INOVIO BIOMEDICAL CORP Form S-4/A April 27, 2009

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As filed with the Securities and Exchange Commission on April 27, 2009

Registration Statement No. 333-156035

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 3

FORM S-4

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

INOVIO BIOMEDICAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

3841 (Primary Standard Industrial Classification Code Number) 33-0969592

(I.R.S. Employer Identification No.)

11494 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

(Address and telephone number of registrant's principal executive offices)

Avtar Dhillon, M.D. Chief Executive Officer and President Inovio Biomedical Corporation 11494 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

(Name, address and telephone number, of agent for service)

Copies of all communications to be sent to:

Shoshannah D. Katz, Esq.

J. Joseph Kim, Ph.D. VGX Kathleen M. Shay, Esq. John W. Kauffman,

Thomas J. Poletti, Esq. K&L Gates LLP 10100 Santa Monica Blvd. Suite 700 Los Angeles, CA 90067 Tel.: (310) 552-5000 Fax: (310) 552-5001 Pharmaceuticals, Inc. 450 Sentry Parkway Blue Bell, PA 19422 Tel.: (267) 440-4200 Fax: (267) 440-4242 Esq. Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103 Tel.: (215) 979-1000 Fax: (215) 979-1020

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other terms and conditions to the merger described in the joint proxy statement/prospectus contained herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o

Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company ý

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) o

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(11)	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(10)
Common Stock, par value \$0.001 per share	41,721,909(1)	N/A	\$1,391(2)	\$1
Options to purchase Common Stock	9,132,891(3)	N/A	N/A	N/A(4)
Common Stock, par value \$0.001 per share underlying Options	9,132,891(5)	N/A	\$9,406,878(6)	\$371
Warrants to purchase Common Stock	4,950,583(7)	N/A	N/A	N/A(4)
Common Stock, par value \$0.001 per share underlying Warrants	4,950,583(8)	N/A	\$5,445,642(9)	\$215

(1)

Represents the maximum number of shares of common stock, par value \$0.001 per share ("Common Stock"), of the registrant, Inovio Biomedical Corporation, or "Inovio," to be issued upon completion of the merger of VGX Pharmaceuticals, Inc., or "VGX," with and into Inovio Acquisition, LLC, a wholly-owned subsidiary of Inovio, to be issued in exchange for all of the outstanding shares of the common stock of VGX, based on the anticipated exchange ratio of 0.9866163 (the "Merger Exchange Ratio") derived from an estimate of the total capital stock, options and warrants outstanding of VGX as of April 14, 2009.

(2)

(4)

Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(f)(2) under the Securities Act of 1933, as amended (the "Securities Act"). As VGX, the issuer of the securities to be acquired and cancelled in the proposed transaction, has an accumulated capital deficit of approximately \$68.1 million as of December 31, 2008, the offering price shown is calculated based on one-third of the \$0.0001 per share par value of VGX common stock.

(3) Represents the maximum number of options to purchase Inovio Common Stock to be issued by Inovio at the completion of the Merger upon its assumption of then outstanding VGX options, based upon the Merger Exchange Ratio (the "Options").

In accordance with Rule 457(g) under the Securities Act, because the shares of Inovio Common Stock underlying the options and warrants are registered hereby, no separate registration fee is required with respect to the options and warrants registered hereby.

(5) Represents the maximum number of shares of Inovio Common Stock issuable upon exercise of the Options, based upon the Merger Exchange Ratio.

(6)
 Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(g) under the Securities Act, based on an anticipated weighted average exercise price of \$1.03 per share (reflecting anticipated adjusted prices ranging from \$0.03 to \$2.29 per share), based upon the Merger Exchange Ratio.

(7)

Represents the maximum number of warrants to purchase Inovio Common Stock to be issued by Inovio at the completion of the Merger upon its assumption of then outstanding VGX warrants, based upon the Merger Exchange Ratio (the "Warrants").

(8)

Represents the maximum number of shares of Inovio Common Stock issuable upon exercise of the Warrants, based upon the Merger Exchange Ratio.

Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(g) under the Securities Act, based on an anticipated weighted average exercise price of \$1.10 per share (reflecting anticipated adjusted prices ranging from \$0.26 to \$1.27 per share), based upon the Merger Exchange Ratio.

(10)

(9)

A filing fee of \$642 was paid with the filing of the registrant's Registration Statement on December 10, 2008. An additional filing fee of \$2 was submitted April 2, 2009. The line item amounts shown reflect the initial registration fee due and paid, as adjusted for applicable increases in the proposed maximum offering price shown here.

(11)

In accordance with Rule 416, the registrant is also registering hereunder an indeterminate number of shares that may be issued and/or become issuable as a result of any stock splits or anti-dilution provisions of the securities registered hereby.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this joint proxy statement/prospectus shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said section 8(a), may determine.

The information in the accompanying joint proxy statement/prospectus is not complete and may be changed. Inovio Biomedical Corporation may not complete the offer and sell its securities until the registration statement filed with the U.S. Securities and Exchange Commission is effective. The accompanying joint proxy statement/prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 27, 2009

PROPOSED MERGER YOUR VOTE IS VERY IMPORTANT

To the Stockholders of Inovio Biomedical Corporation and the Stockholders of VGX Pharmaceuticals, Inc.:

As previously announced, Inovio Biomedical Corporation, or Inovio, and VGX Pharmaceuticals, Inc., or VGX, have agreed to combine under the terms of an acquisition agreement. If the merger is consummated, among other things, based on an exchange ratio and on the terms and conditions of which are described in the accompanying joint proxy statement/prospectus:

all of the issued and outstanding shares of common stock of VGX shall be canceled and converted into the right to receive shares of common stock of Inovio,

all outstanding options to purchase shares of VGX common stock shall be assumed by Inovio and converted into options to purchase Inovio common stock,

all outstanding warrants to purchase shares of VGX common stock shall be assumed by Inovio and converted into warrants to purchase Inovio common stock, and

all outstanding convertible debt of VGX shall become debt convertible into Inovio common stock on existing terms.

If the merger is consummated, based on the fully-diluted share capital outstanding of each of Inovio and VGX as of the record date, current holders of Inovio capital stock will own approximately 51.48% and current holders of VGX common stock will own approximately 48.52% of the outstanding capital stock of the combined company, and current holders of Inovio securities will own approximately 48.18% and holders of VGX securities will own approximately 51.82% of the fully-diluted share capital of the combined company. Inovio's common stock is listed on the NYSE Amex under the trading symbol "INO."

Inovio and VGX cannot complete the proposed merger unless the stockholders of both Inovio and VGX approve proposals relating to the merger. After careful consideration, each of the boards of directors of Inovio and VGX have determined that the merger is fair and in the best interests of the stockholders of their respective companies and recommend that the stockholders of their respective companies vote **FOR** the proposals submitted to them in connection with the proposed merger. This joint proxy statement/prospectus provides you with detailed information about the merger and the other matters to be voted on at the respective stockholders' meetings.

Inovio is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because Inovio's board of directors is soliciting their proxy to vote on the Inovio matters set forth in the joint proxy statement/prospectus at the announced special meeting of Inovio's stockholders to be held [_____], 2009, which we refer to as the "Inovio special meeting." VGX is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because VGX's board of directors is soliciting their proxy to vote on the VGX matters set forth in the joint proxy statement/prospectus at the announced special meeting of VGX's stockholders to be held [_____], 2009, which we refer to as the "VGX special meeting." Before voting, whether you are an Inovio stockholder or a VGX stockholder, you should carefully review all the information contained in the attached joint proxy statement/prospectus, including its annexes and information incorporated by references. IN PARTICULAR, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DISCUSSED UNDER "*RISK FACTORS*" BEGINNING ON PAGE 26.

In considering the recommendation of each company's board of directors, you should be aware that directors and officers of Inovio and VGX may have interests in the merger that are different from, or are in addition to, the interests of Inovio and VGX stockholders generally, and that these directors and officers may directly benefit if the merger is consummated. These interests and benefits are described in the joint proxy statement/prospectus. Whether or not you expect to attend the Inovio or VGX special meeting, the details of which are described on the respective Notices of Special Meeting of Stockholders enclosed, please complete, date, sign and promptly return the accompanying proxy in the enclosed envelope.

We strongly support the combination of Inovio and VGX and join our respective boards of directors in recommending that Inovio's stockholders and VGX's stockholders vote **FOR** the proposals presented for their approval at the Inovio special meeting and the VGX special meeting, respectively.

INOVIO BIOMEDICAL CORPORATION

VGX PHARMACEUTICALS, INC.

J. Joseph Kim, Ph.D.

Avtar Dhillon, M.D. President and Chief Executive Officer

President and Chief Executive Officer

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued in connection with the transaction described in this joint proxy statement/prospectus or determined whether this joint proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This joint proxy statement/prospectus is dated [stockholders on or about [], 2009.

], 2009 and is first being mailed to the Inovio stockholders and the VGX

INOVIO BIOMEDICAL CORPORATION

11494 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS To Be Held on [], 2009

To the Stockholders of Inovio Biomedical Corporation:

You are cordially invited to attend a Special Meeting of Stockholders of Inovio Biomedical Corporation, a Delaware corporation ("Inovio"). The meeting will be held on [], 2009 at [] p.m., Pacific Daylight Time (local time), at Inovio's principal executive offices, located 11494 Sorrento Valley Road, San Diego, California 92121, for the following purposes:

1. To consider and vote upon a proposal to approve a business combination pursuant to an Amended and Restated Agreement and Plan of Merger dated December 5, 2008, as further amended on March 31, 2009, among Inovio, its wholly-owned subsidiary Inovio Acquisition, LLC ("Submerger") and VGX Pharmaceuticals, Inc. ("VGX"), whereby VGX will be merged with and into Submerger, with Submerger as the surviving entity, and Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth in the joint proxy statement/prospectus accompanying this notice (the "Merger"). The Merger would result in holders of VGX common stock owning approximately 48.52% of Inovio's outstanding capital stock immediately after the closing and holders of VGX securities owning approximately 51.82% of Inovio on a fully-diluted basis immediately after the closing.

2. To approve amendment and restatement of the Inovio Amended 2000 Stock Option Plan to clarify the acceleration of vesting of options to purchase shares of Inovio common stock issued and outstanding thereunder and to remove the termination of unexercised options issued and outstanding thereunder at the effective time of the Merger.

3. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the joint proxy statement/prospectus accompanying this notice. Inovio encourages you to read the joint proxy statement/prospectus in its entirety before voting.

The record date for the Inovio special meeting is [], 2009. Only Inovio stockholders of record at the close of business on that date may vote at the Inovio special meeting or any adjournments thereof.

All Inovio stockholders of record are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy card as promptly as possible in order to ensure your representation at the meeting. A return envelope (with postage prepaid if mailed in the United States) is enclosed for your convenience. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

Your vote is important regardless of the number of shares you own. Inovio and VGX cannot complete the Merger described above unless holders of a majority of the shares of Inovio common stock entitled to vote at the Inovio special meeting are present, either in person or by proxy, and vote in favor of the proposals.

By Order of the Board of Directors,

Avtar Dhillon, M.D. President and Chief Executive Officer San Diego, California [____], 2009

VGX PHARMACEUTICALS, INC.

450 Sentry Parkway Blue Bell, Pennsylvania 19422 (267) 440-4200

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS To Be Held on [], 2009

To the Stockholders of VGX Pharmaceuticals, Inc.:

You are cordially invited to attend a Special Meeting of Stockholders of VGX Pharmaceuticals, Inc., a Delaware corporation ("VGX"). The meeting will be held on [], 2009 at [] p.m., Eastern Daylight Time (local time), at VGX's principal executive offices, located 450 Sentry Parkway, Blue Bell, Pennsylvania 19422, for the following purposes:

1. To consider and vote upon a proposal to approve a business combination pursuant to an Amended and Restated Agreement and Plan of Merger dated December 5, 2008, as further amended on March 31, 2009, among VGX, Inovio Biomedical Corporation ("Inovio") and Inovio's wholly-owned subsidiary, Inovio Acquisition, LLC ("Submerger"), whereby VGX will be merged with and into Submerger, with Submerger as the surviving entity, and Inovio will issue shares of its common stock to VGX stockholders in exchange for all of the outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth in the joint proxy statement/prospectus accompanying this notice (the "Merger"). The Merger would result in holders of VGX common stock owning approximately 48.52% of Inovio's outstanding capital stock immediately after the closing and holders of VGX securities owning approximately 51.82% of Inovio on a fully-diluted basis immediately after the closing.

2. To conduct any other business properly brought before the meeting.

The Merger is more fully described in the joint proxy statement/prospectus accompanying this notice. VGX encourages you to read the joint proxy statement/prospectus in its entirety before voting.

The record date for the VGX special meeting is [], 2009. Only VGX stockholders of record at the close of business on that date may vote at the VGX special meeting or any adjournments thereof.

All VGX stockholders of record are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy card as promptly as possible in order to ensure your representation at the meeting. A return envelope (with postage prepaid if mailed in the United States) is enclosed for your convenience. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

Your vote is important regardless of the number of shares you own. Inovio and VGX cannot complete the Merger described above unless holders of a majority of the shares of VGX common stock entitled to vote at the VGX special meeting are present, either in person or by proxy, and vote in favor of the Merger proposal.

By Order of the Board of Directors,

J. Joseph Kim, Ph.D. President and Chief Executive Officer

Blue Bell, Pennsylvania [____], 2009

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ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates by reference certain business and financial information about Inovio Biomedical Corporation, or Inovio, that is not included in or delivered with this joint proxy statement/prospectus. Such information is included in documents filed by Inovio with the U.S. Securities and Exchange Commission, which we refer to as the "SEC," which are available to the stockholders of Inovio and VGX Pharmaceuticals, Inc., or VGX, without charge from the SEC's website at *www.sec.gov*, or upon written or oral request, excluding any exhibits to those documents, unless the exhibit is specifically incorporated by reference as an exhibit in this joint proxy statement/prospectus. You can obtain any of these documents by requesting them in writing or by telephone from:

Inovio Biomedical Corporation 11494 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

See "Where You Can Find More Information About Inovio" beginning on page 220 for a detailed description of the documents of Inovio incorporated by reference into this joint proxy statement/prospectus.

In order for you to receive timely delivery of the documents in advance of the Inovio or VGX special meetings, as applicable, you should make your request by no later than [_____].

Information contained on the Inovio and VGX websites is expressly not incorporated by reference into this joint proxy statement/prospectus.

All information in this joint proxy statement/prospectus concerning Inovio has been furnished by Inovio. All information in this document concerning VGX has been furnished by VGX. VGX has represented to Inovio, and Inovio has represented to VGX, that the information furnished by and concerning it is true and complete in all material respects.

ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS

This document, which forms part of a registration statement on Form S-4 filed with the SEC by Inovio (File No. 333-156035), constitutes a prospectus of Inovio under Section 5 of the Securities Act of 1933, as amended, which we refer to as the "Securities Act," with respect to the securities of Inovio to be issued to holders of VGX securities in the proposed merger pursuant to the acquisition agreement described in this joint proxy statement/prospectus. This document also constitutes a notice of meeting and a proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act," with respect to the Inovio special meeting, at which Inovio stockholders will be asked to consider and vote upon certain proposals, including a proposal to approve the issuance of Inovio securities to holders of VGX securities in the merger pursuant to the acquisition agreement. This joint proxy statement/prospectus will also be utilized by VGX as a notice of meeting and proxy statement with respect to the VGX special meeting, at which VGX stockholders will be asked to consider and vote upon a proposal to approve and adopt the acquisition agreement and approve the merger.

Throughout this joint proxy statement/prospectus, when we use the term "Inovio," we are referring to Inovio Biomedical Corporation, and when we use the term "VGX," we are referring to VGX Pharmaceuticals, Inc. When we use the term "combined company" or "combined group" we are referring to these entities as they will exist and operate if the proposed transaction closes, as described in this joint proxy statement/prospectus. When we use the term "Acquisition Agreement," we are referring to the Amended and Restated Agreement and Plan of Merger, dated December 5, 2008, as further amended on March 31, 2009, by and among Inovio, Inovio Acquisition, LLC, a Delaware limited liability company (which we refer to as "Submerger"), and VGX, which is attached to this joint

proxy statement/prospectus as *Annex A*, and publicly filed by Inovio with the SEC as Exhibit 2.1 to Inovio's Current Report on Form 8-K filed on December 8, 2008 and Exhibit 2.1 to Inovio's Current Report on Form 8-K filed on March 31, 2009, and is incorporated by reference into this joint proxy statement/prospectus. Unless expressly specified otherwise, all of the numbers of Inovio common stock and share ownership numbers of Inovio common stock and all of the numbers of VGX common stock and share ownership numbers of VGX common stock and share outstanding options or conversion of any outstanding warrants or convertible debt after the record date. Further all references to percentages of the post-Merger fully-diluted share capital do not take into account potential conversion of any accrued interest on the assumed VGX convertible debt; however, references to the maximum shares to be issued or become issuable in relation to the Merger, includes the maximum number of shares potentially issuable upon conversion of accrued interest through maturity of the assumed VGX convertible debt.

Additionally, sometimes when we use the terms "transaction" or the "transactions contemplated by the Acquisition Agreement," we are referring to:

the business combination between Inovio and VGX, whereby VGX will merge with and into Submerger, and Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth in this joint proxy statement/prospectus, which we refer to as the "Merger"; and

an amendment and restatement of the Inovio Amended 2000 Stock Option Plan, or the "Inovio 2000 Plan," to (A) clarify the acceleration of vesting of options to purchase shares of Inovio common stock issued and outstanding thereunder at the effective time of the Merger, which we refer to as the "Effective Time," and (B) remove the termination of unexercised Inovio options issued and outstanding thereunder at the Effective Time, which we collectively refer to as the "2000 Plan Amendment."

QUESTIONS AND ANSWERS ABOUT THE TRANSACTION AND THE MEETINGS

Q: Why am I receiving this joint proxy statement/prospectus?

A: Inovio and VGX have agreed to a business combination pursuant to the terms of the Acquisition Agreement. In connection with the transaction, among other things, based on an exchange ratio and on the terms and conditions of which are described in this joint proxy statement/prospectus:

all of the issued and outstanding shares of common stock of VGX shall be canceled and converted into the right to receive shares of common stock of Inovio,

all outstanding options to purchase shares of VGX common stock shall be assumed by Inovio and converted into options to purchase Inovio common stock,

all outstanding warrants to purchase shares of VGX common stock shall be assumed by Inovio and converted into warrants to purchase Inovio common stock, and

all outstanding convertible debt of VGX shall become debt convertible into Inovio common stock on existing terms.

In order to complete the transaction, Inovio stockholders must vote to approve the Merger, including the issuance of shares of Inovio common stock and other securities in exchange for all of the outstanding securities of VGX and the 2000 Plan Amendment, and VGX stockholders must vote to approve the Merger. Inovio is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because Inovio's board of directors is soliciting their proxy to vote on these matters and various other matters set forth in this joint proxy statement/prospectus at the announced special meeting of Inovio's stockholders to be held [_____], 2009, which we refer to as the "Inovio special meeting."

VGX is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because VGX's board of directors is soliciting their proxy to vote on the VGX matters set forth in the joint proxy statement/prospectus at the announced special meeting of VGX's stockholders to be held [______], 2009, which we refer to as the "VGX special meeting." This joint proxy statement/prospectus is also being sent to holders of VGX's outstanding options, warrants and convertible debt as a prospectus in relation to the assumption of such securities and the potential issuance of shares of Inovio common stock upon their respective exercise or conversion post-Merger, if the Merger is completed.

This joint proxy statement/prospectus contains important information about the transaction and the other proposals to be presented at the special meetings. Inovio stockholders and all holders of VGX securities should read this joint proxy statement/prospectus carefully.

Q: Why are Inovio and VGX proposing the transaction?

A: Inovio and VGX believe that the proposed transaction will provide substantial benefits to both companies and their stockholders, including:

the potential for greater ability to mitigate overall development risk through creation of a broader, more balanced, fully-integrated biopharmaceutical company with a deep product development pipeline, which the parties believe will have significant market potential;

complementary product pipelines addressing a broad spectrum of indications in large markets;

a stronger technology platform, including electroporation assisted DNA vaccine delivery, cGMP manufacturing experience and capability in production, and the optimized SynCon sequencing technology with potential to generate new clinical product candidates on an ongoing basis, which the parties anticipate will reduce time to market of their programs;

a broader patent portfolio;

the potential for expanded access to third party funding and validation for the parties' programs;

an experienced and complete post-Merger management team; and

other expected potential synergies, efficiencies and cost savings that may be created in combining the research, development and technological strengths of Inovio and VGX.

For details of the reasons for the transaction, see the sections entitled "Inovio's Reasons for the Transaction" and "VGX's Reasons for the Transaction" on pages 66 and 68, respectively.

Q: What will happen in the transaction?

A: Upon the terms and subject to the conditions of the Acquisition Agreement and in accordance with the Delaware General Corporation Law, or the "DGCL," Inovio, Submerger and VGX will enter into a business combination pursuant to which VGX will be merged with and into Submerger. Upon consummation of the Merger, VGX will cease to exist and Submerger will continue as the surviving entity and as a wholly-owned subsidiary of Inovio and change its name to VGX Pharmaceuticals, LLC, referenced sometimes as the "Surviving Entity."

In consideration for the Merger, Inovio will issue and otherwise allocate for issuance under options and warrants to purchase common stock and debt convertible into common stock, a total of up to 59,995,862 shares of new Inovio common stock pursuant to the terms of the Acquisition Agreement.

Following the completion of the Merger, holders of VGX common stock will become holders of Inovio common stock, and holders of options, warrants and debt exercisable or convertible for shares of VGX common stock will become holders of options, warrants and debt exercisable or convertible for shares of Inovio common stock, respectively.

Q: What will VGX stockholders receive in the Merger?

A: If the Merger is consummated, outstanding shares of VGX common stock will be cancelled and holders of VGX common stock will receive in exchange a number of shares of Inovio common stock calculated using an exchange ratio determined based on the ratio of the number of shares of Inovio common stock outstanding and issuable pursuant to outstanding exercisable or convertible securities as of the closing date, to the number of shares of VGX common stock outstanding and issuable pursuant to outstanding exercisable or convertible securities, as of such date, excluding VGX convertible debt, or the "Merger Exchange Ratio." Based on the respective fully-diluted share capitals of Inovio and VGX as of April 14, 2009 and certain forward election VGX option exercises anticipated prior to closing, we anticipate that the Merger Exchange Ratio will be approximately 0.9866163, meaning that each share of VGX common stock will be exchanged for 0.9866163 shares of Inovio common stock upon closing of the Merger. If you are a holder of VGX securities, see "*Effect of Merger on VGX Securities*" on page 99 for a detailed explanation of what you will receive upon completion of the Merger.

Q: How will VGX's outstanding options, warrants and convertible debt be affected by the Merger?

A: As a result of the Merger, Inovio will assume all outstanding options and warrants to purchase shares of VGX common stock and convert such securities into options and warrants, respectively, to purchase Inovio common stock, with the number of shares issuable and the exercise price of such securities adjusted based on the Merger Exchange Ratio. Submerger will also assume, and Inovio will reflect liability for on a consolidated basis, all outstanding debt of VGX convertible into shares of VGX common stock, which will become debt convertible into Inovio common stock, with a conversion price of \$1.05 based on existing terms providing for such assumption and conversion. See "*Effect of Merger on VGX Securities*" on page 99 for a detailed explanation of the assumption and adjustment of the VGX options, warrants and convertible debt.

Q: Will I be able to freely trade the shares of Inovio common stock issued or issuable upon exercise or conversion of Inovio securities issued upon closing of the Merger?

A: As Inovio has registered the shares of Inovio common stock to be issued upon closing of the Merger or subsequently issued upon exercise of the options and warrants assumed at closing of the Merger, such shares should be freely tradable when issued, subject to the following restrictions:

Persons who are or become affiliates of the combined group for purposes of Rule 144 under the Securities Act may only resell shares they receive in relation to the Merger in transactions permitted by Rule 144, or as otherwise permitted under the Securities Act. Persons who may be deemed to be affiliates of the combined group generally include individuals or entities that control, are controlled by, or are under common control with, the combined group and may include its officers and directors, as well as its principal stockholders.

Certain shares issued upon closing of the Merger or upon exercise of the options and warrants assumed in conjunction with the Merger are subject to contractual lock-up restrictions as set forth in the Acquisition Agreement. See "*Restrictions on Ability to Sell Inovio Common Stock*" on page 84 for a detailed explanation of which securities are subject to such lock-up restrictions and for what duration.

Five principal stockholders of VGX will deposit certain shares of Inovio common stock into a voting trust upon closing of the Merger, which will be transferable only in certain circumstances pursuant to the terms of the voting trust agreement. See *"Voting Trust Agreement"* on page 117 for a detailed explanation of the terms and conditions of the voting trust.

The shares of Inovio common stock issuable upon conversion of the VGX convertible debt assumed by Submerger on its existing terms have not been registered and when issued will be "restricted securities" subject to limitations on transfer and not freely tradable. Such shares will also be subject to contractual lock-up restrictions referenced above, which will limit the ability of holders of such shares to potentially transfer them in reliance on certain exemptions from the registration requirements under the Securities Act that may be otherwise applicable.

Inovio's shares of common stock are currently listed on the NYSE Amex under the trading symbol "INO."

Q: What are the material federal income tax consequences to holders of VGX common stock resulting from the Merger?

A: Inovio and VGX each expect the Merger to qualify as a reorganization for U.S. federal income tax purposes. Accordingly, the parties expect that the Merger will be tax-free to holders of VGX common stock for U.S. federal income tax purposes.

The tax consequences of the transaction are complex. VGX stockholders should consult with their own tax advisors as to the tax consequences to them of the Merger, as well as review the more detailed description of the tax consequences of the Merger in this joint proxy statement/prospectus entitled "*Certain Material U.S. Federal Income Tax Consequences*" beginning on page 95.

Q: How will outstanding Inovio securities be affected by the Merger?

A: The Merger will not affect the outstanding shares of Inovio common stock and Inovio's outstanding options and warrants to purchase shares of Inovio common stock, except:

the closing of the Merger will constitute a "Change of Control" or "Change in Control," as such terms are used in the Inovio's equity incentive plans and related agreements, resulting in the acceleration of vesting for all options to purchase shares of Inovio common stock outstanding as of the Effective Time; and

the current holders of Inovio securities will experience substantial dilution upon the issuance of the shares of Inovio common stock in exchange for the outstanding shares of VGX common stock and the assumption and conversion of the other VGX securities upon consummation of the Merger.

For more detailed information about the impact of the Merger on outstanding Inovio securities, see "Effect of Merger on Inovio Securities" on page 99 and "Resulting Ownership of Inovio; Change of Control" on page 72.

Q: Will there be changes to the Inovio board of directors if the Merger is consummated?

A: The Acquisition Agreement provides that post-Merger Inovio's board of directors will consist of five individuals, comprised of three directors from Inovio's prior board of directors and two directors from VGX's prior board of directors. The parties anticipate that Dr. Avtar Dhillon, Dr. J. Joseph Kim, Mr. Simon Benito, Dr. Morton Collins and Mr. Tee Khiang Ng will serve as directors of the post-Merger company. Dr. Avtar Dhillon, Inovio's current chief executive officer, will serve as chairman of the board of directors post-Merger. See "*Directors and Management of Inovio Following the Transaction*" on page 86 for biographies of the designated directors upon completion of the Merger.

Q: Who will be the executive officers of Inovio if the Merger is consummated?

A: The Acquisition Agreement also provides for an integrated management team, drawn from the senior management of Inovio and VGX, to lead the combined group upon completion of the Merger, including the following individuals:

Position in the Combined							
Name	Company	Current Position					
Dr. J. Joseph Kim	Chief Executive Officer	President and Chief Executive					
	D 1 4	Officer of VGX					
Dr. Avtar Dhillon	President	President and Chief Executive Officer of Inovio					
Peter Kies	Chief Financial Officer	Chief Financial Officer of Inovio					
Dr. C. Jo White	Chief Medical Officer	Chief Medical Officer of VGX					
Dr. Niranjan Sardesai	Senior Vice President,	Senior Vice President,					
Research & Development		Research & Development of					
		VGX					
Kevin Rassas	Senior Vice President, Business	Senior Vice President, Business					
	Development	Development of VGX					
Gene Kim	Vice President, Finance	Chief Financial Officer of VGX					
Punit Dhillon	Vice President, Operations	Vice President, Finance &					
		Operations of Inovio					
Dr. Michael Fons	Vice President, Corporate	Vice President, Corporate					
	Development	Development of Inovio					
Dr. Iacob Mathiesen	Vice President, Research & Development and Managing Director, Inovio AS	Managing Director, Inovio AS					

Q: Does Inovio's board of directors recommend voting in favor of the Merger, including the issuance of Inovio securities to the holders of VGX securities pursuant to the terms of the Acquisition Agreement?

A: Yes. After careful consideration, Inovio's board of directors determined that the transaction is fair to, and in the best interests of, Inovio and its stockholders. Inovio's board of directors recommends that Inovio stockholders vote **FOR** the Merger, including the issuance of Inovio securities pursuant to the Acquisition Agreement.

For a description of the factors considered by Inovio's board of directors in making its determination, Inovio stockholders should read the section entitled "*Inovio's Reasons for the Transaction*" on page 65.

Q: Does Inovio's board of directors recommend voting in favor of the proposed amendment and restatement of the Inovio 2000 Plan?

A: Yes. Inovio's board of directors determined that an amendment and restatement of the Inovio 2000 Plan to clarify the acceleration of vesting of Inovio options issued and outstanding under the Inovio 2000 Plan at the Effective Time and to remove the termination of unexercised Inovio options issued and outstanding under the Inovio 2000 Plan at the Effective Time is vital to the success of the transaction. Inovio's board of directors recommends that Inovio stockholders vote **FOR** the proposed amendment and restatement of the Inovio 2000 Plan.

Q: Does VGX's board of directors recommend voting in favor of the Merger and the Acquisition Agreement?

A: Yes. After careful consideration, VGX's board of directors consider the terms of the Merger, including the Acquisition Agreement, to be fair and reasonable and to be in the best interests of VGX and its stockholders. VGX's board of directors unanimously recommends that VGX's stockholders vote **FOR** the Merger and the Acquisition Agreement.

For a description of the factors considered by VGX's board of directors in making its determination, see the section entitled "VGX's Reasons for the Transaction" on page 68.

Q: When do you expect to complete the Merger?

A: Inovio and VGX are working to complete the Merger as quickly as possible. Inovio and VGX hope to complete the Merger shortly after obtaining the requisite stockholder approvals at the Inovio special meeting and the VGX special meeting, and they believe the closing will occur within the second quarter of the 2009 fiscal year. However, Inovio and VGX cannot predict the exact timing of the completion of the Merger because the Merger is subject to several conditions. There may be a substantial period of time between the Inovio and VGX special meetings and the completion of the Merger, and Inovio and VGX may not complete the Merger within the second quarter of the 2009 fiscal year, if at all. For a detailed description of the conditions to the transaction, see the section entitled "Conditions to the Transaction" on page 112.

Q: What do I need to do now?

A: You should carefully read and consider the information contained in this joint proxy statement/prospectus, including the Annexes, and consider how the transaction will affect you as an Inovio stockholder or VGX stockholder. You also may want to review the documents referenced under the section entitled *"Where You Can Find More Information About Inovio"* on page 220.

If you are an Inovio or VGX stockholder, whether or not you intend to attend the Inovio or VGX special meeting, you should complete and return the enclosed proxy card as soon as possible in accordance with the instructions provided in this joint proxy statement/prospectus and on the enclosed proxy card.



Q: When and where are the Inovio and VGX special meetings?

A: The Inovio special meeting will be held on [], 2009 at [] p.m., Pacific Daylight Time (local time), at Inovio's principal executive offices, located 11494 Sorrento Valley Road, San Diego, California 92121. See "*Special Meeting of Inovio Stockholders*" beginning on page 206 for more information about the Inovio special meeting and the proposals to be presented for the approval of the Inovio stockholders.

The VGX meeting will be held on [], 2009 at [] p.m., Eastern Daylight Time (local time), at VGX's principal executive offices, located 450 Sentry Parkway, Blue Bell, Pennsylvania 19422. See "*Special Meeting of VGX Stockholders*" beginning on page 216 for more information about the VGX special meeting and the proposals to be presented for the approval of the VGX stockholders.

Q: Have any VGX stockholders committed to vote in favor of the Merger and the resulting change of control of VGX?

A: Yes. Subsequent to the execution of the Acquisition Agreement and consistent with the terms thereof, four VGX stockholders, who hold approximately 41% of the issued and outstanding VGX common stock as of the date of this joint proxy statement/prospectus, have each executed voting agreements with Inovio in which such stockholders agreed to vote their shares of VGX common stock for the adoption of the Acquisition Agreement and consummation of the Merger. The form of voting agreement is provided as an exhibit to the Acquisition Agreement included with this joint proxy statement/prospectus as *Annex A*; for further details of the vote required from the VGX stockholders and the voting agreement see "VGX Support Stockholders' Voting Agreement" beginning on page 116.

Q: As a VGX stockholder, do I have appraisal or dissenter's rights?

A: Under the DGCL, holders of VGX common stock who do not vote for the adoption of the Acquisition Agreement and the Merger have the right to seek appraisal and receive cash for the fair value of their shares as determined by the Delaware Court of Chancery if the Merger is completed, but only if they comply with all requirements of Delaware law, which are summarized in this joint proxy statement/prospectus. This appraisal amount could be more than, the same as, or less than the fair value of the Inovio common stock that a VGX stockholder would be entitled to receive under the terms of the Acquisition Agreement. Any holder of VGX common stock intending to exercise its appraisal rights, among other things, must submit a written demand for appraisal to VGX prior to the vote on the adoption of the Acquisition Agreement and must not vote or otherwise submit a proxy in favor of adoption of the Acquisition Agreement. Failure to follow exactly the procedures specified under Delaware law will result in the loss of appraisal rights. Because of the complexity of the Delaware law relating to appraisal rights, if you are considering exercising your appraisal right, we encourage you to seek the advice of your own legal counsel. For a full description of the appraisal rights, see "*Appraisal Rights*" beginning on page 80 of this joint proxy statement/prospectus.

Q: As an Inovio stockholder, how do I vote?

A: If you are an Inovio stockholder of record, you may vote in person at the Inovio special meeting or by submitting a proxy for the meeting. You can submit your proxy by completing, signing, dating and returning the enclosed proxy card in the accompanying pre-addressed postage paid envelope.

If you are an Inovio stockholder and you hold your shares in "street name," which means your shares are held of record by a broker, bank or nominee, you must provide the record holder of your shares with instructions on how to vote your shares with regard to the proposals described in this joint proxy statement/prospectus or obtain a proxy issued in your name from that record holder.



For a more complete description of voting shares of Inovio common stock, see "Special Meeting of Inovio Stockholders" on page 206.

Q: As a VGX stockholder, how do I vote?

A: If you are a VGX stockholder of record, you may vote in person at the VGX special meeting or by submitting a proxy for the meeting. You can submit your proxy by completing, signing, dating and returning the enclosed proxy card in the accompanying pre-addressed postage paid envelope.

For a more complete description of voting shares of VGX common stock, see "Special Meeting of VGX Stockholders" on page 216.

Q: As a VGX stockholder, should I send in my VGX share certificates now?

A: No. If the Merger is completed, we will send the former stockholders of VGX written instructions for exchanging their share certificates. Additional information on the anticipated procedures for exchanging certificates representing shares of VGX common stock for shares of Inovio common stock is set forth in "*Exchange of Securities*" beginning on page 101.

Q: As a holder of VGX options, warrants or convertible debt, what do I do?

A: Holders of other VGX securities do not need to take any action at this time. If the Merger is completed, any exercise or conversion of such securities will be completed on their existing terms and conditions, as adjusted according to the Merger Exchange Ratio as applicable, for shares of Inovio common stock. You will not be sent a replacement form of option, warrant or note, unless requested subsequent to the consummation of the Merger.

Q: Whom should I call with questions?

A: If you have any questions about the transaction or if you need additional copies of this joint proxy statement/prospectus or the enclosed proxy card, you should contact:

Inovio Stockholders: Inovio Biomedical Corporation 114994 Sorrento Valley Road San Diego, California 92121 (858) 597-6006 Attention: Investor Relations VGX Stockholders: VGX Pharmaceuticals, Inc. 450 Sentry Parkway Blue Bell, Pennsylvania 19422 (267) 440-4200 Attention: Investor Relations

You may also obtain additional information about Inovio from documents filed with the U.S. Securities and Exchange Commission, which we refer to as the "SEC," by following the instructions in the section entitled *"Where You Can Find More Information About Inovio"* on page 220.

SUMMARY OF THE JOINT PROXY STATEMENT/PROSPECTUS

This summary highlights selected information from this joint proxy statement/prospectus and does not contain all of the information that is important to you. To better understand the proposed transaction and the proposals on which your vote is being solicited, you should read this entire document carefully, including the annexes, and in particular, the Acquisition Agreement attached as *Annex A*. The page references provided parenthetically in this summary indicate where you can find a more complete description of the topics presented in this summary.

The Companies

Inovio Biomedical Corporation 114994 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

Inovio Biomedical Corporation, a Delaware corporation, organized in 2001, is a San Diego-based biomedical company focused on the development of next-generation vaccines to prevent or treat cancers and chronic infectious diseases. Inovio is a leader in developing DNA delivery solutions based on electroporation, which uses brief, controlled electrical pulses to create temporary pores in cell membranes and enable increased cellular uptake of a useful biopharmaceutical. Inovio has licensing and collaborative arrangements for use of its patented technologies with research-driven biopharmaceutical companies and government and non-government agencies. Inovio licenses the use of its electroporation-based DNA delivery systems, and contracts to manufacture and supply such systems, for partners to use in conjunction with their proprietary DNA vaccines or DNA-based immunotherapies. These arrangements provide Inovio with some combination of upfront payments, development fees, milestone payments, royalties and a supply agreement, while the partners pursue development of proprietary agents or conduct research using Inovio's electroporation technology. Inovio has also been pursuing proprietary vaccine development or co-development, resulting in whole or partial ownership in promising vaccines to prevent or treat cancers and chronic infectious diseases. Inovio's technology is protected by an extensive patent portfolio covering in vivo electroporation, encompassing a range of apparatuses, methodologies, conditions and applications including oncology, gene delivery, vascular, and transdermal as well as ex vivo electroporation.

Inovio's common stock is currently traded on the NYSE Amex under the trading symbol "INO."

Inovio's website address is *www.inovio.com*; however, information on Inovio's website is not a part of, or incorporated by reference in, this joint proxy statement/prospectus, and should not be relied upon in evaluating the proposals set forth for approval by the Inovio or VGX stockholders.

Inovio Acquisition, LLC 114994 Sorrento Valley Road San Diego, California 92121 (858) 597-6006

Inovio Acquisition, LLC, or Submerger, is a wholly-owned direct subsidiary of Inovio that was originally incorporated in Delaware as Inovio Acquisition Corporation in June 2008 and converted into a limited liability company in October 2008. Submerger does not engage in any operations and exists solely to facilitate the Merger.



VGX Pharmaceuticals, Inc. 450 Sentry Parkway Blue Bell, Pennsylvania 19422 (267) 440-4200

VGX Pharmaceuticals, Inc., a Delaware corporation organized in December 2000, is a biopharmaceutical company with DNA Vaccines and small molecule product candidates for the treatment of infectious diseases, cancer and inflammatory diseases. VGX's clinical development programs include programs focused on HIV infection, inflammatory diseases and a DNA-based therapeutic for cervical cancer. In addition, VGX has filed investigational new drug, or IND, applications with the U.S. Food and Drug Administration, or FDA, for a novel DNA therapy that utilizes growth hormone releasing hormone, or GHRH, for the treatment of cancer cachexia and anemia and a DNA preventative vaccine for avian influenza. VGX has established a vertically-integrated DNA vaccines and therapies platform, which includes a patented DNA delivery system (CELLECTRA® electroporation), and access to advanced cGMP plasmid manufacturing capabilities through its affiliate, VGX International. VGX is also a majority shareholder of VGX Animal Health, whose lead product candidate, LifeTide SW 5, received regulatory approval in Australia in January 2008 and became the world's first approved DNA therapy for food animals. VGX's product candidates and technology programs are protected by the VGX's extensive intellectual property portfolio.

VGX's website address is *www.vgxp.com*; however, information on VGX's website is not part of, or incorporated by reference in, this joint proxy statement/prospectus, and should not be relied upon in evaluating the proposals set forth for approval by Inovio or VGX stockholders.

The Combined Group

Inovio and VGX both operate in the biotechnology industry, focused primarily on the development of DNA-based vaccines and therapies. The combined group intends to remain focused on this goal utilizing Inovio's proprietary electroporation technology to continue development of Inovio's pipeline of pre-clinical and clinical candidates and maintaining a substantial number of Inovio's ongoing collaborations and partnerships with pharmaceutical industry leaders and academic institutions, while adding existing VGX pre-clinical and clinical programs and VGX's ongoing collaborations with other pharmaceutical industry leaders and academic institutions. The combined group anticipates integrating and maintaining a balanced portfolio of programs drawn from Inovio's and VGX's current pre-clinical and clinical efforts that are most likely to benefit from and extend the strength of the combined group's intellectual property related to use of Inovio's electroporation technology for DNA delivery and VGX's DNA therapeutics platform. The combined group expects that its initial product pipeline will include DNA-based therapeutics for delivery via electroporation targeted to HIV, hepatitis C virus, human papilloma virus, and influenza. Management of the combined group will be primarily located in San Diego, California, with additional research and development facilities in Blue Bell, Pennsylvania, The Woodlands, Texas and Oslo, Norway.

Summary of the Transaction (see Page 61)

Upon the terms and subject to the conditions of the Acquisition Agreement and in accordance with the DGCL, Inovio, Submerger and VGX will enter into a business combination pursuant to which VGX will be merged with and into Submerger. Upon consummation of the Merger, VGX will cease to exist and Submerger will continue as the surviving entity and as a wholly-owned subsidiary of Inovio and change its name to VGX Pharmaceuticals, LLC. Thus, Inovio will remain the parent, publicly reporting and listed entity, retain its current subsidiaries, and hold VGX Pharmaceuticals, LLC and the current VGX subsidiaries as its direct and indirect subsidiaries upon completion of the transaction.

In consideration for the Merger, based on an exchange ratio and on the terms and conditions described in this joint proxy statement/prospectus:

all of the issued and outstanding shares of common stock of VGX shall be canceled and converted into the right to receive shares of common stock of Inovio,

all outstanding options to purchase shares of VGX common stock shall be assumed by Inovio and converted into options to purchase Inovio common stock,

all outstanding warrants to purchase shares of VGX common stock shall be assumed by Inovio and converted into warrants to purchase Inovio common stock, and

all outstanding convertible debt of VGX shall become debt convertible into Inovio common stock on existing terms.

As a result, Inovio will issue and otherwise allocate for issuance under options and warrants to purchase common stock and debt convertible into common stock, a total of up to 59,995,862 shares of new Inovio common stock pursuant to the terms of the Acquisition Agreement. Following the completion of the Merger, holders of VGX common stock will become holders of Inovio common stock, and holders of options, warrants and debt exercisable or convertible for shares of VGX common stock will become holders of options, warrants, and debt exercisable or convertible for shares of VGX common stock will become holders of options, warrants, and debt exercisable or convertible for shares of VGX common stock, respectively. In addition, Inovio and VGX have agreed that any other contractual rights to receive shares of VGX common stock, other than the VGX options, warrants and convertible debt to be assumed and converted as described above, shall be converted into rights to receive shares of Inovio common stock in accordance with the terms and conditions of the contract(s) providing such rights.

In order to complete the transaction, Inovio stockholders must vote to approve the Merger, including the issuance of shares of Inovio common stock and other securities in exchange for all of the outstanding securities of VGX, and the 2000 Plan Amendment, and VGX stockholders must vote to approve the Merger. Pursuant to the Acquisition Agreement, upon the closing date, three members of Inovio's current board of directors and two members of the VGX board of directors will be appointed to the Inovio board of directors, and the senior management team of the combined group will be composed of executives from both Inovio and VGX will take over management of the Surviving Entity. Further terms, conditions and results of the transaction are described in the sections entitled *"The Transaction"* on page 61 and *"The Acquisition Agreement"* on page 98.

Conditions to the Transaction (see Page 112)

Inovio's obligation to consummate the Merger and issue its securities pursuant to the Acquisition Agreement, which we refer to as the "closing," will not take place until the parties satisfy, or waive where allowable, the conditions listed in the Acquisition Agreement. These closing conditions include, but are not limited to, the following:

Inovio's registration statement, of which this joint proxy statement/prospectus is a part, shall have become effective under the Securities Act and shall not be the subject of any stop order or proceeding seeking a stop order.

Inovio shall have obtained the approval of Inovio's stockholders of

the Acquisition Agreement, the Merger and the other transactions contemplated by the Acquisition Agreement; and

the amendment of the Inovio 2000 Plan to clarify the acceleration of vesting of Inovio options issued and outstanding at the Effective Time and to remove the termination of

unexercised Inovio options issued and outstanding under the Inovio 2000 Plan at the Effective Time.

VGX shall have obtained the approval of VGX's stockholders of the Acquisition Agreement, the Merger and the other transactions contemplated by the Acquisition Agreement.

The number of shares held by dissenting VGX stockholders shall not exceed 10% of the number of shares of outstanding VGX common stock.

No governmental entity, as defined in the Acquisition Agreement, shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which has the effect of making the Merger illegal or otherwise prohibiting consummation of the Merger, the issuance of the Inovio's securities to VGX stockholders or the assumption of the VGX securities.

The directors and officers of VGX and Inovio in office immediately prior to the closing shall have resigned as directors and officers, unless they will be continuing in the same capacity with the combined group.

The waiting period, if any (and any extension thereof), applicable to the Merger under the Hart-Scott-Rodino Act, or "HSR Act," shall have been terminated or shall have expired.

Inovio shall have received an opinion of K&L Gates LLP, and VGX shall have received an opinion of Duane Morris LLP, each to the effect that the Merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code.

The representation and warranties by Inovio, VGX and Submerger contained in the Acquisition Agreement shall continue to be true and correct as of the closing.

No event having a material adverse effect with respect to Inovio or VGX shall have occurred.

Inovio, VGX and Submerger shall have performed or complied in all material respects with the agreements and covenants required by the Acquisition Agreement to be performed or complied with by them, and VGX and Inovio shall have received certificate from each other to such effect signed by a duly authorized officer.

Inovio and VGX shall have furnished the other party all consents, approvals and waivers set forth in the Acquisition Agreement.

Inovio's common stock shall continue to be listed on the NYSE Amex or listed or quoted on an alternate securities exchange or quotation system in accordance with the other terms and conditions of the Acquisition Agreement.

The shares issued pursuant to the Merger shall be authorized for listing on the NYSE Amex, or listed or quoted on an alternate securities exchange or quotation system in accordance with the other terms and conditions of the Acquisition Agreement.

VGX and Inovio shall have received customary legal opinions from each other's counsel reasonably acceptable and consistent with the opinions anticipated pursuant to the Acquisition Agreement.

VGX's auditor's opinion with respect to the VGX audited consolidated financial statements (including restatements thereof, if applicable) for the periods ended December 31, 2005, 2006 and 2007, shall remain in full force and effect and VGX shall not have received any written notice from its auditors that such opinions and related financial statements may no longer be

relied upon, nor that VGX's reviewed financial statements for each of the quarters ended subsequent to January 1, 2008 may no longer be relied upon.

VGX shall have paid in full, principal and interest accrued, all VGX debt, convertible and non-convertible, other than the \$4.4 million of the VGX convertible debt identified in the Acquisition Agreement and have amended such remaining notes to provide for optional conversion at \$1.05 per share after the Effective Time and to provide for mandatory conversion at such price should Inovio's common stock trade at or above \$2.10 for five consecutive trading days after the Effective Time.

VGX shall have entered into a manufacturing agreement in conjunction with its prior asset sale to VGXI, Inc., and such agreement shall upon its terms be effective at the time of the closing and bear a term for at least 12 months post-closing.

VGX shall have received payment in full of all principal and interest owed on all loans to VGX's directors, officers and/or employees and there shall be no outstanding loans from VGX or any affiliate of VGX to any director, officer or employee of VGX or any of its subsidiaries, other than advances made in the ordinary course of business for business purposes.

The signatories to the voting trust agreement contemplated by the Acquisition Agreement shall have provided executed signature pages to the voting trust agreement, to be held in escrow pending the closing.

Termination of the Acquisition Agreement (see Page 114)

The Acquisition Agreement may be terminated prior to the date the registration statement, of which this joint proxy statement/prospectus is a part, becomes effective, or the subsequent closing of the Merger, under several circumstances, including:

by mutual written consent duly authorized by the boards of directors of Inovio and VGX;

by either Inovio or VGX, if, with certain exceptions, the closing shall not have occurred by June 30, 2009, with certain automatic extensions related to the status of the registration process and special meetings;

if a governmental entity shall have issued an order, decree or ruling or taken any other action (including the failure to take action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger, which order, decree or ruling is final and nonappealable;

by VGX, upon a breach of any representation, warranty, covenant or agreement on the part of Inovio set forth in the Acquisition Agreement, or if any representation or warranty of Inovio shall have become untrue, in either case such that the conditions set forth in the Acquisition Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, with certain cure period exceptions;

by Inovio, upon a breach of any representation, warranty, covenant or agreement on the part of Inovio set forth in the Acquisition Agreement, or if any representation or warranty of VGX shall have become untrue, in either case such that the conditions set forth in the Acquisition Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, with certain cure period exceptions;

by VGX, upon written notice to Inovio setting forth

the determination of VGX's board of directors that a competing proposal received constitutes a VGX superior offer, as defined by the Acquisition Agreement;

the determination of VGX's board of directors to withdraw its recommendation in favor of recommending the VGX superior offer to the VGX stockholders, in satisfaction of its fiduciary duties; and

VGX's representation of full and complete compliance with the terms of the Acquisition Agreement's no solicitation provisions prior to such termination, with certain limitations related to compliance with notice and document delivery requirements pursuant to the Acquisition Agreement; or

by Inovio, upon written notice to Inovio setting forth

the determination of Inovio's board of directors that a competing proposal received constitutes a Inovio superior offer, as defined by the Acquisition Agreement,

the determination of Inovio's board of directors to withdraw its recommendation in favor of recommending the Inovio superior offer to the Inovio stockholders, in satisfaction of its fiduciary duties, and

Inovio's representation of full and complete compliance with the terms of the Acquisition Agreement's no solicitation provisions prior to such termination, with certain limitations related to compliance with notice and document delivery requirements pursuant to the Acquisition Agreement.

In the event that the Acquisition Agreement is terminated by either Inovio or VGX pursuant to the provisions related to recommendation of a competing superior offer, the terminating party shall pay the other party a fee equal to \$3,500,000 in immediately available funds and such payment shall be the sole and exclusive remedy relating to such termination.

No Solicitation (see Page 109)

The Acquisition Agreement contains detailed provisions prohibiting Inovio and VGX, as well as their respective officers, directors, employees, agents and representatives, from taking any action to solicit a competing acquisition proposal. Notwithstanding these restrictions, the Acquisition Agreement provides that under limited circumstances prior to the approval of the Acquisition Agreement by their respective stockholders, Inovio or VGX, upon receipt of an acquisition proposal from a third party, may furnish non-public information to that third party and/or enter into discussions or negotiations with that third party. We refer to an acquisition proposal from a third party which meets the specified criteria and is recognized as such by the relevant board of directors as a "superior offer." If either Inovio or VGX receives a superior offer, then the board of directors of the receiving party may change its recommendation relating to the transaction.

Vote of Stockholders Required (see Pages 211 and 219)

In order to transact business at the Inovio special meeting, holders of a majority of the shares of Inovio common stock entitled to vote as of the record date for the Inovio special meeting must be present, either in person or by proxy. The approval of a business combination between Inovio and VGX, whereby Inovio will issue shares of common stock to outstanding stockholders of VGX in the Merger and upon exercise of assumed VGX options and warrants and upon conversion of VGX convertible debt assumed by Inovio on a consolidated basis, on the terms and conditions set forth in the joint proxy statement/prospectus, requires the approval of the holders of a majority of the shares of Inovio common stock entitled to vote and present at the Inovio special meeting, either in person or by proxy duly authorized. The approval of the proposed changes to the Inovio 2000 Plan requires approval of the holders of a majority of the shares of Inovio common stock entitled to vote and present at the Inovio special meeting, either in person or by proxy duly authorized. As of the close of business on the record date for the Inovio special meeting, [____], 2009, Inovio directors, executive officers and affiliates beneficially owned and were entitled to vote [____] shares of Inovio common stock, which represented [___]% of the [_____] shares of Inovio common stock outstanding and entitled to vote on that date.

In order to transact business at the VGX special meeting, holders of the majority of the shares of VGX common stock entitled to vote as of the record date for the VGX special meeting must be present, either in person or by proxy. The approval of the business combination between Inovio and VGX, whereby Inovio will issue shares of common stock to outstanding stockholders of VGX in the Merger and upon exercise of assumed VGX options and warrants and upon conversion of VGX convertible debt assumed by Inovio on a consolidated basis, on the terms and conditions set forth in the joint proxy statement/prospectus, requires the approval of the holders of a majority of the outstanding shares of VGX common stock entitled to vote at the VGX special meeting.

As of the close of business on the record date for the VGX special meeting, [], 2009, VGX directors, executive officers and affiliates beneficially owned and were entitled to vote [] shares of VGX common stock, which represented []% of the [] shares of VGX common stock outstanding and entitled to vote on that date. Of such shares, shares representing approximately 41% of the shares of VGX common stock outstanding and entitled to vote are already committed to voting in favor of the Merger pursuant to certain voting agreements, as described in *"Support Stockholders' Voting Agreements"* beginning on page 116.

Appraisal and Dissenters Rights (see Page 80)

If any VGX stockholder entitled to appraisal rights under DGCL with respect to the Merger has properly exercised and perfected such appraisal rights pursuant to and in accordance with Section 262 of the DGCL, and the Merger is consummated, such holder shall, to the extent allowed under applicable laws, be entitled to an appraisal by the Delaware Court of Chancery of the fair value of such shares of VGX common stock as provided in Section 262 of the DGCL, provided that such VGX stockholder acts in accordance with and meets all the requirements of Section 262 of the DGCL. Prior to the closing, Inovio, Submerger and VGX shall comply, and after the closing, Inovio and the Surviving Entity shall comply, with the information delivery and other requirements pursuant to Section 262 of the DGCL and applicable Delaware law. See *Annex E* for a copy of Section 262 of the DGCL.

Notwithstanding any other provision in the Acquisition Agreement to the contrary, shares of VGX common stock that have not consented to or been voted for approval of, as applicable, the Merger and with respect to which such VGX stockholders become entitled to, and do properly exercise dissenters' rights in accordance with Section 262 of DGCL, or the "dissenting shares," will not be converted into or represent a right to receive consideration in connection with the Merger, but will instead be converted into the right to receive such consideration as may be determined to be due with respect to such dissenting shares pursuant to the DGCL. If a holder of dissenting shares, or a "dissenting stockholder's demand for such payment and appraisal or becomes ineligible for such payment and appraisal, then, as of the Effective Time or the occurrence of such event of withdrawal or ineligibility, whichever last occurs, such dissenting stockholder's dissenting shares and will be converted into the right to receive, and will be exchangeable for the merger consideration. However, if the number of dissenting shares exceeds 10% of the number of shares of outstanding VGX common stock outstanding just prior to closing, a condition to consummation of the Merger will not be satisfied and the Merger will not close unless Inovio waives the condition.

Directors and Management of Inovio Following the Transaction (see Page 86)

The Acquisition Agreement provides that Inovio's board of directors will take all actions necessary such that, on the closing date of the transaction, three directors who shall be acceptable to Inovio's board of directors shall be nominated and appointed to the Inovio board, including Dr. Avtar Dhillon, who shall serve as chairman of the board of the post-Merger board of directors. Further, the Acquisition Agreement provides that VGX's board of directors will take all actions necessary such that,

on the closing date of the transaction, two directors who shall be acceptable to VGX's board of directors shall be nominated and appointed to the Inovio board. The parties shall ensure that the composition of the Inovio board upon such appointments shall comply with the rules and regulations of the NYSE Amex, or other applicable securities exchange or quotation system, and the SEC. Consistent with these requirements, the parties have identified and anticipate that Dr. Avtar Dhillon, Dr. J. Joseph Kim, Mr. Simon Benito, Mr. Tee Khiang Ng and Dr. Morton Collins will serve on the post-Merger board of directors.

The post-Merger management team of the combined group shall consist of the following persons as of closing:

J. Joseph Kim shall be appointed Chief Executive Officer;

Avtar Dhillon shall be appointed President;

Peter Kies shall be appointed Chief Financial Officer;

C. Jo White shall be appointed Chief Medical Officer;

Niranjan Sardesai shall be appointed Senior Vice President, Research & Development;

Kevin Rassas shall be appointed Senior Vice President, Business Development;

Gene Kim shall be appointed Vice President, Finance;

Punit Dhillon shall be appointed Vice President, Operations;

Michael Fons shall be appointed Vice President, Corporate Development; and

Iacob Mathiesen, Vice President, Research & Development and Managing Director, Inovio AS.

Opinion of Inovio's Financial Advisor (see Page 73)

In connection with the Merger, Inovio's board of directors received a written opinion, dated July 2, 2008, of Inovio's financial advisor, Oppenheimer & Co. Inc., referred to as Oppenheimer, as to the fairness, from a financial point of view and as of the date of the opinion, to Inovio of the Merger Exchange Ratio provided for in the original agreement and plan of merger (prior to its amendment). Oppenheimer's opinion, dated July 2, 2008, relates only to the Merger Exchange Ratio provided for in the original merger agreement and does not take into account any events or developments after the date of such opinion, including any modification to the proposed Merger or the Merger Exchange Ratio provided for in the Acquisition Agreement, dated as of December 5, 2008, as further amended on March 31, 2009.

The full text of Oppenheimer's written opinion, dated July 2, 2008, which describes the assumptions made, procedures followed, matters considered and limitations on the review undertaken, is attached to this joint proxy statement/prospectus as *Annex B*. *Oppenheimer's opinion was provided to Inovio's board of directors in connection with its evaluation of the Merger Exchange Ratio from a financial point of view to Inovio and does not address any other aspect of the Merger. Oppenheimer's opinion does not address the underlying business decision of Inovio to effect the Merger, the relative merits of the Merger as compared to any alternative business strategies that might exist for Inovio or the effect of any other transaction in which Inovio might engage and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to any matters relating to the Merger.*

Interests of Directors, Officers and Affiliates (see Page 85)

In considering the recommendation of Inovio's board of directors that Inovio stockholders vote in favor of the issuance of Inovio's securities in conjunction with the Merger and the resulting change of control of Inovio, Inovio stockholders should be aware that some Inovio executive officers and directors

have interests in the transaction that may be different from, or in addition to, their interests as stockholders of Inovio. These interests include the execution of new employment agreements, to be effective upon closing of the Merger, between Inovio and its current executive officers, which provide for certain payments upon closing of the Merger and eligibility for future severance payments under certain terms and conditions.

Inovio's board of directors was aware of these interests and considered them, among other matters, in making its recommendation to Inovio's stockholders that they approve the transaction and other related proposals. In addition, subsequent to such recommendation, Dr. Avtar Dhillon, Mr. Simon Benito and Mr. Tee Khiang Ng were selected to continue service on the Inovio board as directors post-Merger, for which Mr. Benito and Mr. Ng will continue to receive customary director compensation, and Dr. Dhillon will also serve as chairman of the board of directors and president of Inovio post-Merger.

In considering the recommendation of VGX's board of directors to VGX's stockholders that they approve the transaction, VGX stockholders should be aware that some officers and directors of VGX have interests in the transaction that are different from, or in addition to, the other VGX stockholders. These interests include:

Dr. J. Joseph Kim, Chief Executive Officer of VGX, will become the Chief Executive Officer of Inovio post-Merger; and

Dr. C. Jo White, Chief Medical Officer of VGX, will serve as the Chief Medical Officer of Inovio post-Merger.

As of December 31, 2008, all current directors and executive officers of VGX as a group beneficially owned approximately 33.2% of the shares of VGX common stock. Under the terms of the Acquisition Agreement, at the effective time of the Merger, each outstanding and unexercised option to purchase shares of VGX common stock, whether vested or unvested, will be assumed by Inovio and will become an option to acquire, on the same terms and conditions as were applicable under the stock option agreement by which such option is evidenced and the stock option plan under which such option was issued, an option to purchase shares of Inovio common stock. VGX's current executive officers and directors, as of December 31, 2008, own vested and unvested options and warrants to purchase an aggregate of 8,081,800 shares VGX common stock.

VGX's board of directors was aware of these interests and considered them, among other matters, in making its recommendation to VGX's stockholders that they approve the transaction. In addition, subsequent to such recommendation, Dr. J. Joseph Kim and Dr. Morton Collins were selected to serve as directors of Inovio post-Merger, for which Dr. Collins will receive customary director compensation.

Accounting Treatment of the Merger (see Page 83)

The Merger will be accounted for using the purchase method of accounting for business combinations under United States generally accepted accounting principles, which is referred to as GAAP. Although the parties view the business combination of Inovio and VGX as a "merger of equals," Inovio has been determined to be the acquirer for purposes of generally accepted accounting principles, in accordance with the provisions of Statement of Financial Accounting Standards No. 141R, Business Combinations (SFAS 141R). Accordingly, the historical consolidated financial statements of Inovio will be carried forward at their historical cost, the assets and liabilities of VGX will be recorded at their fair value and the results of operations of VGX will be included in the consolidated financial statements from the date of the closing of the Merger. In evaluating the appropriate accounting treatment under SFAS 141R, the parties and their accountants considered all relevant facts and circumstances, including, without limitation, the relative operational size and revenue production of the legacy entities, the relative voting rights of the legacy holders in the combined group, the composition

of the post-Merger company's board of directors and its committees, and the composition and relevant experience of senior management.

Certain Material U.S. Federal Income Tax Consequences of the Transaction (see Page 95)

The Merger is intended to qualify as a "reorganization" under Section 368(a) of the Code. It is a condition to the completion of the Merger that each of Inovio and VGX receives a legal opinion from their respective tax counsel to the effect that the Merger will be treated as a "reorganization" under the Code. Accordingly, VGX stockholders will generally not recognize any gain or loss for U.S. federal income tax purposes of their exchange of their VGX common stock for Inovio common stock in the Merger. The companies themselves will not recognize gain or loss for U.S. federal income tax purposes as a result of the Merger.

The U.S. federal income tax consequences described above may not apply to all holders of VGX common stock. Your tax consequences will depend on your individual situation. Accordingly, you should consult your own tax advisor concerning all federal, state, local, gift, and foreign tax consequences of the Merger that may apply to you.

Listing of Inovio Common Stock on the NYSE Amex (see Page 84)

Inovio has notified the NYSE Amex of the Acquisition Agreement, the anticipated Merger and the other transactions contemplated by the Acquisition Agreement, and has submitted an additional listing application for the shares of Inovio common stock to be issued or to become issuable pursuant to assume securities in the Merger. In the Acquisition Agreement, Inovio agrees to use all commercially reasonable efforts to cause the shares of Inovio common stock issuable in connection with the Acquisition Agreement to be approved for listing on the NYSE Amex or, if applicable under certain circumstances described in the Acquisition Agreement, to be approved for listing or quotation on another securities exchange or quotation system.

Risk Factors (see Page 26)

There are material risks to the transaction and to the parties' separate and proposed combined businesses, which may impact the parties' ability to complete the transaction and its results if consummated, the business prospects of the parties to the transaction and the anticipated operations and financial condition of the proposed combined group. In evaluating the Acquisition Agreement, the principal terms of the transaction or the issuance of Inovio securities in the transaction, you should carefully read this joint proxy statement/prospectus and especially consider the factors discussed in the section entitled *"Risk Factors"* beginning on page 26 as well as the risk factors listed in the annual report on Form 10-K of Inovio for the year ended December 31, 2008.

Comparative Market Price and Dividend Information (see Page 23)

Inovio common stock is currently listed on the NYSE Amex, the successor to the American Stock Exchange, under the trading symbol "INO." On July 7, 2008, the last full trading day prior to the initial public announcement of the transaction, Inovio common stock closed at \$1.08 per share on the American Stock Exchange. On December 5, 2008, the last full trading day prior to the public announcement of the Acquisition Agreement, Inovio common stock closed at \$0.39 per share on the NYSE Amex. On to mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement/prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement prospectus, Inovio common stock closed at \$ mailing of this joint proxy statement prospectus,

Shares of VGX common stock are not currently listed on an exchange.

SELECTED SUMMARY HISTORICAL AND PRO FORMA COMBINED FINANCIAL DATA

The following tables present summary historical financial data, comparative per share historical and pro forma data as well as market price and dividend data of Inovio and VGX.

Financial Information

The extracts from the financial statements of, and other information about, Inovio and VGX appearing in this joint proxy statement/prospectus are presented in U.S. dollars (\$) and have been prepared in accordance with U.S. GAAP.

Selected Summary Historical Financial Data of Inovio

The following table sets forth selected summary historical financial data of Inovio. The information presented below was derived from Inovio's audited annual consolidated financial statements as of December 31, 2008, and for the five years ended December 31, 2008. This information is only a summary. This information should be read together with Inovio's historical financial statements and accompanying notes and Inovio's "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" included elsewhere into this joint proxy statement/prospectus. Historical results are not necessarily indicative of future results.

		ear Ended ecember 31, 2008		Year Ended ecember 31, 2007		Year Ended ecember 31, 2006	-	Year Ended ecember 31, 2005		/ear Ended ecember 31, 2004
Operations Data:										
License fee and milestone payments	\$	791,401	\$	2,793,478	\$	1,337,105	\$	2,563,283	\$	214,351
Revenue under collaborative research &										
development arrangements		1,077,967		1,854,303		962,207		1,492,145		945,591
Grants & miscellaneous revenue		228,264		159,948		1,168,866		1,411,825		7,157
Total revenue		2,097,632		4,807,729		3,468,178		5,467,253		1,167,099
Loss from continuing operations		(13,658,464)		(15,898,420)		(13,346,194)		(15,506,970)		(11,263,140)
Gain on disposal of assets										290,209
Interest & other income		692,842		4,693,977		1,002,252		210,118		247,555
Net loss		(12,965,622)		(11,204,443)		(12,343,942)		(15,296,852)		(10,972,931)
Imputed dividends common stock								(8,329,112)		
Imputed & declared dividends preferred stock				(23,335)		(2,005,664)		(2,736,658)		(732,405)
Net loss attributable to common stockholders	\$	(12,965,622)	\$	(11,227,778)	\$	(14,349,606)	\$	(26,362,622)	\$	(11,705,336)
Per common share basic & diluted:										
Net loss	\$	(0.30)	\$	(0.27)	\$	(0.40)	\$	(0.81)	\$	(0.62)
Imputed dividends common stock								(0.44)		
Imputed & declared dividends preferred stock						(0.06)		(0.14)		(0.04)
Net loss attributable to common stockholders	\$	(0.30)	\$	(0.27)	\$	(0.46)	\$	(1.39)	\$	(0.66)
Balance Sheet Data:										
Cash and equivalents	\$	14,115,281	\$	10.250.929	\$	8.321.606	\$	17,166,567	\$	17,889,797
Short-term investments	Ψ	1,110,201	Ψ	16,999,600	Ψ	14,700,000	Ψ	1,100,007	φ	17,005,757
Long-term investments		9,169,471		10,777,000		1,700,000				
Total assets		38,987,028		39,775,021		35,949,615		28,978,954		20,951,502
Current liabilities		14,709,582		3.354.499		6,859,722		4,002,280		5,401,992
Accumulated deficit		(152,812,948)		(139,847,326)		(128,619,548)		(114,269,942)		(87,907,320)
Total stockholders equity		19,106,147		31,034,754		18,151,864		23,470,748		15,549,510
			2					,,,		

Selected Summary Historical Financial Data of VGX

The following table sets forth selected summary historical financial data of VGX. The information presented below was derived from VGX's audited annual consolidated financial statements as of December 31, 2008, and for the five years ended December 31, 2008. This information is only a summary. This information should be read together with VGX's historical financial statements and accompanying notes and VGX's "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" included elsewhere into this joint proxy statement/prospectus. Historical results are not necessarily indicative of future results.

	Years Ended December 31,									
Consolidated Statement of Operations Data		2008 2007			2006 2005		2005	2004		
Revenue:										
Revenue from Product Sales	\$	606,211	\$	5 723,411	\$	5	\$		\$	
Government Contract Revenue		1,990,411								
Government Grant Revenue		86,120		668,955		337,178		381,872		111,643
Revenue from Related Parties		376,072								
Other Operating Revenue, net		68,425		36,448						
Total Revenue		3,127,239		1,428,814		337,178		381,872		111,643
Total Revenue		5,127,259		1,420,014		557,178		301,072		111,043
Operating Expenses										
Cost of Product Sales		2,237,238		2,204,254						
Research & Development		13,125,479		10,781,960		9,007,334		3,412,430		1,631,523
General & Administrative		7,808,636		5,082,119		8,679,153		7,878,765		2,291,785
TOTAL Operating Expenses		23,171,353		18,068,333		17,686,487		11,291,195		3,923,308
Loss from Operations		(20,044,114)		(16,639,519)		(17,349,309)		(10,909,323)		(3,811,665)
Other Income (Expense):										
Gain on Sale of Manufacturing Assets to Related										
Party, net of tax		6,653,153								
Losses from Equity Investment in Affiliated Entity		(1,632,812)		(990,338)		(700,451)		(325,080)		
Interest Income		423,312		919,026		846,219		89,455		4,382
Interest Expense		(712,242)		(1,128,713)		(957,153)		(190,201)		(966)
Other Income		218,557								
Minority Interest		267,634		43,503						
•										
Total Other Income (Expense)		5,217,602		(1,156,522)		(811,385)		(425,826)		3,416
Total Other Income (Expense)		5,217,002		(1,130,322)		(011,505)		(425,620)		3,410
Net Loss	\$	(14,826,512)	\$	(17,796,041)	\$	(18,160,694)	\$	(11,335,149)	\$	(3,808,249)
Amounts per common share basic and diluted:										
Net loss per share	\$	(0.34)	\$	(0.41)	\$	(0.45)	\$	(0.34)	\$	(0.14)
Weighted average number of common shares										
outstanding basic and diluted		43,392,406		43,915,950		40,535,848		33,795,625		26,314,113

			December 31,		
Consolidated Balance Sheet Data	2008	2007	2006	2005	2004
Current Assets	\$ 8,409,630	\$ 19,434,539	\$ 21,948,415	\$ 4,763,882	\$ 1,505,395
Noncurrent Assets	5,944,399	14,687,551	9,108,878	5,751,481	9,517
Current Liabilities	5,078,828	17,773,729	12,444,467	1,944,959	776,934
Noncurrent Liabilities	4,400,000	2,945,646	4,000,000	5,000,000	
Minority Interest	688,863	956,497			
Accumulated Deficit	(68,111,842)	(53,285,330)	(35,489,289)	(17,328,595)	(5,993,446)
Total Stockholders' Equity	4,186,338	12,446,218	14,612,826	3,570,404	737,978

Selected Comparison of Historical and Pro Forma Per Share

The following table sets forth selected historical per share information of Inovio and VGX and unaudited pro forma per share information after giving effect to the Merger between Inovio and VGX,

assuming that 0.9866163 shares of Inovio common stock are issued in exchange for each outstanding share of VGX common stock. You should read this information in conjunction with the selected historical financial information, the unaudited pro forma combined financial statements and the separate historical financial statements of Inovio and VGX and the notes thereto included elsewhere in this joint proxy statement/prospectus. The historical per share information is derived from the audited consolidated financial statements of Inovio and VGX as of the year ended December 31, 2008. The unaudited pro forma combined financial statements are not necessarily indicative of the operating results or financial position that would have been achieved had the Merger been consummated at the beginning of the period presented and should not be construed as representative of future operations.

Year Ended December 31, 2008

	Inovio Historical			VGX storical	Pro Forma Combined	
Basic and diluted net loss attributable to common stockholders per common						
share	\$	(0.30)	\$	(0.34)	\$	(0.02)
Weighted average number of common shares basic and diluted	43,914,004		43	,392,406	85,760,779	
			2	22		

COMPARATIVE STOCK PRICE AND DIVIDEND INFORMATION

Inovio's common stock is currently listed, and principally traded, on the NYSE Amex under the symbol "INO." The following table sets forth the quarterly high and low per share closing prices of Inovio's common stock for the three years ending December 31, 2008 and the quarter ended March 31, 2009.

TICA

	US\$		
	High	Low	
Quarter ended March 31, 2009	0.56	0.28	
Year ended December 31, 2008			
Quarter ended December 31, 2008	0.80	0.16	
Quarter ended September 30, 2008	1.13	0.60	
Quarter ended June 30, 2008	1.30	0.78	
Quarter ended March 31, 2008	1.45	0.83	
Year ended December 31, 2007			
Quarter ended December 31, 2007	1.51	0.85	
Quarter ended September 30, 2007	2.94	1.16	
Quarter ended June 30, 2007	4.17	2.20	
Quarter ended March 31, 2007	3.46	2.82	
Year ended December 31, 2006			
Quarter ended December 31, 2006	3.59	2.62	
Quarter ended September 30, 2006	2.58	2.01	
Quarter ended June 30, 2006	2.67	2.00	
Quarter ended March 31, 2006	3.15	2.28	

On July 7, 2008, the last full trading day prior to the initial public announcement date of the Merger, and on [], 2009, the most recent practicable date prior to the mailing of this joint proxy statement/prospectus, the last reported sales prices of Inovio's common stock as reported by the American Stock Exchange and NYSE Amex, respectively, were \$1.08 and \$[], respectively. You are encouraged to obtain current trading prices for Inovio's common stock in considering whether to vote to approve the Merger or engage in any other transaction involving Inovio's securities. As of the record date for the Inovio special meeting, there were approximately [] holders of record of Inovio's common stock.

No public market exists for VGX's common stock. As of the record date for the VGX special meeting, there were approximately [] holders of record of VGX's common stock

Neither Inovio nor VGX have historically paid dividends on its common stock and neither has any intention to do so in the foreseeable future, whether as separate entities or as a combined group if the Merger is consummated.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This joint proxy statement/prospectus and the documents that are incorporated into this joint proxy statement/prospectus by reference contain or incorporate by reference forward-looking statements, as defined by the Private Securities Litigation Reform Act of 1995, which are not purely historical. Forward-looking statements include, without limitation, statements regarding Inovio's, VGX's, the combined group's and the parties' management's expectations, hopes, beliefs, intentions or strategies regarding the future, including Inovio's and VGX's financial condition, results of operations, and the expected impact of the proposed transaction on the parties' financial performance, individually and as a combined group. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "seek," "shall," "should," "would," "will be," "will continue," "will result" and similar expressions or the negatives of such terms may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements include information concerning possible or assumed future results of the combined group's operations, including statements about the following subjects:

the benefits, effects or results of the proposed Merger;

cost reductions, operating efficiencies or synergies resulting from the proposed Merger;

operations and results after the proposed Merger;

integration of the parties' operations;

business strategies;

growth opportunities;

competitive position;

market outlook;

plans and objectives of management;

tax treatment of the proposed Merger;

accounting treatment of the proposed Merger;

costs in connection with the proposed Merger; and

any other statements regarding future growth, future cash needs, future operations, business plans and future financial results, and any other statements that are not historical facts;

These forward-looking statements are based on current expectations and beliefs concerning future developments and the potential effects on the parties and the transaction. There can be no assurance that future developments actually affecting Inovio, VGX and the proposed combined group will be those anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond the parties' control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by

these forward-looking statements. In addition to the risk factors described in this joint proxy statement/prospectus under the heading "*Risk Factors*," beginning on page 26, as well as the risk factors described in the other documents Inovio files with the SEC and incorporate by reference in this joint proxy statement/prospectus, those factors include:

Inovio's ability to obtain stockholder approval of the Merger and the related amendment to the Inovio 2000 Plan;

VGX's ability to obtain stockholder approval of the Merger;

Stockholder litigation, if any, and/or regulatory scrutiny related to the Merger;

the parties' ability to close the Merger in a timely manner;

the ability of the management team to effect a smooth transition to leadership of the combined group;

changes in U.S. and foreign governmental safety, health, environmental and other regulations, which could require Inovio and/or VGX to make significant expenditures;

employment workforce factors, including the loss of key employees;

uncertainties relating to Inovio's and/or VGX's technology;

the combined group's ability to implement certain business objectives;

liability related to the use of the combined group's products;

uncertainties related to clinical trials;

U.S. and foreign government regulation and uncertainty of obtaining regulatory approval;

dependence on research collaborators and scientific advisors; and

other risks and uncertainties detailed from time to time in Inovio's filings with the SEC.

Should one or more of these risks or uncertainties materialize, or should any of the parties' assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Inovio and VGX undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

The risks included in this joint proxy statement/prospectus are not exhaustive. Other sections of this joint proxy statement/prospectus may include additional factors that could adversely impact the parties' businesses and financial performance. Moreover, new risk factors emerge from time to time and neither Inovio nor VGX can predict all such risk factors, nor can either company assess the impact of all such risk factors on its current business or the combined group's anticipated business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward looking statements. Given these risks and uncertainties, you should not place undue reliance on forward-looking statements as a prediction of actual results. You should also be aware that while Inovio does, and the combined group will, from time to time, communicate with securities analysts, Inovio does not, and the combined group does not, intend to disclose any material non-public information or other confidential commercial information to them. Accordingly, you should not assume that Inovio, VGX or the resulting combined group agrees with any statement or report issued by any analyst, regardless of the content of the analyst's report. Thus, to the extent that reports issued by securities analysts contain any projections, forecasts or opinions, such reports are not Inovio's, VGX's or the combined group's responsibility.

All forward-looking statements attributable to Inovio or VGX or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

RISK FACTORS

Inovio stockholders should carefully consider the following factors in evaluating whether to approve the proposals to be voted on at the Inovio special meeting. VGX stockholders should carefully consider the following factors in evaluating whether to approve the proposals to be voted on at the VGX special meeting. Holders of VGX options, warrants and convertible debt should carefully consider the following factors in evaluating whether to exercise or convert such securities for Inovio common stock post-Merger. These factors should be considered in conjunction with the other information included in or incorporated by referenced into this proxy statement/ prospectus, including the risks discussed in Inovio's Form 10-K for the year ended December 31, 2008.

Risks Relating to the Transaction

The issuance of Inovio securities to VGX stockholders in the transaction will substantially reduce the percentage interests of Inovio stockholders.

If the transaction is completed, Inovio will issue, or otherwise allocate for issuance under options, warrants and convertible debt to acquire Inovio common stock, a total of up to 59,995,862 shares of Inovio common stock pursuant to the terms of the Acquisition Agreement. The issuance and allocation of this substantial number of new shares of Inovio common stock, will cause a significant reduction in the relative percentage interests of current Inovio stockholders. Following the completion of the transaction and upon issuance of the new shares, subject to the approval of the Acquisition Agreement, Merger and the other transactions contemplated thereby, current VGX stockholders will own approximately 48.52% of Inovio's outstanding capital stock, and current Inovio stockholders will own approximately 51.48% of Inovio's outstanding capital stock. If the Merger is completed on the terms described in this joint proxy statement/prospectus, former holders of VGX securities will own approximately 51.82% of Inovio's share capital on a fully-diluted basis and current holders of Inovio securities will own approximately 48.18% of Inovio's common stock on a fully diluted basis.

The percentage ownership of Inovio's fully-diluted share capital post-Merger is not necessarily reflective of the anticipated voting power of the legacy Inovio and VGX stockholders post-Merger.

The Acquisition Agreement anticipates the calculation of the Merger Exchange Ratio such that the legacy holders of Inovio's securities and VGX's securities will respectively hold 50 percent of the fully diluted share capital upon closing of the Merger, excluding the shares underlying the VGX convertible debt assumed in the Merger. Taking into account potential conversion of the assumed VGX convertible debt, the anticipated split in potential voting power between the legacy holders of the securities of Inovio and those of VGX, on a fully-diluted basis, would be 48.18% to 51.82%. However, under the terms of a voting trust agreement to be signed and become effective concurrent with the closing of the Merger, five significant stockholders of VGX will place 8,000,000 shares into a trust to be administered by an independent committee of the board of directors of Inovio post-Merger. The trustees would vote the shares in accordance with the percentage of votes cast by all stockholders on any particular matter. The trust will have a term of ten years and would terminate upon a change in control of the combined group. The effect of the voting trust reduces the voting power of the legacy holders of VGX securities on a fully-diluted basis to 44.91%, with the legacy holders of the Inovio's securities holding 48.18% voting power on a fully-diluted basis for the duration of the voting trust; the effect of the voting trust reduces the voting power of NGX common stock to 39.22% and maintains the legacy holders of Inovio common stock at 51.48% based on the anticipated shares of Inovio common stock outstanding upon closing. The remaining voting power held in trust will reflect the pro rata vote of the stockholders overall. Thus, in the initial post-Merger period Inovio's legacy investors may control stockholder actions, presuming participation by all eligible common stockholders, until shares are transferred out of the voting trust pursuant to its terms or the voting trust is otherwise terminated.



The Merger Exchange Ratio is not based on stock price or book value and the terms of the Merger will not be adjusted to reflect any increase or decrease in Inovio's stock price or either company's book value prior to the Effective Time.

As noted above, the Acquisition Agreement anticipates the calculation of the Merger Exchange Ratio such that the legacy holders of Inovio's securities and VGX's securities will respectively hold 50 percent of the fully-diluted share capital of Inovio upon closing of the Merger, excluding any of the shares underlying the VGX convertible debt assumed in the Merger, an approach meant to reflect the parties' shared view of their integration as a "merger of equals." Although the Acquisition Agreement limits both parties' ability to issue additional securities in the interim period prior to closing, thereby limiting the amount of fluctuation possible in the Merger Exchange Ratio, the Acquisition Agreement does not provide for any value-based adjustment. Thus, any changes, whether an increase or decrease, in the perceived or actual value of Inovio or VGX will not be reflected in the Merger Exchange Ratio or in the final consideration received by the holders of VGX securities upon closing of the Merger.

Sales of substantial amounts of Inovio shares, or even the availability of Inovio shares for sale, in the open market could cause the market price of Inovio shares to decline.

Under Inovio's "shelf registration statement" that the SEC declared effective on May 25, 2006, Inovio registered an aggregate of \$75.0 million of Inovio's equity securities that it may issue from time to time, in one or more offerings at prices and on terms that it determines at the time of each offering. Under that registration statement, Inovio has registered multiple kinds of its equity securities, including common stock, preferred stock, warrants and a combination of these securities, or units.

Through December 31, 2008, Inovio has "taken-down" from the shelf registration statement, and issued and sold, an aggregate of 9,035,378 shares of Inovio common stock valued at \$26.9 million upon issuance and warrants to purchase up to 1,575,919 shares of Inovio common stock valued at \$3.9 million upon issuance and, if those warrants are fully exercised, Inovio will have issued an additional 1,575,919 shares of Inovio common stock under that shelf registration statement. In other words, the shares of common stock sold in offerings from the shelf registration statement as of the date of this joint proxy statement/prospectus represent approximately 36% of the value of the aggregate equity securities from the shelf registration statement (41% if the warrants sold from the shelf registration statement are fully exercised). While that amount is only approximately 24% of Inovio's outstanding shares of common stock as of December 31, 2008, future issuances and sales of common stock or securities exercisable for or convertible into Inovio's common stock pursuant to the existing shelf registration statement, if in substantial numbers, and even the availability for issuance of the securities registered under the shelf registration statement, could adversely affect the market price of Inovio shares.

In addition to the shares and warrants Inovio has issued under the shelf registration statement, during 2007 it also issued 2,201,644 shares of Inovio common stock and warrants to purchase up to 938,475 shares of Inovio common stock in other recent offerings, as well as other restricted shares pursuant to consulting arrangements and other registered securities pursuant to its stock incentive plan in 2007 and 2008. Further, effective February 15, 2008, the SEC revised Rule 144, which provides a safe harbor for the resale of restricted securities, shortening applicable holding periods and easing other restrictions and requirements for resales by Inovio's non-affiliates, thereby enabling an increased number of Inovio's outstanding restricted securities to be resold sooner in the public market.

Further, in conjunction with the Merger, if completed, Inovio will issue a significant number of registered shares, and become obligated to issue a significant number of registered shares upon exercise of VGX options and warrants assumed in the Merger, that will be freely tradable for non-affiliates of VGX or the combined group, limited only by the lock-up arrangements applicable to certain insiders and affiliates of VGX. Thus, approximately 26.00% of the shares issued or issuable in conjunction with the Merger, representing approximately 13.47% of Inovio's post-Merger share capital on a fully-diluted

basis, will be freely tradable immediately post-closing. Further, Inovio anticipates registering the shares of Inovio common stock underlying the VGX convertible debt assumed by Submerger for resale by the debt holders shortly after the closing of the Merger; upon the effectiveness of such registration and conversion of the convertible debt, up to an additional 4,788,100 shares of Inovio common stock would become freely tradable.

Sales of substantial amounts of shares of Inovio common stock at any one time or from time to time by the investors to whom Inovio has issued such shares, or even the availability of these shares for sale, could cause the market price of Inovio's common stock to decline. The significant amount of shares of Inovio common stock available for immediate sale pursuant to registration or Rule 144 could also serve to artificially limit the ability of Inovio's market price to increase in response to growth and improved financial condition of the combined group, if any.

Failure to complete the Merger could negatively impact the stock prices and the future business and financial results of Inovio and VGX because of, among other things, the disruption that would occur as a result of uncertainties relating to a failure to complete the Merger.

The stockholders of Inovio and VGX may not approve the Merger. If the Merger is not completed for any reason, Inovio and VGX could be subject to several risks, including the following:

being required to pay the other company a termination fee of \$3.5 million in certain circumstances, as described under "*The Acquisition Agreement Termination of the Acquisition Agreement*" beginning on page 114 of this joint proxy statement/prospectus, and "*The Acquisition Agreement Termination Payment*" beginning on page 115 of this joint proxy statement/prospectus;

having had the focus of management of each of the companies directed toward the Merger and integration planning instead of on each company's core business and other opportunities that could have been beneficial to the companies; and

incurring substantial transaction costs related to the Merger.

In addition, Inovio and VGX would not realize any of the potential benefits of having completed the Merger.

If the Merger is not completed, the price of Inovio common stock may decline to the extent that the current market price of that stock reflects a market assumption that the Merger will be completed and that the related benefits and synergies will be realized, or as a result of the market's perceptions that the Merger was not consummated due to an adverse change in Inovio's or VGX's business. In addition, each company's business may be harmed, to the extent that customers, suppliers and others believe that such company cannot compete in the marketplace as effectively without the Merger or otherwise remain uncertain about each company's future prospects in the absence of the Merger. Similarly, current and prospective employees of Inovio or VGX may experience uncertainty about their future roles with the combined group and choose to pursue other opportunities, which could adversely affect Inovio or VGX, as applicable, if the Merger is not completed. The realization of any of these risks may materially adversely affect the business, financial results, financial condition and stock price of each company.

Inovio and VGX will incur substantial costs whether or not the transaction is completed, and even if consummated, the costs associated with the transaction, being difficult to estimate, may be higher than expected and may harm the financial results of the post-Merger company.

Inovio and VGX will incur substantial costs related to the transaction whether or not the transaction is completed. These costs include fees for attorneys, accountants and financial advisors, filing fees and financial printing costs. Inovio and VGX estimate that they will incur, in aggregate, direct transaction costs of approximately \$3.3 million associated with the transaction prior to closing

(approximately \$1.8 million by Inovio and \$1.5 million by VGX), and additional costs associated with the consolidation and integration of operations, which cannot be estimated accurately at this time. If the total costs of the transaction exceed the parties' estimates or the benefits of the Merger do not exceed the total costs of the Merger, the financial results of the combined company could be adversely affected. Unless the Acquisition Agreement is terminated under specific circumstances discussed below, the parties' will not recoup any of these costs if the Merger does not close, and will have diverted funds from other operational purposes, potentially to the detriment of each company's financial condition and ability to maintain or grow its respective operations.

In addition, if the Acquisition Agreement is terminated by Inovio upon written notice to VGX setting forth (i) the Inovio board of directors' determination that an Inovio Acquisition Proposal (as defined in the Acquisition Agreement) constitutes an Inovio superior offer (as defined in the Acquisition Agreement), (ii) the Inovio board of directors' determination to withdraw its recommendation in favor of the adoption and approval of the Acquisition Agreement or the approval of the Merger in favor of recommending the Inovio superior offer to the Inovio stockholders, and (iii) Inovio's full and complete compliance with the terms of certain provisions in the Acquisition Agreement prior to such terminated by VGX upon written to Inovio setting forth (i) the VGX board of directors' determination that a VGX Acquisition Proposal (as defined in the Acquisition Agreement) constitutes a VGX superior offer (as defined in the Acquisition Agreement), (ii) the VGX board of directors' determination that a VGX Acquisition Proposal (as defined in the Acquisition Agreement) constitutes a VGX superior offer (as defined in the Acquisition Agreement), (ii) the VGX board of directors' determination to withdraw its recommendation in favor of the adoption and approval of the Acquisition Agreement) constitutes a VGX superior offer to the VGX stockholders, and (iii) VGX's full and complete compliance with the terms of certain provisions in the Acquisition Agreement prior to such termination, VGX will be required to pay Inovio a termination fee equal to \$3.5 million. See "*The Acquisition Agreement No Solicitation*" beginning on page 109 of this joint proxy statement/prospectus, "*The Acquisition Agreement Termination of the Acquisition Agreement*" beginning on page 114 of this joint proxy statement/prospectus, and "*The Acquisition Agreement Termination Payment*" beginning on page 115 of this joint proxy statement/prospectus.

The Acquisition Agreement limits Inovio's and VGX's ability to pursue alternatives to the Merger.

The Acquisition Agreement contains provisions that make it more difficult for Inovio and VGX to pursue alternative business combination transactions with a third party. These provisions include the general prohibition on both Inovio and VGX from soliciting any acquisition proposal or offer for a competing transaction except under limited circumstances and the requirement that the terminating party pay a termination fee of \$3.5 million if the Acquisition Agreement is terminated under specified circumstances. Moreover, approximately 41% of the outstanding shares of VGX common stock as of the record date are subject to voting agreements pursuant to which such VGX stockholders agree to vote in favor of the Merger. See "*The Acquisition Agreement No Solicitation*" beginning on page 109 of this joint proxy statement/prospectus, "*The Acquisition Agreement Termination of the Acquisition Agreement*" beginning on page 114 of this joint proxy statement/prospectus, "*The Acquisition Agreement Termination Payment*" beginning on page 115 of this joint proxy statement/prospectus, and "*Other Agreements Related to the Transaction VGX Support Stockholders Voting Agreement*" beginning on page 116 of this joint proxy statement/prospectus.

These provisions might discourage a third party that may have an interest in acquiring all of or a significant part of either Inovio or VGX from considering or proposing an acquisition, even if that party were prepared to pay consideration with a higher per share market price than the current proposed merger consideration. Furthermore, the termination fee may result in a potential competing acquirer proposing to pay a lower per share price to acquire Inovio or VGX than it might otherwise have proposed to pay. The payment of the termination fee could also have an adverse effect on the terminating company's financial condition and the ability of that company to fund its operations after the termination of the Acquisition Agreement.



Inovio and VGX may not realize the benefits they expect from the transaction and if the benefits of the transaction, if any, do not exceed the costs of integrating the businesses of Inovio and VGX, the combined group's financial results may be adversely affected.

Inovio and VGX have entered into the Acquisition Agreement with the expectation that the transaction will result in substantial benefits such as a potentially greater ability to mitigate overall development risk through creation of a broader, more balanced fully-integrated biopharmaceutical company with a deep product development pipeline, with anticipated significant market potential, synergies and efficiencies from the combination of experienced management and research and development teams, and a broader patent portfolio. The combination of Inovio and VGX will be complex, time consuming and expensive, and could disrupt Inovio's and VGX's businesses. The combined group will need to overcome significant integration and allocation of resources challenges in a timely and efficient manner in order to realize any benefits from the transaction and have a successful integration of the operations and personnel. In addition to the costs incurred thus far by each party in negotiating the Acquisition Agreement, planning for the special meetings and managing the pre-Merger process, the combined group will incur costs, which are not reasonably estimable, in the quarter in which the transaction is completed or following quarters, associated with integrating the two companies' operations and management. The combined group may incur additional material charges in subsequent quarters to reflect additional costs associated with the transaction. If the financial benefits of the transaction, if any, do not exceed the costs of planning for and completing the Merger and integrating the businesses of Inovio and VGX, the combined group's financial results may be adversely affected.

Management of the combined group will include numerous individuals that may not possess experience in a publicly traded corporate environment and may be unfamiliar with the reporting and compliance requirements applicable to publicly traded companies.

The management of the combined group post-Merger, if completed, will draw from the current Inovio and VGX management. As VGX is a privately-held company, many of the legacy VGX members of the combined group's management may not possess experience in a publicly traded corporate environment and may be unfamiliar with the reporting and compliance requirements of a publicly traded company in general or of the post-Merger Inovio specifically. As a result, these individuals may have to rely on the legacy Inovio members of the combined group's management to gain the historical perspective with respect to Inovio that may be necessary to properly analyze the performance of the combined group for reporting purposes and to provide critical disclosures to the public. As a result, the combined group may be unable to fully or timely comply with applicable Exchange Act reporting requirements, or may incur greater costs in doing so due to inefficiencies in the reporting process and the need to provide relevant educational support regarding public company responsibilities and reporting requirements. Any noncompliance with the applicable reporting requirements could trigger, among other things, an investigation by the SEC, a stockholder lawsuit, an inability to utilize certain streamlined forms or processes or to rely on certain safe harbors under the federal securities laws, which may result in an unfavorable impact on the market price of the public company's stock post-Merger.

If Inovio and VGX lose key personnel prior to completion of the Merger, or the combined group loses key personnel shortly after the Merger, and are unable to attract and retain additional, highly skilled personnel required to develop products or obtain new collaborations, the business of Inovio, VGX and/or the combined group may suffer.

Inovio and VGX depend, to a significant extent, on the efforts of their key employees, including senior management and senior scientific, clinical, regulatory and other personnel. The development of new therapeutic products requires expertise from a number of different disciplines, some of which is not widely available. Both companies depend upon scientific staff to discover new product candidates

and to develop and conduct pre-clinical studies of those new potential products, and rely on clinical and regulatory staff for the design and execution of clinical trials in accordance with FDA and foreign regulatory requirements and for the advancement of product candidates toward FDA and foreign regulatory approval. The clinical and regulatory staff is responsible for the design and execution of clinical trials in accordance with FDA requirements and for the advancement of our product candidates toward FDA approval. The manufacturing staffs are responsible for designing and conducting each company's manufacturing processes in accordance with the FDA's Quality System Regulations. The quality and reputation of the companies' scientific, clinical, regulatory and manufacturing staff, especially the senior staff, and their success in performing their responsibilities, have been and remain significant factors in attracting potential funding sources and collaborators. In addition, each company's executive officers are involved in a broad range of critical activities, including providing strategic and operational guidance. It is vital to each of Inovio and VGX to maintain its current management and senior staff in support of ongoing operations in case the Merger is not completed, and important to the combined group to retain such individuals so that they can be integrated post-Merger and provide the combined group the anticipated, continued benefit of their significant prior experience and their reputations for quality performance. Inovio and VGX each face, and the combined group will face, intense competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations. The loss of these individuals, or an inability to retain or recruit other key management and scientific, clinical, regulatory, manufacturing and other personnel, may delay or prevent either company from achieving its current business objectives and, if the Merger is completed, could also substantially delay the integration process, undermine partner and investor confidence in the combined group and hamper the combined group's ability to complete in-process programs, all of which could adversely affect each of the companies' financial condition, operations and stock price. The combined group also faces intense competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations.

Certain partners or collaborators of Inovio and VGX may have the right to terminate their existing license or collaboration agreements in conjunction with the Merger; such termination may have an adverse effect on the financial condition and operations of Inovio, VGX and/or, if the Merger is consummated, the combined group.

Some of Inovio's and VGX's sponsored research, license and/or collaborative arrangements contain "Change of Control" or other protective provisions that may be triggered by the proposed transaction, if completed, which may enable premature termination of such arrangements or otherwise may impact the status of such arrangements for the combined group. For example, Inovio's agreement with Wyeth requires Inovio to provide Wyeth with certain notifications of a pending qualifying transaction and enables Wyeth to terminate the arrangement if such notice and certain other written assurances regarding the priority and commitment to the arrangement are not timely provided to Wyeth by Inovio prior to consummation of such transaction. Similarly, Inovio's arrangement with Merck requires certain notice of a Change of Control transaction and also enables termination under limited circumstances as a result. Other of Inovio's and VGX's arrangements, including certain of their patent licenses, require that the company seek and obtain prior written consent from the collaborative party ahead of the consummation of any Change of Control transaction. Although Inovio and VGX intend to comply with applicable notice and other documentation requirements, and to provide assurances and seek consent from the collaborator, pursuant to such "Change of Control" provisions in these and other collaborative arrangements, Inovio and VGX cannot assure you that, to the extent such rights exist, their partners will not seek to terminate or alter their arrangements with them in relation to the closing of the proposed transaction. If any of these arrangements are terminated and such arrangements, individually or in the aggregate, are material to Inovio, VGX and/or the combined group, such termination may have an adverse effect on the ability of the company/combined group to continue to conduct certain aspects of its business or fund its operations at historical levels or generate revenues, and thus may also adversely affect the company's and/or combined group's financial condition and Inovio's stock price.

The holders of Inovio's Series C preferred stock and a limited number of Inovio's warrants may seek redemption of their shares or warrants for cash, which could result in litigation and if applicable to such securities, could impair the combined group's cash position.

Inovio has reviewed the rights of the holders of its outstanding securities in conjunction with the Merger, which have a variety of provisions prescribing certain consequences upon a merger transaction, contingent upon the existence of specified shifts of ownership of Inovio's securities or voting power of Inovio stockholders. Although the holders of Inovio's equity securities prior to the closing of the Merger will hold less than 50% of the outstanding equity securities after closing of the Merger, the holders of outstanding Inovio capital stock prior to closing of the Merger will retain a majority of the voting power upon consummation of the Merger. As a result, the Merger does not appear to constitute a change of control or qualifying triggering event for shares of Inovio's Series C preferred stock and certain Inovio's warrants, which in the event of a change of control or qualifying triggering event as defined for such securities, would provide the holders of such securities the right to redeem such shares or warrants for cash. Although such redemption would not be mandatory, if triggered and sought by all holders of such Inovio securities, the costs of redemption would total approximately \$853,000 in cash for the shares of Series C preferred stock and various warrants, which could impair the cash position of the combined group post-closing, and result in the combined group not having sufficient funds to support its operations initial post-combination. Although Inovio believes the Merger does not satisfy the applicable definitions of a change of control or qualifying triggering event applicable to the shares of Series C preferred stock and the certain warrants containing redemption rights, and thus the Merger does not trigger the redemption rights, if the holders of these securities believe otherwise, such holders could take legal action against Inovio, resulting in increased legal fees, which could also impair the cash position of the combined group post-closing.

If Inovio's due diligence investigation of VGX was inadequate, or VGX's due diligence of Inovio was inadequate, then stockholders of the combined group following the Merger could lose some or all of their investment. Additionally, if the representations and warranties made by Inovio and VGX in the Acquisition Agreement are inaccurate or breached, neither entity will be indemnified for any losses or damages incurred as a result of such breach.

Even though Inovio conducted a due diligence investigation of VGX, and VGX conducted a due diligence investigation of Inovio, neither can be sure that this diligence surfaced all material issues that may be present inside either company's business, or that it would be possible to uncover all material issues through a customary amount of due diligence, or that factors outside of VGX, Inovio and their respective businesses and outside of their control will not later arise. Even if each party's due diligence successfully identified certain risks, unexpected risks may arise and previously known risks may materialize in a manner not consistent with the other party's preliminary risk analysis.

In addition, Inovio and VGX are relying upon the representations and warranties made by the other party in the Acquisition Agreement, however the Acquisition Agreement does not include indemnification provisions allowing for clear procedures for recoupment of losses resulting from a breach of such representations or warranties. If either party breaches a representation or warranty made by such party and the other party suffers losses or damages as a result of such breach, the other party will not be indemnified for such loss or damage and would have to rely on potentially costly litigation to pursue and potentially recoup such costs.

Inovio and VGX may be unable to obtain the regulatory or exchange approvals required to complete the Merger.

Inovio and VGX do not believe that the Merger is subject to review by any other governmental authorities under the antitrust laws of the other jurisdictions where Inovio and VGX conduct business. However, Inovio and VGX are continuing to review such requirements and there remains the

possibility that the parties would be subject to a pre-Merger statutory filing under the HSR Act if the implied value of the transaction would change substantially prior to the consummation of the Merger. Also, even after completion of the Merger, U.S. or foreign governmental authorities could challenge or seek to block the Merger under the antitrust laws, as they deem necessary or desirable in the public interest. Moreover, in some jurisdictions, a competitor, customer or other third party could initiate a private action under the antitrust laws challenging or seeking to enjoin the Merger, before or after it is completed. Inovio and VGX cannot be sure that a challenge to the Merger will not be made or that, if a challenge is made, Inovio and VGX will prevail. For a full description of the regulatory clearances, consents and approvals required for the Merger, see "*The Acquisition Agreement Regulatory Matters*" beginning on page 109 of this joint proxy statement/prospectus.

The Acquisition Agreement conditions the closing of the Merger on the registration statement, of which this joint proxy statement/prospectus is a part, being declared effective by the SEC and the NYSE Amex, or an alternate securities exchange or quotation system under certain circumstances, approving the Inovio common stock to be issued or to become issuable in the Merger for listing (or quotation, if applicable). While Inovio and VGX expect to obtain the required regulatory clearances, consents and approvals, Inovio and VGX cannot be certain that any required approvals will be obtained, nor can they be certain that the approvals will be obtained within the time contemplated by the Acquisition Agreement. A delay in obtaining any required clearances, consents and approvals might delay and may possibly prevent the completion of the Merger.

The NYSE Amex may delist Inovio's securities from quotation on its exchange in the interim period of the pending Merger if Inovio is unable to maintain the required stock price, and if so, Inovio may be unable to relist its securities on the NYSE Amex or another national securities exchange due to the level of the perceived market value of shares of its common stock.

Inovio's securities are currently listed on the NYSE Amex, a national securities exchange, and in recent months have experienced a significant drop in market price. The NYSE Amex may seek to delist Inovio's securities from trading on its exchange if the NYSE Amex determines that the market price of Inovio's common stock has been persistently too low or if Inovio fails to maintain compliance with other requirements of continued listing on the NYSE Amex. If NYSE Amex finds that Inovio is non-compliant, it will issue a warning letter, which will require Inovio to respond regarding potential actions it intends to take to support the market price. If such actions are not found sufficient by the NYSE Amex, if Inovio cannot get any required approvals for such actions from its stockholders, or Inovio otherwise cannot or does not complete such actions in a timely manner, the NYSE Amex will initiate the delisting process. If the NYSE Amex delists Inovio's securities from trading on its exchange and Inovio is unable to relist its securities on the NYSE Amex or to list its securities or another securities exchange or to have its securities quoted on a quotation system due to the level of the perceived market price of shares of its common stock, Inovio could face significant material adverse consequences, including:

an inability to fulfill the closing conditions for the Merger under the Acquisition Agreement;

a limited availability of market quotations for its securities;

a determination that its common stock is a "penny stock" which will require brokers trading in its common stock to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the trading market for Inovio common stock;

a limited amount of news and analyst coverage for its company;

a decreased ability to issue additional securities or obtain additional financing in the future; and

if prior to the VGX special meeting, a lack of support among VGX stockholders for the Merger.

Further, although the NYSE Amex has determined that the transaction does not constitute a "Reverse Merger" under Section 341 of the exchange's Company Guide, or "Section 341," such determination could change if facts material to such determination were to change, whether prior to or after closing of the Merger. If the transaction is ultimately determined to constitute a "Reverse Merger," Inovio would be required to file an initial listing application and satisfy the initial listing requirements in order to remain listed on the NYSE Amex and obtain listing approval for the shares issued and issuable in relation to the Merger. If Inovio is not able to qualify for initial listing on the NYSE Amex at such time, the Inovio common stock may transition to listing on an alternate securities exchange or quotation on a quotation system consistent with the terms of the Acquisition Agreement, which also could result in the significant material adverse consequences noted above.

The proposal to amend the Inovio 2000 Plan, the approval of which is a condition to the Merger pursuant to the Acquisition Agreement, may not receive the required stockholder approval.

Pursuant to the Acquisition Agreement, the Merger is contingent upon, among other things, an amendment to the Inovio 2000 Plan. If the 2000 Plan Amendment is not approved by the stockholders of Inovio, and the parties do not waive the related closing condition in the Acquisition Agreement, the pending transaction may be delayed or terminated altogether, adversely affecting the financial condition of the parties. If the parties were to waive the related closing condition and consummate the Merger in absence of the 2000 Plan Amendment, legacy holders of Inovio securities will hold a smaller proportion of Inovio's fully-diluted share capital post-Merger.

VGX stockholders may exercise their dissenters' rights in connection with the Merger, which may impact the closing of the Merger and the availability of cash post-closing.

VGX stockholders who exercise their dissenters' rights in connection with the Merger, including satisfying all statutory requirements for exercising such rights, will be entitled to cash payment for the fair value of their shares which will be determined in accordance with the DGCL. As the Acquisition Agreement includes a 10% cap on the percentage of VGX holders exercising such rights as a closing condition to the Merger, if the number of shares of VGX common stock held by dissenting stockholders exceeds this cap, the Merger may not close. Additionally, even if the Merger is consummated, the availability of cash to the company after the Merger may be significantly reduced and may adversely affect the financial condition and operations of the combined group.

If the taxation consequences of the transaction on the companies themselves and/or any participating VGX stockholders are significantly different than those anticipated by the parties and described in this joint proxy statement/prospectus, VGX and Inovio may be subject to expensive stockholder litigation, which could negatively impact the financial condition of the combined group.

This joint proxy statement/prospectus contains a discussion of certain material U.S. federal income tax consequences to a VGX stockholder of the exchange of VGX common stock for Inovio common stock in the contemplated transaction. This discussion is based on current provisions of the Code, Treasury regulations promulgated under the Code, Internal Revenue Service, or IRS, rulings and pronouncements, and judicial decisions now in effect, all of which are subject to change at any time by legislative, judicial or administrative action. Any such changes may be applied retroactively. In addition, this discussion does not consider the effects of any applicable foreign, state, local or other tax laws, or estate or gift tax considerations, or the alternative minimum tax.

Neither Inovio nor VGX has sought, and nor will either party seek, any rulings from the IRS with respect to the U.S. federal income tax consequences discussed in this joint proxy statement/prospectus. The provided discussion does not in any way bind the IRS or the courts or in any way constitute an assurance that the presentation of U.S. federal income tax consequences will be accepted by the IRS or the courts. Thus, there is a risk that the tax consequences described in this joint proxy



statement/prospectus for Inovio stockholders and/or VGX stockholders may be incorrect. The provided discussion of tax consequences is not tax advice, and it is clearly stated that each holder of Inovio and VGX securities should consult his, her or its own tax advisor as to particular tax consequences to it of such events, including the applicability of any state, local or foreign tax laws and any proposed changes in applicable law.

As discussed, the parties intend that the proposed transaction and the exchange of Inovio common stock for VGX common stock, be tax-free to the entities' stockholders and tax-free to the entities themselves. However, should the tax consequences resulting from the issuance of common stock be different than as discussed in this joint proxy statement/prospectus, the combined group may face claims from individuals in connection with any unanticipated tax burden related to the transaction, which will result in increased legal costs to the combined group and negatively impact the combined group's financial condition.

The consummation of the Merger may limit the ability of Inovio and VGX to utilize existing net operating losses and certain other tax attributes.

As disclosed in Inovio's annual report on Form 10-K for the 2008 fiscal year, as of December 31, 2008, Inovio had net operating losses, or "NOLs", of approximately \$59.4 million for federal income tax purposes and approximately \$58 million for state income tax purposes, plus federal research tax credit carry-forwards of approximately \$1.2 million as of December 31, 2008. As disclosed in VGX's audited financial statements for the year ended December 31, 2008, VGX had NOL carry-forwards of approximately \$36.3 million for federal income tax purposes and approximately \$30.1 million for state income tax purposes.

Utilization of the NOLs and tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Code, and similar state provisions due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of NOL and tax credit carryforwards and other deferred tax assets that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing ownership of certain stockholders or public groups in the stock of the corporation by more than 50 percentage points over a three-year period. Inovio previously performed an analysis of ownership activity through December 31, 2008, which indicated that multiple ownership changes have occurred in previous years which created annual limitations on Inovio's ability to utilize NOL and tax credit carryforwards that would expire unused. VGX has not performed a detailed Section 382 analysis to determine whether there are any limitations with respect to the utilization of its NOLs.

Inovio, VGX and their tax advisors are continuing to analyze the impact of the Merger, if consummated, on the parties' tax benefits related to NOL and tax credit carryforwards. Any limitation on the combined group's net operating loss carryforwards that could be used to offset post-ownership change in taxable income would adversely affect the combined group's liquidity and cash flow, if the combined group were to become profitable.

Some of Inovio's and VGX's officers and directors have conflicts of interest that may influence them to support or approve the Merger.

Certain officers and directors of Inovio and VGX may participate in arrangements arising from the Merger that provide them with interests in the Merger that are different from those of other stockholders of Inovio and stockholders of VGX, including new employment agreements, closing payments due at the Effective Time and continuing indemnification pursuant to the terms of the Acquisition Agreement. These interests, among others, may influence the officers and directors of



Inovio and VGX to support or approve the transaction. Inovio and VGX stockholders are encouraged to review the more detailed discussion entitled "*Interests of Directors, Officers and Affiliates*" on page 85, to evaluate the interests of such individuals and to weigh the impact such interests may have had on the support or recommendations of such individuals for the Merger.

Inovio and VGX may be subject to the risks of litigation relating to the Merger.

Any significant transaction generates some degree of litigation risk, and both Inovio and VGX may be subject to claims and actions incidental to the pending merger transaction, potentially from partners or collaborators of the parties' current programs, stockholders or other third parties who seek to disrupt the transaction to serve their own interests, or by each other if the parties' fail to consummate the transaction. Inovio and VGX are not currently aware of, nor do they presently anticipate, any such litigation, however the transaction may result in litigation prior to or upon closing of the transaction, if completed. If such litigation arises, the outcome of these proceedings cannot be predicted. If a plaintiff were successful in a claim against either or both companies, either or both of the companies, or the combined group if the Merger is closed, could be burdened with the required payment of a material sum of money. If this were to occur, it could have an adverse effect on either or both companies' financial condition and the financial condition of the combined group if the Merger is consummated.

The combined group may be required to file time-consuming and potentially costly subsequent registration statements or post-effective amendments to the registration statement, of which this joint proxy statement/prospectus is a part, related to the options, warrants and convertible debt assumed pursuant to the Merger.

Pursuant to the Acquisition Agreement, Inovio is required to maintain a current prospectus covering the shares of common stock issuable upon the exercise or conversion of the warrants, options and convertible debt assumed from VGX upon completion of the Merger. Consequently, Inovio may be required to file subsequent registration statements or amend the registration statement of which this joint proxy statement/prospectus is a part in order to update and maintain the prospectus for the issuance of the shares underlying the assumed options, warrants and, on a consolidated basis, convertible debt, until all such shares have been issued or such instruments have expired. The preparation and filing of such registration statements can be time-consuming and costly, and may divert management's attention from the combined group's business.

Risks Relating to the Business of the Combined Group

For purposes of the following risk factors, the terms "we," "our," "our company" and "us" refer to the projected combined group, consisting of Inovio, VGX and their respective subsidiaries, unless otherwise explicitly stated.

The integration of the operations of Inovio and VGX may be difficult and may lead to adverse effects.

The success of the Merger will depend, in part, on the ability of our company to realize the anticipated synergies, cost savings and growth opportunities from integrating VGX's business with our business. Our success in realizing these benefits and the timing of this realization depend upon the successful integration of the operations of VGX with those of Inovio. The integration of previously independent businesses is a complex, costly and time-consuming process, which requires coordination of different development, regulatory, manufacturing and business teams, and involves the integration of systems, applications, policies, procedures, business processes and operations. The difficulties of combining the operations of the businesses include, among others:

coordinating and, where appropriate, consolidating research and development operations;

preserving important licensing, research and development, manufacturing and supply, distribution, marketing, customer and other relationships of Inovio and VGX;

establishing or expanding manufacturing, sales, distribution and marketing functions in order to accommodate newly acquired programs and product lines or rationalizing these functions to take advantage of synergies;

integrating the newly acquired entities and personnel into a uniform financial reporting system, including ensuring internal controls and procedures are expanded to include all necessary reporting pathways;

minimizing the diversion of management's attention from ongoing business concerns and facilitating the development of senior management's ability to work as a single administrative team; and

coordinating and consolidating geographically separate organizations.

The combined group may not accomplish this integration smoothly or successfully. If cultural conflicts and different opinions on scientific and regulatory matters arise, the integration could become more difficult and unpredictable. The combined group may not succeed in addressing these risks and challenges, or any other problems encountered in connection with the transaction, which could have a material adverse effect on the combined group and its ability to realize any of the expected benefits of the Merger, which as a result may harm the market price of Inovio common stock.

Integrating Inovio and VGX may divert management's attention away from other operations.

Successful integration of the operations, products and personnel may place a significant burden on the combined group's management and internal resources. The diversion of the attention of management from current programs to the integration effort and any difficulties encountered in combining operations could result in delays in the companies' clinical trial programs and could prevent the combined group from realizing the full benefits anticipated to result from the Merger, thus adversely affecting our business. In addition, the combined group may not be able to retain its senior management and other employees for the duration of the integration process or beyond. The failure to retain employees could result in higher operating expenses, disrupt the management of the combined group and have a materially adverse effect on the combined group's financial condition, results of operations and cash flow.

Inovio and VGX expect to incur significant costs integrating the companies into a single business.

Inovio and VGX expect to incur significant costs integrating our operations, products and personnel. These costs may include costs for:

employee redeployment, relocation or severance;

conversion of information systems;

combining development, regulatory, manufacturing and commercial teams and processes;

reorganization of facilities; and

relocation or disposition of excess equipment.

Additionally, other costs associated with the integration of the combined group can be substantial. To the extent that the combined group incurs integration costs that were not anticipated, these unexpected costs could adversely impact the combined group's liquidity or force it to borrow or raise additional funds, further diverting management's attention from operations of the combined group and potentially further diluting the stockholders of the combined group.

The combined group will have a need for significant funds in the future and there is no guarantee that we will be able to obtain the funds needed timely or at all.

Developing new medical devices and therapies and conducting clinical trials is expensive. The combined group's product development efforts may not lead to commercial products, either because our product candidates fail to be found safe or effective in clinical trials or because we lack the necessary financial or other resources or relationships to pursue its programs through advanced phases of clinical trials to commercialization. Our capital and future revenue may not be sufficient to support the expenses of our operations, the development of a commercial infrastructure and the conduct of our pre-clinical research and clinical trials, although based upon Inovio's and VGX's current budgeting and projected cash flow models, we believe that the combined group may be able to support its integrated operations for 12 months post-closing of the Merger.

Our plans for conducting research, furthering development, continuing and integrating current and launching future pre-clinical and clinical trials and, eventually, marketing our human-use equipment and associated therapies will involve substantial costs. The extent of such costs will depend on many factors, including some of the following:

The speed and degree of success of our efforts to integrate existing pre-clinical and clinical programs from Inovio and VGX and timely make decisions regarding the future of such programs;

The progress and breadth of pre-clinical testing and the size or complexity of our clinical trials and drug delivery programs, all of which directly influence cost;

The possible failure of one or more of our clinical trials, necessitating redirection or abandonment of certain programs or a change in focus to other product candidates or other medical indications;

Higher than expected costs involved in complying with the regulatory process to get our human-use products approved, including the number, size, and timing of necessary clinical trials and costs associated with the current assembly and review of existing clinical and pre-clinical information;

Higher than expected costs involved in patenting our technologies and defending them and pursuing our overall intellectual property strategy;

Unexpected costs associated with obtaining rights to any third-party intellectual property asserted or believed to be blocking our freedom to operate under any of our own intellectual property necessary or desirable to product development and commercialization;

Changes in our existing research and development relationships and our ability to efficiently negotiate and enter into new agreements;

Changes in or terminations of our existing collaboration and licensing arrangements;

Faster or slower than expected rate of progress and changes in the scope and the cost of our research and development and clinical trial activities;

An increase or decrease in the amount and timing of milestone payments we receive from collaborators;

Higher than expected costs of preparing an applications for FDA and counterpart foreign regulatory approval of our product development programs;

Higher than expected costs of developing the processes and systems to support FDA approval of our product development programs;

An increase in our timetable and costs for the development of marketing operations and other activities related to the commercialization of our product development programs;

Costs associated with compliance with increasingly stringent laws, regulations and industry guidelines with respect to the sales, marketing, and advertising of our human-use products;

Higher than expected costs to develop and scale up our manufacturing capability of our human-use equipment and associated therapies or obtain manufacturing services from third-parties; and

Competition for our products and our ability, and that of our partners, to commercialize our products.

We plan to fund operations by several means. We will attempt to enter into contracts with partners that will fund either general operating expenses or specific programs or projects. Some funding also may be received through government grants. However, we may not be able to enter into any such contracts or may not receive such grants or, if we do, our partners and the grants may not provide enough funding to meet our needs.

In the past, Inovio and VGX have both raised funds through the sale of their capital stock or issuing debt convertible into stock, and the combined group is likely to do this in the future. However, due to the significant fluctuations in the market price of our common stock as a result of the extreme fluctuations in the global financial markets recently, there may not be sufficient investor interest in such sales at such time as we seek to raise additional funds, or if there is interest, it may not be at a price or on terms favorable to us. Further, sale of our stock to new investors post-Merger would result in dilution of the ownership interests of our existing stockholders, including the current Inovio stockholders and the former VGX stockholders. The greater the number of shares sold, the greater the dilution. A high degree of dilution, especially soon after completion of a highly dilutive event like the Merger, can make it difficult for the price of our stock to increase, among other things. Dilution also weakens existing stockholders' voting power; to the extent a planned issuance of shares of capital stock would require stockholder approval, there can be no assurance that our stockholders will support such an issuance, and thus we may not be able to raise funds in sufficient amounts or in a timely manner if such approvals would be needed.

We cannot assure you that we will be able to raise additional capital or secure alternate financing to fund operations, or that we will be able to raise additional capital under terms that are favorable to us. Further, we cannot assure you that the Merger, if completed, will in any way negate or mitigate each of Inovio's and VGX's current need for future capital.

Negative conditions in the global credit markets may impair the liquidity of a portion of Inovio's investment portfolio and the combined group's ability to maintain overall liquidity, negatively impacting the combined group's operations and financial condition.

The capital and credit markets have been experiencing extreme volatility and disruption for more than twelve months and the volatility and disruption have reached unprecedented levels. In some cases, the markets have exerted downward pressure on availability of liquidity and credit capacity for certain issuers. We need liquidity to pay our operating expenses, make timely principal and interest payments on our debt and replace certain maturing liabilities.

Inovio's investment securities consist of high-grade (AAA rated) auction rate securities, or ARS, issued primarily by municipalities, with a par value of approximately \$13.6 million. The recent negative conditions in the global credit markets have prevented some investors from liquidating their holdings, including their holdings of ARS. In early March 2008, Inovio was informed that there was insufficient demand at auction for all six of its high-grade ARS. As a result, these affected securities are currently not liquid, and Inovio could be required to hold them until they are redeemed by the issuer or to



maturity. In the event Inovio needs to access the funds that are in an illiquid state, Inovio will not be able to do so without a loss of principal, until a future auction on these investments is successful, the securities are redeemed by the issuer or they mature.

In December 2008, Inovio, via its wholly-owned subsidiary Genetronics, Inc., or "Genetronics," which holds the ARS, accepted an offer of ARS rights from UBS. The ARS rights permit Inovio to require UBS to purchase Inovio's ARS at par value at any time during the period of June 30, 2010 through July 2, 2012. If we do not exercise our ARS rights, the ARS will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction fails. If the ARS rights are not exercised before July 2, 2012 they will expire and UBS will have no further obligation to buy our ARS. UBS has the discretion to purchase or sell our ARS at any time without prior notice so long as we receive a payment at par upon any sale or disposition. UBS will only exercise its discretion to purchase or sell our ARS for the purpose of restructurings, dispositions or other solutions that will provide us with par value for our ARS. As a condition to accepting the offer of ARS rights, we released UBS from all claims except claims for consequential damages relating to its marketing and sales of ARS. We also agreed not to serve as a class representative or receive benefits under any class action settlement or investor fund.

In conjunction with the acceptance of the rights offering, Genetronics also amended its existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with the ARS pledged as collateral. Genetronics fully drew down on the line of credit in December 2008. Although Inovio has been able to regain limited liquidity through this line of credit secured by the ARS and expects redemption of the ARS pursuant to the rights obtained, the line of credit may not provide sufficient liquidity for Inovio's current operational needs, nor provide the necessary liquidity to complete the integration process and maintain desired programs after the Merger with VGX, if completed.

Without sufficient liquidity, Inovio, and upon completion of the Merger, the combined group, will be forced to curtail its operations, and its business will suffer. In the event current resources, including Inovio's ARS and the related line of credit, do not satisfy the combined group's needs, it may have to seek additional financing. The availability of additional financing will depend on a variety of factors such as market conditions, the general availability of credit, the volume of trading activities, the overall availability of credit to the financial services industry, our credit ratings and credit capacity, as well as the possibility that customers or lenders could develop a negative perception of our long- or short-term financial prospects if Inovio, or subsequently the combined group, incurs large investment losses or if the level of business activity decreases due to a downturn in available funding, partnership opportunities and other fluctuations. The crisis in the global financial markets currently places significant limitations on the general availability of credit and the number and level of interest of investors. Similarly, access to funds may be impaired if regulatory authorities take negative actions against the combined group. Further, even if financing becomes available, the cost to the combined group may be significantly higher than in the past. The combined group's results of operations, financial condition, and cash flows position could be materially adversely affected by these disruptions in the financial markets, including the resulting lack of liquidity in Inovio's current investments and availability of financing for future liquidity.

If the combined group does not have enough capital to fund operations, then we will have to cut costs or raise funds.

If we are unable to raise additional funds under terms acceptable to us and in the interests of our stockholders post-Merger, then we will have to take measures to cut costs or obtain funds using alternative methods, such as:

Delay, scale back or discontinue one or more of our pre-clinical or clinical programs or other aspects of operations, including laying off personnel or stopping or delaying planned preclinical research and the initiation or continuation of clinical trials;

Sell or license some of our technologies that we would not otherwise sell or license if we were in a stronger financial position;

Sell or license some of our technologies under terms that are less favorable than they otherwise might have been if we were in a stronger financial position; and

Consider further business combination transactions with other companies or positioning ourselves to be acquired by another company.

If it became necessary to take one or more of the above-listed actions, then our perceived valuation may be lower, which could impact the market price of our stock price. Further, the effects on our operations, financial performance and stock price may be significant if we do not or cannot take one or more of the above-listed actions in a timely manner and when needed, and our ability to do so may be limited significantly due to the instability of the global financial markets and the resulting limitations on available financing to us and to potential licensees, buyers and investors.

The market for Inovio's common stock is volatile, and the combined group anticipates that such volatility will continue indefinitely, which could adversely affect an investment in our stock.

Historically, Inovio's share price and trading volume have been highly volatile, and such volatility has been exacerbated by the crisis in the global financial markets which has resulted in extreme fluctuations in market performance overall throughout the recent weeks. Such volatility is not unusual for biomedical companies of Inovio's size, age and with a discrete market niche and is likely to continue even if the global markets stabilize. Inovio and VGX do not believe that the integration of the companies into the combined group will alter these factors significantly enough to lessen such volatility. It also is common for the trading volume and price of biotechnology stocks to be unrelated to a company's operations, i.e. to increase or decrease on positive or no news. Inovio's stock has exhibited this type of behavior in the past and will likely exhibit it in the future. The historically low trading volume of Inovio's stock, in relation to many other biomedical companies of its current size, and the anticipated size as the combined group, makes it more likely that a severe fluctuation in volume, either up or down, will affect the stock price.

Some factors that we would expect to depress the price of our stock include:

Adverse clinical trial results;

Adverse research and development results;

Our inability to obtain additional capital;

Announcement that the FDA denied our request to approve our human-use product for commercialization in the U.S., or similar denial by other regulatory bodies which make independent decisions outside the U.S.;

Announcement of legal actions brought against us with respect to any alleged failure by us or our marketers or distributors to sell, market, and advertise our human-use products in compliance with applicable laws, regulations, and industry guidelines;

Announcement of legal actions brought by or filed against us for patent or other matters, especially if we receive negative rulings or outcomes in such actions;

Announcement of an investigation of or an action against us by the SEC, NYSE Amex, or other state or federal regulatory authorities related to corporate governance or securities issues, including any prolonged comment letter response process, especially if such circumstances result in negative outcomes such as a significant restatement of our prior financial results;

Inability to satisfy continued listing requirements of the NYSE Amex and subsequent transition to an alternate securities exchange or quotation system;

Cancellation of corporate or academic partnerships which include Merck, Wyeth, University of Pennsylvania, as well as other material agreements;

Public concern as to the safety or efficacy of our human-use products including public perceptions regarding gene therapy in general;

Potential negative market reaction to the terms or volume of any issuances of shares of our stock to new investors or service providers;

Stockholders' decisions, for whatever reasons, to sell large amounts of our stock;

Declining working capital to fund operations, or other signs of apparent financial uncertainty;

Significant advances made by competitors that adversely affect our potential market position; and

The loss of key personnel and the inability to attract and retain additional highly-skilled personnel.

These factors, as well as the other factors described in this joint proxy statement/prospectus, could significantly affect the price of our stock. Historically Inovio has held that quarter-to-quarter or annual comparisons of its operating results are not a good indicator of its future performance, and the companies believe that such comparisons will also be poor indicators of performance post-Merger, at least until the combined group has operated on an integrated basis for a substantial period of time, if not longer. Further, the inability to accurately compare periodic performance due to the Merger and any other fluctuations may cause Inovio's stock to perform below the expectations of public market analysts and investors post-Merger. If this happens, the price of Inovio's common stock would likely decline.

Our operating results may vary significantly from period-to-period, which may result in a decrease in the price of our common stock.

Our future revenues and operating results may vary significantly from period-to-period due to a number of factors, many of which are outside of our control. These factors include:

the uncertainties inherent in the integration and consolidation process of combining Inovio and VGX, including the significant number of one-time costs likely to be incurred in the initial periods post-Merger;

the introduction of new products and services by us or our competitors;

costs and expenses associated with delays or changes and regulatory requirements for pre-clinical testing and clinical trials;

the timing of regulatory approvals;

sales and marketing expenses, including costs of training and compliance; and

the amount and timing of operating costs and capital expenditures relating to the expansion or consolidation of our business operations and facilities.

Although we acknowledge that our operating results will vary significantly from period-to-period and past periodic performance should not be relied upon as an indicator of future periodic performance, it is possible that in one or more future periods our operating results may be below the expectations of analysts and/or investors. If this happens, the price of our common stock may decrease, even if there has not been a significant adverse change in our financial condition or our operations.

Both Inovio and VGX have a history of losses, we expect to continue to incur losses and we may not achieve or maintain profitability.

As of December 31, 2008, Inovio had an accumulated deficit of approximately \$152.8 million and VGX had an accumulated deficit of approximately \$68.1 million. Inovio and VGX have each operated at a loss since their respective inceptions, and the combined group anticipates such losses to continue for some time. The combined group expects its consolidated, accumulated deficit will continue to increase, as it will be expensive to continue research, development and clinical efforts, especially while integrating such efforts. If these activities are successful and if we receive approval from the FDA to market equipment and/or a therapy, then even more funding will be required to market and sell such product. The outcome of these matters cannot be predicted at this time. We anticipate maintaining current partnerships and collaborations, and expect to evaluate additional potential partnerships and collaborative agreements as a way to further fund operations, but there is no assurance we will be able to secure partnerships or other arrangements that will provide the required funding, if at all. We will seek to continue to rely on outside sources of financing to meet our capital needs for the initial 12 months post-Merger. In the past, we have raised funds through the public and private sale of our stock, and we are likely to seek to do this in the future. However, due to the significant fluctuations in the market price of our common stock as a result of the extreme fluctuations in the global financial markets recently, there may not be sufficient investor interest in such sales at such time as we seek to raise additional funds, or if there is interest, it may not be at a price or on terms favorable to us.

Further, there can be no assurance, assuming we successfully raise additional funds, that we will achieve positive cash flow. If we are unable to raise additional funds under terms acceptable to us and in the interests of our stockholders, then we will have to take measures to cut costs, such as delaying, scaling back or discontinuing one or more of our gene delivery programs or other aspects of operations, including laying off personnel or stopping or delaying planned preclinical research and the initiation or continuation of clinical trials.

VGX has a large amount of outstanding receivables from VGXI, Inc., a wholly owned subsidiary of VGX International, which if not repaid timely could have negative cash flow impacts on VGX or the combined group.

As a result of licensing agreements with VGXI, Inc. VGX has accounts receivable from VGXI, Inc. totaling \$200,000. Also by the end of the fiscal year 2009, approximately \$1,000,000 will be due from VGXI, Inc. for the repayment of direct costs paid by VGX for the VGX-1027 multiple ascending dose study. If VGXI, Inc. fails to pay these amounts to VGX, VGX or the combined group may suffer negative cash flow because these funds are intended to be used to repay direct expenses incurred by VGX related to the licensing agreements and VGX-1027 program. Although as of February 2009 VGX owns, and upon consummation of the Merger, if approved, the combined group will own, 25.04% of VGX International, Inc., the parent company of VGXI, Inc., VGX is not able to compel payment of the amounts owed on a timely basis, or at all, on account of this ownership interest.

Our dependence upon non-marketed products, our limited experience in manufacturing, our lack of experience marketing human-use products, and our continuing deficit may result in even further fluctuations in our trading volume and share price.

Even if we were to achieve successful clinical results in our programs, successful approval, marketing, and sales of our human-use equipment are critical to the financial future of our company. Our human-use products are not yet approved for sale in the U.S. and other jurisdictions and we may never obtain these approvals regardless of whether we achieve successful clinical trial results utilizing such human-use products. Even if we do obtain approvals to sell our human-use products in the U.S., these sales may not be as large or as timely as we expect. These uncertainties may cause our operating results to fluctuate dramatically in the next several years.

If we are unable to develop commercially successful products in various markets for multiple indications, our business will be harmed and we may be forced to curtail or cease operations.

We cannot assure you that we will successfully develop any products, or if we do, that they will be commercially successful. If we fail to develop or successfully commercialize any products, we may be forced to refocus, curtail or cease operations. Our ability to achieve and sustain operating profitability depends on our ability, directly or with strategic partners, to successfully commercialize our products in Europe, Asia and in the US. This will depend in large part on our ability to commence, execute and complete clinical programs and obtain regulatory approvals for our products. Clinical trials are still necessary before we can seek regulatory approval to sell our products or therapies. We cannot assure you that we will receive approval for our products in the U.S. or in other countries or, if approved, that we or a partner will achieve a significant level of sales. If we fail to partner or commercialize our products, we may be forced to curtail or cease operations.

We are also in the pre-clinical stages of research and development with other new product candidates using electroporation technology. These new indications and product candidates will require significant costs to advance through the development stages. Even if such product candidates are advanced through clinical trials, the results of such trials may not gain FDA or foreign regulatory approval. Even if approved, our products may not be commercially successful.

Pre-clinical and clinical trials of human-use equipment are unpredictable, and if we experience unsuccessful trial results, our business will suffer.

Before any of our human-use equipment can be sold, the FDA or applicable foreign regulatory authorities must determine that the equipment meets specified criteria for use in the indications for which approval is requested, including obtaining appropriate regulatory approvals. Satisfaction of regulatory requirements typically takes many years, and involves compliance with requirements covering research and development, testing, manufacturing, quality control, labeling and promotion of therapies for human use. To obtain regulatory approvals, we must, among other requirements, complete pre-clinical research and clinical trials demonstrating that our product candidates are safe and effective for a particular cancer type or disease. Regulatory approval of a new treatment is never guaranteed. The FDA and each applicable foreign regulatory authority will make this determination independently, based on the results from our pre-clinical testing and clinical trials and has substantial discretion in the approval process. Despite the time and experience exerted, failure can occur at any stage, and we could encounter problems causing us to abandon pre-clinical research and clinical trials.



In addition, any of our clinical trials for treatment using our therapies may be delayed or halted at any time for various other reasons, including:

The electroporation-mediated delivery of drugs, gene-based therapeutics or other agents may be found to be ineffective or be considered to cause harmful side effects, including death;

Our clinical trials may take longer than anticipated for any of a number of reasons, including a scarcity of subjects that meet the physiological or pathological criteria for entry into the study and a scarcity of subjects that are willing to participate through the end of the trial, or follow-up visits;

The reported clinical data may change over time as a result of the continuing evaluation of patients or the current assembly and review of existing clinical and pre-clinical information;

Data from various sites participating in the clinical trials may be incomplete or unreliable, which could result in the need to repeat the trial or abandon the project; and

Pre-clinical and clinical data can be interpreted in many different ways, and the FDA and other regulatory authorities may interpret our data differently than we do, which could halt or delay our clinical trials or prevent regulatory approval.

If any of the above events arise during our pre-clinical research, clinical trials or data review, we would expect this to have a serious negative impact on our company. Any termination of ongoing enrollment or other delay or change in the conduct of our clinical trials may not always be understood or accepted by the capital markets and announcements of such scientific results and related actions may adversely affect the market price of our common stock. We have experienced such problems in the past when we stopped further patient enrollment in two Phase III pivotal studies for squamous cell head and neck cancer in 2007.

Any delays or difficulties Inovio or VGX has encountered or the combined group will encounter in its pre-clinical research and clinical trials may delay or preclude regulatory approval. Our product development costs will increase if we experience delays in testing or regulatory approvals or if we need to perform more extensive or larger clinical trials than planned, or if we need to redirect the focus of our trials to other product candidates or medical indications. Any such events could also delay or preclude the commercialization of our therapy or any other product candidates.

Clinical trials are unpredictable, especially human-use trials. Results achieved in early stage clinical trials may not be repeated in later stage trials, or in trials with more patients. When early positive results were not repeated in later stage trials, pharmaceutical and biotechnology companies have suffered significant setbacks. Not only are commercialization timelines pushed back, but some companies, particularly smaller biotechnology companies with limited cash reserves, have discontinued business after releasing news of unsuccessful clinical trial results. Neither Inovio nor VGX can be certain the results it has observed in its pre-clinical testing will be confirmed in clinical trials or the results of any of its or the combined group's clinical trials will support FDA or foreign regulatory approval. If we experience unexpected, inconsistent or disappointing results in connection with a clinical or pre-clinical trial our business will suffer.

A delay in our clinical trials, for whatever reason, will probably require us to spend additional funds to keep our product(s) moving through the regulatory process. If we do not have or cannot raise additional funds, then the testing of our human-use products could be discontinued. In the event our clinical trials are not successful, we will have to determine whether to continue to fund our programs to address the deficiencies, or whether to abandon our clinical development programs for our products in tested indications. Loss of our human-use product line would be a significant setback for our company.

Because there are so many variables inherent in clinical trials, we cannot predict whether any of our future regulatory applications to conduct clinical trials will be approved by the FDA or other

regulatory authorities, whether our clinical trials will commence or proceed as planned, and whether the trials will ultimately be deemed to be successful. Historically, the experience of both Inovio and VGX has been that submission and approval of clinical protocols has taken longer than desired or expected.

Our business is highly dependent on receiving approvals from various regulatory authorities and will be dramatically affected if approval to manufacture and sell our human-use equipment and/or gene-based therapies is not granted or is not granted in a timely manner.

The production and marketing of our human-use equipment and related gene-based therapies, our ongoing research, development, pre-clinical testing, and clinical trial activities are subject to extensive regulation. Numerous governmental agencies in the U.S. and internationally, including the FDA, must review our applications and decide whether to grant regulatory approval. All of our human-use equipment and the therapies to be used in conjunction with such equipment must go through one or more approval processes, in some instances for each indication for which we want to label the equipment for use (such as use for transfer of a certain gene to a certain tissue). These regulatory processes are extensive and involve substantial costs and time.

We have limited experience in, and limited resources available, for such regulatory activities. Failure to comply with applicable regulations can, among other things, result in non-approval, suspensions of regulatory approvals, fines, product seizures and recalls, operating restrictions, injunctions and criminal prosecution.

Any of the following events can occur and, if any did occur, any one could have a material adverse effect on our business, financial conditions and results of operations:

As mentioned earlier, clinical trials may not yield sufficiently conclusive results for regulatory agencies to approve the use of our products;

There can be delays, sometimes long, in obtaining approval for our human-use devices, and indeed, Inovio has experienced such delays in obtaining FDA approval of its clinical protocols;

The rules and regulations governing human-use equipment such as ours can change during the review process, which can result in the need to spend time and money for further testing or review;

If approval for commercialization is granted, it is possible the authorized use will be more limited than we believe is necessary for commercial success, or that approval may be conditioned on completion of further clinical trials or other activities; and

Once granted, approval can be withdrawn, or limited, if previously unknown problems arise with our human-use product or data arising from its use.

We cannot predict the safety profile of the use of our electroporation system when used in combination with other therapies.

Inovio's current clinical trials involve the use of its electroporation system in combination with certain DNA vaccines. While the data Inovio has evaluated to date suggest the use of electroporation does not alone have significant adverse effects nor increase the adverse effects of other therapies, we cannot predict if this outcome will continue to be true or whether possible adverse side effects directly attributable to the vaccines provided by our partners and collaborators or developed internally will compromise the safety profile of the electroporation-based DNA delivery system when used in certain combination therapies. In some instances, clinical results may not clearly indicate whether possible adverse effects are related to our technology versus other study related factors. Even in cases where adverse effects can be shown to be attributable to other study-related factors, not to our technology,

the capital markets may not always understand or accept this distinction, and announcements of such adverse events may cause a drop in the market price of our common stock.

We could be substantially damaged if the third parties we rely on to perform our clinical trials do not adhere to protocols defined in clinical trial agreements or meet expected deadlines.

Like many companies our size, we do not have the ability to conduct preclinical or clinical studies for our product candidates without the assistance of third parties who conduct the studies on our behalf. VGX historically has worked with toxicology facilities, and Inovio and VGX have historically worked with clinical research organizations, or "CROs," that have significant resources and experience in the conduct of pre-clinical and clinical studies. The toxicology facilities conduct the pre-clinical safety studies as well as all associated tasks connected with these studies. The CROs typically perform patient recruitment, project management, data management, statistical analysis and other reporting functions. In addition, Inovio historically has worked with a number of hospitals to perform clinical trials, primarily in the field of oncology.

The combined group anticipates working with such toxicology facilities, CROs and hospitals to perform clinical trials related to its gene-based therapy programs. We will depend on these third parties to recruit patients for our trials, to perform the trials according to our protocols, and to report the results in a thorough, accurate and consistent manner. Our reliance on these third parties for development activities reduces our control over these activities. Although we anticipate having agreements with these entities which should govern what each party is to do with respect to each protocol, patient safety and informed consent, and avoidance of conflict of interest, the risks remain that the terms of the contracts will not be followed, such as the following:

Possible Deviations from Protocol. The entities or the physicians and staff working at them may not perform the trials correctly. It is also possible that the occurrence of serious adverse events during a trial may require physicians and staff, in their medical judgment, to deviate from protocol in response to medical emergencies. In either case, deviations from our protocol may make the clinical data not useful and the trial could become essentially worthless.

Potential for Conflict of Interest. Physicians working on protocols may have an improper economic interest in our company, or other conflict of interest. When a physician has a personal stake in the success of the trial, such as when a physician owns stock, or rights to purchase stock of the trial sponsor, it can create suspicion that the trial results were improperly influenced by the physician's interest in economic gain. Not only can this put the clinical trial results at risk, but it can also cause serious damage to a company's reputation.

Patient Safety and Consent Issues. Physicians and hospitals may fail to secure formal written consent as instructed or report adverse effects that arise during the trial in the proper manner, which could put patients at unnecessary risk. Physicians and hospital staff may fail to observe proper safety measures such as the mishandling of used medical needles, which may result in the transmission of infectious and deadly diseases, such as HIV. This increases our liability, affects the data, and can damage our reputation.

Compliance with Regulations Governing Use of Human Subjects in Research. The use of human subjects in research is a heavily regulated area. Physicians, staff, and the Institutional Review Boards overseeing their use of human subjects may fail to comply with such regulations, potentially putting patients at risk, increasing our liability, affecting the validity of the data, and damaging our reputation.

If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or for other reasons, our clinical trials may be extended, delayed or terminated. If these third parties do not successfully carry out their contractual

duties or meet expected deadlines, we may be required to replace them. Although we believe there are a number of third-party contractors we could engage to continue these activities, replacing a third-party contractor may result in a delay of a particular trial. If any of these events were to occur, then it could have a material adverse effect on our ability to receive regulatory authorization to sell our products, and on our reputation. Negative events that arise in the performance of clinical trials sponsored by biotechnology companies of our size and with limited cash reserves have resulted in companies going out of business. While these risks are always present, to date, Inovio's and VGX's contracted physicians and clinics have been successful in collecting significant data regarding the clinical protocols under which they have operated, and neither Inovio nor VGX is aware of any conflicts of interest or improprieties regarding its protocols.

Even if our products are approved by regulatory authorities, if we fail to comply with on-going regulatory requirements, or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Any product for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data and promotional activities for such product, will be subject to continual review and periodic inspections by the FDA and other regulatory bodies. Even if regulatory approval of a product is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to certain requirements resulting in costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Later discovery of previously unknown problems with our products, including unanticipated adverse events of unanticipated severity or frequency regarding manufacturer or manufacturing processes or failing to comply with regulatory requirements, may result in restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recall, fines, suspension of regulatory approvals, product seizures or detention, injunctions or the imposition of civil or criminal penalties.

Failure to comply with foreign regulatory requirements governing human clinical trials and marketing approval for our human-use equipment could prevent us from selling our products in foreign markets, which may adversely affect our operating results and financial conditions.

For marketing our electroporation systems outside the U.S., the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country and may require additional testing. The time required to obtain approvals outside the U.S. may differ from that required to obtain FDA approval. We may not obtain foreign regulatory approval on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities or by the FDA. Failure to comply with these regulatory requirements or to obtain required approvals could impair our ability to develop these markets and could have a material adverse affect on our results of operations and financial condition.

Our ability to achieve significant revenues from sales or leases of human-use products will depend on establishing effective sales, marketing and distribution capabilities or relationships and we currently lack substantial experience in these areas.

To market our products, we will need to develop sales, marketing and distribution capabilities. In order to develop or otherwise obtain these capabilities, we may have to enter into marketing, distribution or other similar arrangements with third parties in order to sell, market and distribute our products successfully. To the extent that we enter into any such arrangements with third parties, our product revenue is likely to be lower than if we marketed and sold our products directly, and our revenues will depend upon the efforts of these third parties.

We have limited experience in sales, marketing and distribution of clinical and human-use products and we currently have no sales, marketing or distribution capability. If we decide to market and sell our human-use products directly, we must develop a marketing and sales capability. This would involve substantial costs, training and time. We may be unable to develop sufficient sales, marketing and distribution capabilities to commercialize our products successfully. Because the laws, regulations, and industry guidelines with respect to sales, marketing and distribution of clinical and human-use products are becoming increasingly stringent, our lack of experience may cause us to fail to comply or fail to cause contracting third parties to comply, exposing us to liability. Regardless of whether we elect to use third parties or seek to develop our own marketing capability, we may not be able to successfully commercialize any product.

Delays in the approval of LifeTide SW5 in other countries may affect our financial results.

VGX has been, and the combined group will continue, actively seeking to leverage the approval of its product, LifeTide SW5, in Australia to attain approval in neighboring countries such as New Zealand, Philippines and Indonesia. We have limited experience in, and limited resources available for overseeing the approval of our drug in these countries and will have to rely on third-party consultants to assist us in attaining approval. Delays in attaining regulatory approval in these countries will adversely affect future revenues.

Changes in the market conditions in the global porcine market may affect our future results.

Our GHRH DNA therapy for porcine application, LifeTide SW5, is sold through veterinarians to farmers in Australia. The demand for our product is highly correlated with the price of swine in the marketplace. As such, our expected revenue from the sale of LifeTide SW5 is subject to the commodity price risk of the porcine market. We do not hedge the commodity price risk using derivatives. As the porcine market fluctuates, so will our expected revenues from this product.

We rely on collaborative and licensing relationships to fund a portion of our research and development expenses. If we are unable to maintain or expand existing relationships, or initiate new relationships, we will have to defer or curtail research and development activities in one or more areas.

Our partners and collaborators fund a portion of our research and development expenses and assist us in the research and development of our human-use equipment and therapies. These collaborations and partnerships help pay the salaries and other overhead expenses related to research. In the past, Inovio has encountered operational difficulties after the termination of an agreement by a former partner. Because this partnership was terminated, Inovio did not receive significant milestone payments which it had expected and was forced to delay some clinical trials as well as some product development. We may experience such operational difficulties or termination of such relationships without anticipated payment again in the future.

We also rely on scientific collaborators at companies and universities to further expand our research and to test our equipment. In most cases, we lend our equipment to a collaborator, teach him or her how to use it, and together design experiments to test the equipment in one of the collaborator's fields of expertise. We aim to secure agreements that restrict collaborators' rights to use the equipment outside of the agreed upon research, and outline the rights each of the parties will have in any results or inventions arising from the work.

Nevertheless, there is always potential that:

Our equipment or therapies may be used in ways we did not authorize, which can lead to liability and unwanted competition;



We may determine that technology has been improperly assigned to us or a collaborator may claim rights to certain of our technology, which may require us to pay license fees or milestone payments and, if commercial sales of the underlying product are achieved, royalties;

We may lose rights to inventions made by our collaborators in the field of our business, which can lead to expensive litigation and unwanted competition;

Our collaborators may not keep our confidential information to themselves, which can lead to loss of our right to seek patent protection and loss of trade secrets, and expensive litigation; and

Collaborative associations can damage a company's reputation if they fail and thus, by association or otherwise, the scientific or medical community may develop a negative view of us.

The results from these collaborations may not be successful. We may not be able to continue to collaborate with individuals and institutions that will further develop our products, and we may not be able to do so under terms that are not overly restrictive. If we are not able to maintain or develop new collaborative relationships, it is likely that our research pace will slow down and that it will take longer to identify and commercialize new products, or new indications for our existing products.

A small number of licensing partners and government contracts account for a substantial portion of our revenue in each period and our results of operations and financial condition could suffer if we lose these licensing partners or fail to add additional licensing partners in the future.

We derive a significant portion of our revenue from a limited number of licensing partners and government grants and contracts in each period. Accordingly, if we fail to sign additional future contracts with major licensing partners and the government, if a contract is delayed or deferred, or if an existing contract expires or is cancelled and we fail to replace the contract with new business, our revenue would be adversely affected.

Until commercialization of our Medpulser® Electroporation System or our gene-based therapies, we expect that a limited number of licensing partners will continue to account for a substantial portion of our revenue in each quarter in the foreseeable future. During the years ended December 31, 2008 and 2007, one licensing partner, Merck, accounted for approximately 30% and 68%, respectively, of Inovio's consolidated revenue. During the years ended December 31, 2008 and 2007 another licensing partner, Wyeth, accounted for 40% and 23%, respectively, of Inovio's consolidated revenue. We expect revenues from Wyeth and Merck to be significantly lower in 2009, as Wyeth evaluates internal strategic options prior to initiating further development of electroporation-based infectious disease programs and development activities for Merck will be limited for the foreseeable future. Further, Wyeth has recently agreed to be acquired by Pfizer Inc. and Merck has recently agreed to acquire Schering-Plough Corporation. Development and funding priorities may change as a result of these transactions, which may lead to the suspension or termination of our relationships with Wyeth or Merck. Any such suspension or termination would likely adversely effect our business.

VGX to date has relied on government grants and contracts for a substantial portion of its revenues. During the years ended December 31, 2008 and 2007, government grants and contracts accounted for 66% and 47%, respectively, of VGX's consolidated revenue.

If we cannot maintain our existing corporate and academic arrangements and enter into new arrangements, we may be unable to develop products effectively, or at all.

Our strategy for the research, development and commercialization of our product candidates may result in our entering into contractual arrangements with corporate collaborators, academic institutions and others. We have entered into sponsored research, license and/or collaborative arrangements with several entities, including Merck, Wyeth, Dow Global Technologies, Vical, Valentis, the U.S. Navy, Chiron, the University of Pennsylvania, Baylor University, and the University of South Florida, as well

as numerous other institutions that conduct clinical trials or perform pre-clinical research for us. Our success depends upon our collaborative partners performing their responsibilities under these arrangements and complying with the regulations and requirements governing clinical trials. We cannot control the amount and timing of resources our collaborative partners devote to our research and testing programs or product candidates, or their compliance with regulatory requirements which can vary because of factors unrelated to such programs or product candidates. These relationships may in some cases be terminated at the discretion of our collaborative partners with only limited notice to us.

Merck can terminate its May 2004 license and collaboration agreement with us at any time in its sole discretion, without cause, by giving ninety days' advance notice to us. If this agreement is terminated by Merck at any time during the first two years of the collaboration term, then Merck shall continue, for a six-month period beginning on the date of such termination, to make payments previously approved by the project's joint collaboration committee in relation to scientists and outside contractors engaged by us in connection with the agreement. During the years ended December 31, 2008 and 2007, Merck accounted for approximately 30% and 68%, respectively, of Inovio's consolidated revenue, and 12%, on a pro forma basis for the year ended December 31, 2008 when combined with VGX. In addition, some of Inovio's sponsored research, license and/or collaborative arrangements contain "Change of Control" or other protective provisions that may be triggered by the Merger, which may enable pre-mature termination of such arrangements or otherwise may impact the status of such arrangements for the combined group. For example, our agreement with Wyeth requires that we provide Wyeth with certain notifications of a pending qualifying transaction and enables Wyeth to terminate our arrangement if such notice and certain other written assurances regarding the priority and commitment to the arrangement are not timely provided to Wyeth by the Inovio and/or the other Change of Control transaction party prior to consummation of such transaction. Similarly, our arrangement with Merck requires certain notice of a Change of Control transaction and also enables termination under limited circumstances as a result. Other arrangements require that we seek and obtain prior written consent from the collaborative party ahead of the consummation of any Change of Control transaction. Although we intend to comply with applicable notice and other documentation requirements pursuant to such "Change of Control" provisions in these and other collaborative arrangements, we cannot assure you that, to the extent such rights exist, our partners will not seek to terminate or alter their arrangements with us in relation to the closing of the Merger.

The combined group may not be able to maintain Inovio's and VGX's existing arrangements, enter into new arrangements or negotiate current or new arrangements on acceptable terms, if at all. Some of our collaborative partners may also be researching competing technologies independently from us to treat the diseases targeted by our collaborative programs.

We may be subject to stockholder litigation, which would harm our business and financial condition.

We may have actions brought against us by stockholders realting to the Merger, past transactions, changes in our stock price or other matters. Any such actions could give rise to substantial damages, and thereby have a material adverse effect on our consolidated financial position, liquidity, or results of operations. Even if an action is not resolved against us, the uncertainty and expense associated with stockholder actions could harm our business, financial condition and reputation. Litigation can be costly, time-consuming and disruptive to business operations. The defense of lawsuits could also result in diversion of our management's time and attention away from business operations, which could harm our business.

We rely heavily on our patents and proprietary rights to attract partnerships and maintain market position.

The strength of our patent portfolio is an important factor that will influence our success. Patents give the patent holder the right to prevent others from using its patented technology. When someone infringes upon the patented material of a patent holder, the patent holder has the right to initiate legal



proceedings against that person to protect its patented material. These proceedings, however, can be lengthy and costly. Inovio and VGX historically performed, and we will perform, an ongoing review of our patent portfolio to confirm that our key technologies are adequately protected. If we determine that any of our patents require either additional disclosures or revisions to existing information, we may ask that such patents be reexamined or reissued, as applicable, by the U.S. Patent and Trademark Office.

The patenting process, enforcement of issued patents, and defense against claims of infringement are inherently risky. Because we rely heavily on patent protection, we face the following significant risks:

Possibility of Inadequate Patent Protection for Product. The U.S. Patent and Trademark Office or foreign patent offices may not grant patents of meaningful scope based on the applications we have already filed and those we intend to file. If we do not have patents that adequately protect our human-use equipment and indications for its use and other therapies, then we will not be competitive.

Potential That Important Patents Will Be Judged Invalid. Some of the issued patents we now own or license may be determined to be invalid. If we have to defend the validity of any of our patents, the costs of such defense could be substantial, and there is no guarantee of a successful outcome. In the event an important patent related to our drug delivery technology is found to be invalid, we may lose competitive position and may not be able to receive royalties for products covered in part or whole by that patent under license agreements.

Danger of Being Charged With Infringement. Although neither Inovio nor VGX is currently aware of any basis for an infringement claim or any parties intending to pursue infringement claims against it, there is the possibility that the combined group may use a patented technology owned by another person and/or be charged with infringement. Defending or indemnifying a third party against a charge of infringement can involve lengthy and costly legal actions, and there can be no guarantee of a successful outcome. Biotechnology companies comparable to us in size and financial position have discontinued business after losing infringement battles. If we or our partners were prevented from using or selling our human-use equipment, then our business would be materially adversely affected.

Freedom to Operate Issues. Inovio and VGX are aware that patents related to electrically-assisted drug delivery have been granted to, and patent applications have been filed by, our potential competitors. Each of Inovio and VGX or its partners have received licenses to operate under some of these patents, and the combined group will consider procuring additional licenses in the future. Nevertheless, the competitive nature of our field of business and the fact that others have sought patent protection for technologies similar to ours make these potential issues significant.

In addition, as a result of the sale of VGX's DNA plasmid manufacturing assets to VGXI, Inc. in June 2008, VGX does not have control of certain patents relating to the current manufacturing technology for products used in VGX's pre-clinical and clinical studies and anticipated pre-clinical and clinical studies of the combined group. The rights under these patents could be lost, either by loss of rights by VGXI, Inc., for example, through abandonment of one or more patents, or by any decision of VGXI, Inc. to manufacture for other clients. If VGXI, Inc. were to lose those rights, VGX, and upon completion of the Merger, if approved, the combined group would need to expend resources to find another manufacturer and another manufacturing technology for these products.

In addition to patents, we also rely on trade secrets and proprietary know-how. We try to protect this information with appropriate confidentiality and inventions agreements with our employees, scientific advisors, consultants, and collaborators. We cannot be sure that these agreements will not be breached, that we will be able to protect ourselves if they are breached, or that our trade secrets will not otherwise become known or be independently discovered by competitors. We also cannot be sure that academic and research institutions with which we have research arrangements may not create or

improve upon our intellectual property and use that intellectual property in future research to which our competitors might have access. If any of these events occur, then we face the potential of losing control over valuable company information, which could negatively affect our competitive position.

The rights our company relies upon to protect the intellectual property underlying our products may not be adequate, which could enable third parties to use our technology and would reduce our ability to compete in the market.

The combined group's success will depend in part on its ability to develop or acquire commercially valuable patent rights and to protect its intellectual property. Our patent position is generally uncertain and involves complex legal and factual questions. The degree of present and future protection of our proprietary rights is uncertain.

The risks and uncertainties that our company faces with respect to our patents and other proprietary rights include the following:

the pending patent applications we have filed or to which we have acquired rights may not result in issued patents or may take longer than we expect to result in issued patents;

the claims of any patents which are issued may not provide meaningful protection;

we may not be able to develop additional proprietary technologies that are patentable;

the patents licensed or issued to us or our customers may not provide a competitive advantage;

in our collaborations with academic and research institutions, our ability to obtain exclusive rights to new inventions arising from research we have funded or the intellectual property we have provided may be limited by institutional policy, government march-in rights (if government funds have supported the research), and/or third party rights (if third party funds have supported the research);

other parties may challenge patents or patent applications licensed or issued to us or our customers;

patents issued to other companies may harm our ability to do business; and

other companies may design around technologies we have patented, licensed or developed.

In addition to patents, our company relies on a combination of trade secrets, nondisclosure agreements and other contractual provisions and technical measures to protect our intellectual property rights. Nevertheless, these customary measures may not be adequate to safeguard the technology underlying our products. If these measures do not protect our rights, third parties could use our technology and our ability to compete in the market would be reduced. In addition, employees, consultants and others who participate in the development of our products may breach their agreements with us regarding our intellectual property, and we may not have adequate remedies for the breach. We also may not be able to effectively protect our intellectual property rights in some foreign countries. For a variety of reasons, our company may decide not to file for patent, copyright or trademark protection or prosecute potential infringers of our patents. Our trade secrets may also become known through other means not currently foreseen by us. Despite our efforts to protect our intellectual property, our competitors or customers may independently develop similar or alternative technologies or products that are equal or superior to our technology and products without infringing on any of our intellectual property rights or design around our proprietary technologies.

Claims by others that our products infringe on their proprietary rights could adversely affect our ability to sell our products and could increase our costs.

Substantial litigation over intellectual property rights exists in our industry. Our company expects that its products could be increasingly subject to third-party infringement claims as the number of competitors in our industry grows and the functionality of products and technology in different industry

segments overlaps. Third parties may currently have, or may eventually be issued, patents which our products or technology may be alleged to infringe. Any of these third parties might make a claim of infringement against our company. Any litigation could result in the expenditure of significant financial resources and the diversion of management's time and resources. In addition, litigation in which our company is accused of infringement may cause negative publicity, have an impact on prospective customers, cause product shipment delays or require our company to develop non-infringing technology, make substantial payments to third parties, or enter into royalty or license agreements, which may not be available on acceptable terms, or at all. If a successful claim of infringement were made against our company and our company could not develop non-infringing technology or license the infringed or similar technology on a timely and cost-effective basis, our company's revenue may decrease and we could be exposed to legal actions by our customers.

If we are not successful in developing our current products, our business model may change as our priorities and opportunities change and our business may never develop to be profitable or sustainable.

Inovio and VGX both have historically managed numerous programs and actively sought to develop product and program pipelines. As a result, there are many products and programs that seem promising to us which we could pursue, and a significant part of the parties' integration process, if the Merger is completed, will be to continue to focus our efforts and allocate our available resources to particular programs and products. However, with limited resources, we may decide to change priorities and shift programs away from those that Inovio and VGX have been pursuing for the purpose of exploiting the combined company's joint strengths of its core electroporation technology and development capabilities for gene-based therapeutics. The choices we make will be dependent upon numerous contemporaneous factors, some of which we cannot predict. We cannot be sure that our business model, as initially integrated or as it may evolve, will enable us to become profitable or to sustain operations.

Serious and unexpected side effects attributable to gene therapy may result in governmental authorities imposing additional regulatory requirements or a negative public perception of our products.

The gene therapy or DNA vaccine product candidates under development could be broadly described as gene therapies. A number of clinical trials are being conducted by other pharmaceutical companies involving gene therapy, including compounds similar to, or competitive with, our product candidates. The announcement of adverse results from these clinical trials, such as serious unwanted and unexpected side effects attributable to treatment, or any response by the FDA or foreign regulatory agencies to such clinical trials, may impede the progress of our clinical trials, delay or prevent us from obtaining regulatory approval, or negatively influence public perception of our product candidates, which could harm our business and results of operations and reduce the value of our stock.

The U.S. Senate has held hearings concerning the adequacy of regulatory oversight of gene therapy clinical trials, as well as the adequacy of research subject education and protection in clinical research in general, and to determine whether additional legislation is required to protect volunteers and patients who participate in such clinical trials. The Recombinant DNA Advisory Committee, or RAC, which acts as an advisory body to the National Institutes of Health, has expanded its public role in evaluating important public and ethical issues in gene therapy clinical trials. Implementation of any additional review and reporting procedures or other additional regulatory measures could increase the costs of or prolong our product development efforts or clinical trials.

As of December 31, 2008, to our knowledge, there have not been any serious adverse events in any gene therapy clinical trials in which our technology was used. In the future, if one or a series of serious adverse events were to occur during a gene therapy clinical trial in which our technology was used, we would report all such events to the FDA and other regulatory agencies as required by law. Such serious adverse events, whether treatment-related or not, could result in negative public perception of our treatments and require additional regulatory review or other measures, which could increase the cost of or prolong our gene therapy clinical trials or require us to halt our clinical trials altogether.

The commercial success of our products will depend in part on public acceptance of the use of gene therapy products or gene-induced products, which are a new type of disease treatment for the prevention or treatment of human diseases. Public attitudes may be influenced by claims that gene therapy products or gene-induced products are unsafe, and these treatment methodologies may not gain the acceptance of the public or the medical community. Negative public reaction to gene therapy products or gene-induced products could also result in greater government regulation and stricter clinical trial oversight.

No gene therapy products have been approved by the FDA to date and we cannot assure you that gene therapy products will ever receive approval for commercialization; this lack of precedent may undermine consumer and investor confidence in our therapies, which may depress the market price for our common stock or limit our ability to partner to advance our technologies.

The FDA has not yet approved any human gene therapy product for sale, and the FDA deems current gene therapy efforts "experimental" on its website. There have been deaths and significant adverse effects in gene therapy clinical trials previously, and in January 2003, the FDA placed a temporary halt on all gene therapy trials using retroviral vectors in blood stem cells. Although such ban has been subsequently eased, gene therapy clinical trials still face strict standards and remain subject to potential future bans or additional oversight if there are further high-profile adverse effects in ongoing gene therapy clinical trials. As a result, investors may be hesitant to invest in or maintain a position in our common stock, creating low trading volumes and stagnant demand for our shares of common stock and limiting our ability to raise funds through equity financing on favorable terms, if at all. Further, the lack of commercial precedent may minimize the number of potential collaborators willing to partner with us long-term, limiting our other sources of operational funding and our ability to advance our gene therapy-technologies as quickly or at all.

We have the potential for product liability issues with our equipment and products.

The testing, marketing and sale of human-use products expose us to significant and unpredictable risks of equipment product liability claims. These claims may arise from patients, clinical trial volunteers, consumers, physicians, hospitals, companies, institutions, researchers or others using, selling, or buying our equipment. Product liability risks are inherent in our business and will exist even after the products are approved for sale. If and when our human-use equipment is commercialized, we run the risk that use (or misuse) of the equipment will result in personal injury. The chance of such an occurrence will increase after a product type is on the market.

The testing, marketing and sale of animal-use products expose us to significant and unpredictable risks of potential product liability claims. These claims may arise from farmers, veterinarians, consumers, and anyone coming in contact with our GHRH DNA therapy. We may not be successful in our attempts to manage these inherent product liability risks by using myriad of approaches including, insurance programs, quality control measures and proper training.

Inovio and VGX have historically maintained, and we will continue to maintain, liability insurance in connection with our ongoing business and products, and we may purchase additional policies if such policies are determined by management to be necessary. However, our existing insurance and the insurance we purchase may not provide adequate coverage in the event a claim is made and we may be required to pay claims directly. If we did have to make payment against a claim, it would adversely impact our financial ability to perform the research, development, and sales activities that we have planned.

If and when our human-use equipment is commercialized, there is always the risk of product defects. Product defects can lead to loss of future sales, decrease in market acceptance, damage to our brand or reputation, product returns and warranty costs, and even product withdrawal from the market.

These events can occur whether the defect resides in a component we purchased from a third party or whether it was due to our design and/or manufacture. We expect that our sales agreements will contain provisions designed to limit our exposure to product liability claims. However, we do not know whether these limitations will be enforceable in the countries in which the sale is made. Any product liability or other claim brought against us, if successful and of sufficient magnitude, could negatively impact our financial results and condition.

We cannot be certain that we will be able to manufacture our human-use equipment in sufficient volumes at commercially reasonable costs.

Our manufacturing facilities for human-use products will be subject to quality systems regulations, international quality standards and other regulatory requirements, including pre-approval inspection for our human-use equipment and periodic post-approval inspections for all human-use products. While Inovio has previously undergone and passed a quality systems audit from an international body, we have never undergone a quality systems inspection by the FDA. We may not be able to pass an FDA inspection when and if it occurs. If our facilities are found not to be compliant with FDA standards in sufficient time, prior to a launch of our product in the U.S., then it will result in a delay or termination of our ability to produce our human-use equipment in our facility. Any delay in production will have a negative effect on our business. While there are no target dates set forth for launch of our products in the U.S., we plan on launching each product once we successfully perform a Phase III clinical study involving a particular use of our technology, obtain the requisite regulatory approval, and engage a partner who has the financial resources and marketing capacity to bring our products to market.

Our products must be manufactured in sufficient commercial quantities, in compliance with regulatory requirements, and at an acceptable cost to be attractive to purchasers. We rely on third parties to manufacture and assemble most aspects of our equipment, and thus cannot directly control the quality, timing or quantities of equipment manufactured or assembled at any given time.

Disruption of the manufacture of our products, for whatever reason, could delay or interrupt our ability to manufacture or deliver our products to customers in a timely basis. This would be expected to affect revenue and may affect our long-term reputation, as well. In the event we provide product of inferior quality, we run the risk of product liability claims and warranty obligations, which will negatively affect our financial performance.

There is a possibility that our technology will become obsolete or lose its competitive advantage.

The vaccine development and delivery business is very competitive, fast moving and intense, and expected to be increasingly so in the future. Other companies and research institutions are developing drug delivery systems and gene-based therapies that, if not similar in type to our systems and therapies, are designed to address the same patient or subject population. Therefore, we cannot promise that our products will be the best, the safest, the first to market, or the most economical to manufacture and use. If competitors' products are better than ours, for whatever reason, then we could become less profitable from product sales and our products could become obsolete.

There are many reasons why a competitor might be more successful than us, including:

Financial Resources. Some competitors have greater financial resources and can afford more technical and developmental setbacks than we can.

Greater Experience. Some competitors have been in the biomedical business longer than we have. They have greater experience than us in critical areas like clinical testing, obtaining regulatory approval and sales and marketing. This experience or their name recognition may give them a competitive advantage over us. In certain international markets, local companies may be given preferential treatment by local physicians and hospitals.



Superior Patent Position. Some competitors may have better patent protection over their technology than we have or will have in order to protect our technology. If we cannot use our patents to prevent others from copying our technology or developing similar technology, or if we cannot obtain a critical license to another's patent that we need to manufacture and use our equipment, then we would expect our competitive position to weaken.

Faster to Market. Some companies with competitive technologies may move through stages of development, approval, and marketing faster than us. If a competitor receives FDA approval, or regulatory approval in another major market outside the U.S., before us, then it will be authorized to sell its products before we can sell ours. Because the first company "to market" often has a significant advantage over others, a second place position could result in less than anticipated sales.

Reimbursement Allowed. In the U.S., third party payers, such as Medicare, may reimburse physicians and hospitals for competitors' products but not for our own human-use products. This would significantly affect our ability to sell our human-use products in the U.S. and would have a negative impact on revenue and our business as a whole. Outside of the U.S., reimbursement and funding policies vary widely.

The restructuring and repricing of certain VGX options and warrants may not have remedied certain issues arising under federal tax law and could expose VGX or the combined group to certain risks.

Prior to August 2006, VGX issued options and warrants to employees and consultants that did not comply with the provisions Section 409A of the Code. In September 2008, the VGX board of directors approved two methods to bring these noncompliant options and warrants into compliance with section 409A of the Code. Each holder of non-compliant options and warrants was given the choice of either agreeing to reset the exercise price at a value that was no less than the fair market value of VGX common stock on the date of the repricing, as determined by the VGX board of directors, which considered in part preliminary work performed by an independent valuation firm, or making a forward election in which the holder was given the option to choose a date after December 31, 2008 on or after which to exercise the option or warrant. VGX cannot assure stockholders that these steps were sufficient to cure any non-compliance by VGX with respect to 409A of the Code and, if these steps are deemed insufficient, VGX, or the combined group upon closing of the Merger, could face potential tax liability under the Code.

Any acquisition we might make may be costly and difficult to integrate, may divert management resources or dilute stockholder value.

Both Inovio and VGX have considered and made strategic acquisitions in the past, and in the future the combined group may acquire or invest in complementary companies, products or technologies. As part of our business strategy, we may acquire assets or businesses principally relating to or complementary to the combined group's integrated operations. Any acquisitions we undertake will be accompanied by issues commonly encountered in business acquisitions, which could adversely affect us, including:

Potential exposure to unknown liabilities of acquired companies;

The difficulty and expense of assimilating the operations and personnel of acquired businesses;

Diversion of management time and attention and other resources;

Loss of key employees and customers as a result of changes in management;

Increased legal, accounting and other administrative costs associated with negotiation, documentation and reporting any such acquisition;

Possible dilution to our stockholders; and

Possible acceleration of financing needs.

In addition, geography and/or language barriers may make the integration of businesses more difficult. We may not be successful in overcoming these risks or any other problems encountered in connection with any of our acquisitions, and we cannot assure you that the results of any acquisition, if completed, will meet the expectations of the parties and their stockholders.

Some of VGX's officers have positions with subsidiaries and affiliates of VGX, which may have interests that could conflict with those of the combined group.

Certain officers and directors of VGX hold officer or director positions with non-wholly owned affiliates or subsidiaries of VGX with which VGX transacts business. For example, J. Joseph Kim, VGX's chief executive officer, is a director and officer of VGX Animal Health, Inc., an 88% owned subsidiary and of VGX International, Inc., a 25% owned affiliate, each as of the record date. Dr. Kim intends to resign from his officer position with VGX International, Inc. on or before the closing of the Merger, but expects to continue as a director of that entity. Transactions and other business activities of these two entities may conflict with the interests of VGX and the combined group after the merger, and, as officers or directors of these other entities, these persons may have conflicting fiduciary duties.

We may not meet environmental guidelines and as a result could be subject to civil and criminal penalties.

Like all companies in the biomedical industry, we are subject to a variety of governmental regulations relating to the use, storage, discharge and disposal of hazardous substances. Our safety procedures for handling, storage and disposal of such materials are designed to comply with applicable laws and regulations. While both Inovio and VGX believe they are currently in compliance with all material applicable environmental regulations, if either party or the combined group is subsequently found to not comply with environmental regulations, or is involved with contamination or injury from these materials, then we may be subject to civil and criminal penalties. This would have a negative impact on our reputation and finances, and could result in a slowdown or even complete cessation of our business.

Changes in foreign exchange rates may affect our future operating results.

Inovio and VGX both maintain investments in foreign subsidiaries. During the years ended December 31, 2008 and 2007, Inovio AS, Inovio's wholly-owned Norwegian subsidiary, contributed approximately \$135,000 and \$159,000 to Inovio's revenue, respectively, which amounted to approximately 6% and 3% of Inovio's total revenue. Inovio AS conducts its operations primarily in foreign currencies, including the Euro, Norwegian Kroner and Swedish Krona. In September 2006, Inovio established Inovio Asia Pte. Ltd., a wholly-owned company incorporated in the Republic of Singapore, which conducts its operations primarily in Singaporean dollars. As of December 31, 2008, VGX held 30% of and currently holds 25% of the outstanding shares of VGX International, a publicly-traded company on the Korean Stock Exchange whose functional currency is the Korean Won. VGX Animal Health markets its LifeTide SW5 GHRH DNA therapy to the porcine market in Australia. As such, all revenues from marketing of LifeTide SW5, and payments made to any vendors in Australia, will be in Australian Dollars. Fluctuation in the values of these foreign currencies relative to the U.S. dollar will affect our financial results which are reported in U.S. dollars and will cause U.S. dollar translation of such currencies to vary from one period to another. We cannot predict the scope of any fluctuations in the values of these foreign currencies relative to the U.S. dollar nor the effect of exchange rate fluctuations upon our future operating results.

Inovio's restructuring of its Norwegian subsidiary, Inovio AS, may not realize the efficiencies anticipated and could result in additional, unanticipated liabilities, which would have a negative effect on our financial condition.

On December 31, 2007, Inovio's wholly-owned Norwegian subsidiary Inovio AS transferred certain patent and other intellectual property rights to Inovio's wholly-owned U.S. subsidiary, Genetronics. The value assigned to these rights was \$1.9 million, which was determined by and was the responsibility of management of Inovio, who considered in part preliminary work performed by an independent valuation specialist in Norway. All Norwegian tax gains associated with this transfer of the patents and other intellectual property rights was offset by prior year tax loss carry forwards. Subsequent to year-end, Inovio changed the name of Inovio AS to Inovio Tec AS. Simultaneously, Inovio incorporated a new Norwegian wholly-owned subsidiary under the name Inovio AS, for the purpose of organizing a research effort directed towards the development of specific cancer vaccine candidates. In January 2008, all employees, employee agreements, lease agreements and fixed assets were transferred from Inovio Tec AS to Inovio AS. In December 2008, the parties entered into a Master Cross-Licensing Agreement, providing for a non-exclusive license to Inovio AS of certain Inovio intellectual property rights, relating to gene delivery for cancer treatment, as well as a non-exclusive license to Inovio of all intellectual property rights developed by Inovio AS, subject only to certain exclusive product development, manufacturing and commercialization rights retained by Inovio AS. Further, although Inovio and its board of directors retain ultimate control over and responsibility for Inovio AS now has a distinct board of directors, consisting of two members of Inovio's board of directors Dr. Avtar Dhillon and Simon Benito and two Norwegian personnel, intended to allow more efficient balancing of U.S. legal and regulatory concerns with Norwegian legal and regulatory concerns in the course of decision-making.

This restructuring of Inovio's Norwegian operations was intended to better focus the research and development efforts conducted in Norway on Inovio's strategic programs and ease access to previously developed intellectual property rights for Inovio and its other subsidiaries, through a Master Research Agreement among Inovio and its other subsidiaries and VGX. We expect funding for this program to be about \$5.0 million over the next several years. Although designed to be tax-neutral to the parties, we cannot assure you that the tax authorities in Norway or the U.S. will agree with the valuation of the transferred assets or the procedures through which the transfers were made. If such disagreements were to arise, we may face unanticipated tax liabilities in Norway or the U.S. arising from the asset transfer. Further, as there will be an ongoing licensing relationship between the parties post-transfer, it is possible that such arrangements will receive heightened scrutiny for potential transfer pricing issues, which could result in additional liability to us. We believe that the new Inovio AS is now appropriately organized and staffed, and has the necessary resources and commitments for future resources to conduct its research and development efforts in support of our business strategy. However, we cannot assure stockholders that Inovio AS will not require further staff or financing beyond these initial commitments, or that we will be able to provide such resources if and when requested. To the extent Inovio AS or we face additional tax or transfer pricing issues, our operating results and overall financial condition may be adversely affected. In particular, if we are unable to provide additional support for Inovio AS when requested, Inovio AS may not be able to reach previously specified targets and milestones in a timely manner, undermining its financial stability and the commercial potential for its prostate cancer vaccine program.

Some of our facilities are located near known earthquake fault and wildfire zones, and the occurrence of an earthquake, significant wildfire or other catastrophic disaster could cause damage to our facilities and equipment.

Our San Diego facility is located near known earthquake fault zones and areas prone to severe seasonal wildfires and is vulnerable to damage from earthquakes and wildfires. All of our facilities are

also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously impaired. In addition, the unique nature of our research activities could cause significant delays in our programs and make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions. Accordingly, an earthquake, wildfire or other disaster could materially and adversely harm our ability to conduct business.

THE TRANSACTION

The discussion in this joint proxy statement/prospectus of the Merger and the principal terms of the Acquisition Agreement are subject to, and are qualified in their entirety by reference to, the Acquisition Agreement, a copy of which is attached to this joint proxy statement/prospectus as Annex A and incorporated into this joint proxy statement/prospectus by reference.

General Description of the Merger

Inovio, its wholly-owned acquisition subsidiary referenced in this joint proxy statement/prospectus as Submerger, and VGX have agreed to a business combination pursuant to the terms of the Acquisition Agreement and in accordance with the DGCL. Upon consummation of the Merger, VGX will be merged with and into Submerger, VGX will cease to exist and Submerger will continue as the surviving entity and as a wholly-owned subsidiary of Inovio and change its name to "VGX Pharmaceuticals, LLC." The ongoing public entity will be known as Inovio Biomedical Corporation, which shall hold, as directly wholly-owned subsidiaries, VGX Pharmaceuticals, LLC and Inovio's current direct subsidiaries, including Genetronics, and the combined group shall integrate the historical operations of Inovio and VGX.

In consideration for the Merger, Inovio will issue and otherwise allocate for issuance under options and warrants to purchase common stock and debt convertible into common stock, a total of up to 59,995,862 shares of new Inovio common stock pursuant to the terms of the Acquisition Agreement. Specifically, upon closing of the Merger, based on an exchange ratio and on the terms and conditions of which are described in this joint proxy statement/prospectus:

all of the issued and outstanding shares of common stock of VGX will be canceled and converted into the right to receive shares of common stock of Inovio,

all outstanding options to purchase shares of VGX common stock will be assumed by Inovio and converted into options to purchase Inovio common stock,

all outstanding warrants to purchase shares of VGX common stock will be assumed by Inovio and converted into warrants to purchase Inovio common stock, and

all outstanding convertible debt of VGX will become debt convertible into Inovio common stock on existing terms.

Based on the respective fully-diluted share capitals of Inovio and VGX as of the record date and certain VGX option exercises anticipated prior to closing, the parties anticipate that the Merger Exchange Ratio will be approximately 0.9866163, meaning that each share of VGX common stock will be exchanged for 0.9866163 shares of Inovio common stock upon closing of the Merger.

Other than the significant dilution resulting from the issuance of Inovio securities in conjunction with the Merger, the outstanding shares of Inovio common stock prior to the Merger will not be impacted by the Merger. Similarly, the Merger will not affect any of Inovio's other outstanding securities, other than accelerating the vesting rights of Inovio's outstanding options to purchase shares of Inovio common stock (presuming the related 2000 Plan Amendment, as discussed elsewhere in this joint proxy statement/prospectus, receives Inovio stockholder approval).

The parties anticipate that the Merger, if completed, will result in a full integration of the existing Inovio and VGX organizations, including appointment of an integrated board of directors and management team consistent with the terms of the Acquisition Agreement, and the combination of significant administrative functions at Inovio's San Diego, California headquarters.

Background to the Transaction

Both Inovio and VGX regularly evaluated various strategies for improving their respective competitive positions and enhancing stockholder value. As part of these evaluations, the parties have,

from time to time, considered strategic initiatives in the pursuit of their business plans, including acquisitions, divestitures and possible business combinations. Inovio's management and board of directors regularly discussed the position and prospects of Inovio within various segments of the biopharmaceutical industry, and VGX's leadership similarly evaluated its position and prospects. The parties' boards of directors regularly reviewed short and long-term business strategies, as well as market trends in the biopharmaceutical industry and the challenges confronting each company in achieving its business objectives.

Inovio's long-term strategic plan includes diversifying its product pipeline through acquisitions, collaborations, alliances or joint ventures. Inovio's management developed criteria for identifying public and private companies that might fit its strategic plan. The criteria emphasized vaccine and immunotherapy based infectious disease and cancer companies with synergistic clinical development programs which use electroporation or a technology complimentary to electroporation assisted delivery. Starting in late 2005 through May 2008, Inovio conducted a targeted process to identify appropriate acquisition candidates, during which Inovio contacted numerous companies to assess their potential interest in engaging in an acquisition, collaboration, alliance or joint venture arrangements. As a result of these efforts, Inovio's management team met with seven of these companies to explore whether the opportunity existed for a transaction that fit the Inovio strategic plan and would potentially enhance perceived stockholder value. Inovio conducted substantive scientific due diligence on several of these companies during this period, and Inovio's management kept its board of directors informed of these discussions both informally and through reports at board meetings.

Inovio also reviewed a larger list other non-electroporation based delivery companies, but felt it would be difficult to pursue a deal unless these companies where not able meet a significant milestone with their competing technology. Some of the additional considerations that influenced the gradual elimination of certain companies from being final candidates were the following:

level of cash position to pursue significant clinical milestones prior to next funding event;

synergies in management expertise to execute a combined business plan; and

timeline gains for Inovio to reach its milestones with its technology platform.

Like Inovio, VGX's long-term strategic plans for growth have included diversification through acquisitions and collaborations. The VGX management team has explored several different approaches toward growth, including:

a potential merger with a company in the vaccine and immunotherapy space that complemented VGX's own pipeline; and

an initial public offering of securities with subsequent leveraging the resulting access to capital markets to acquire companies with technologies and intellectual property portfolios to strengthen VGX's position in the DNA vaccines arena.

In 2007, the VGX board of directors made the decision to accelerate this strategy by engaging Needham and Company, LLC, or "Needham," to act as its investment advisor. Together with Needham, VGX began a systematic process of identifying and contacting those companies that potentially met its criteria for a merger or an acquisition. Merger candidates were ranked based on multiple criteria, the most important of which was the candidate's technology and its strategic fit with VGX's long-term goals. Other key criteria were the candidate's management capability, strength of its balance sheet, and its status as a public or a private company. After an extensive search and analysis, which included meetings with several companies, VGX's management and board of directors reached the conclusion that, given its long-term goal of becoming a dominant player in the DNA vaccines market, Inovio was the ideal candidate with whom VGX should pursue its strategy. In December 2007, the VGX board of directors and management decided to initiate inquiries to Inovio to gauge its interest in potential "merger of equals" of the two companies.

In January 2008, representatives from VGX contacted Inovio to inquire about its interest in exploring a potential business combination transaction. Both companies' management expressed interest in exploring the feasibility of such a transaction. Shortly thereafter, the parties executed customary confidentiality agreements on January 28, 2008, allowing them to initiate due diligence. On February 11, 2008, representatives of VGX's and Inovio's management teams met at Inovio's offices in San Diego to discuss their respective businesses, programs and technology platforms, and to explore the feasibility of a business combination between VGX and Inovio. Following these general discussions, VGX and Inovio agreed that more in-depth discussions were warranted and the exchange of business information continued.

At its regular meeting on February 15, 2008, Inovio management briefed its board of directors on the ongoing process to identify possible acquisition candidates and on management's current assessment of the degree of strategic fit for each of the active prospects. Management also presented a detailed review of the drug pipeline and potential synergies of seven possible business combination candidates viewed as the best strategic fit of the parties reviewed to date, which included VGX. After discussing these presentations, the board of directors authorized management to approach each of these companies with preliminary indications of interest for a strategic acquisition, while continuing efforts to identify other potential acquisition candidates. Subsequent to that meeting, Inovio's management conducted initial scientific diligence and engaged in detailed discussions with each of these seven candidates to assess the feasibility of a transaction that met Inovio's strategic objectives, and ultimately Inovio's management believed that VGX presented the best opportunity for Inovio and its stockholders.

On February 20, 2008, Inovio's chief executive officer, Dr. Avtar Dhillon, met with VGX's chief executive officer, Dr. J. Joseph Kim, to advance discussions regarding a potential business combination. The chief executive officers met a number of times thereafter to discuss potential terms and conditions for a draft letter of intent for a proposed business combination to be presented to their respective boards of directors.

On March 14, 2008, Inovio received a preliminary, non-binding indication of interest, or indicative proposal, from VGX and its financial advisor, Needham. The Inovio board of directors met later that day, during which Inovio's management reported on its meetings with VGX and the indicative proposal received from VGX and Needham regarding the proposed transaction was presented for board of directors for approval. The Inovio board of directors authorized management to continue discussions with VGX, while preparing a final summary report and presentation of initial due diligence and conclusions regarding all potential merger and acquisition candidates previously identified for presentation at the next regular meeting of the board of directors on May 5, 2008. The Inovio board of directors also asked management to contact potential consultants to assist management with operational due diligence and to contact several investment banks to assist the Inovio board in evaluating the fairness, from a financial point of view, to Inovio of the consideration payable by Inovio in connection with a potential transaction with VGX. Inovio subsequently engaged the consulting firm PRTM Management Consultants, Inc., or "PRTM," and the investment bank Oppenheimer & Co. Inc., or "Oppenheimer," for these respective purposes.

On April 1, 2008, representatives of VGX and Inovio held a kick-off meeting regarding the proposed transaction between Inovio and VGX, including a general discussion of structure, terms and timeline. During April 2008, Inovio and VGX conducted in-person business and financial due diligence at each other's offices in San Diego, CA, Blue Bell, PA, and The Woodlands, TX, which consisted of in-depth evaluation of the businesses, assets and liabilities, including meetings between the parties' management teams and ongoing access to each party's separate online data room. Concurrently, PRTM was assisting management with the due diligence review of VGX. During April 2008, the management teams also met telephonically several times and reviewed in detail the profiles of the respective companies and the companies' respective scientific programs and related assets. Beginning in April

2008, the companies' counsel also drafted and negotiated a proposed form of agreement and plan of merger and ancillary documentation.

At a regular scheduled meeting of the Inovio board of directors on May 5, 2008, Inovio's management provided the board with a detailed update of potential business combination candidates previously discussed and a report on discussions with such prospective candidates, including a detailed update on the due diligence review of such potential acquisition candidates and an assessment of the strategic fit of the active prospects. Management reported to the board that discussions with three of the prospective business combination candidates had been previously terminated in early March 2008 due to difficulties in reaching mutually beneficial economic terms, while discussions with a fourth potential candidate, which had expressed little interest in pursuing a transaction that met Inovio's strategic objectives, had been terminated in early January 2008 once it was clear that a basis for a mutually beneficial transaction did not exist. Inovio had maintained discussions with two additional companies, although neither company was interested in a business combination, as such entities remained interested in pursuing a transaction that meets Inovio's other strategic objectives. After extensive discussion, Inovio's board of directors determined that it should pursue further negotiations with VGX concerning a business combination ransaction on an exclusive basis. Inovio's management and PRTM also presented the results of the preliminary diligence performed on VGX to the Inovio board of directors, including a presentation by a representative of PRTM summarizing the operational due diligence completed in support of a potential business combination transaction with VGX. Based on the scientific and business due diligence conducted by the management and PRTM, and the report of counsel on the status of negotiations for an agreement and plan of merger with VGX, Inovio's management and board of directors recommended continuing the proposed transaction with VGX.

On June 5, 2008, Inovio's board of directors held a special meeting at which management reviewed with the board in detail the status of negotiations with VGX and the status of material open points. The board reviewed the terms of the proposed agreement and plan of merger with VGX and the company's counsel detailed the proposed structure of the transaction. Subsequently, via telephone, Oppenheimer discussed with the board the status of its financial review and the types of financial analyses it expected preliminarily to review with the Inovio board in connection with its opinion. Representatives from management then presented an assessment of the projected combined group's financial condition. The directors then further discussed the terms of the proposed merger, and agreed to postpone formal approvals of such matters until a future date due to the materiality of the unsettled items related to the merger. After such discussion, the Inovio board of directors unanimously resolved that it was in the best interests of Inovio and its stockholders to continue the negotiation, documentation and other efforts in support of the proposed merger with VGX, including the formation of Inovio Acquisition Corporation.

On July 2, 2008, at a special telephonic meeting of the Inovio board of directors, the directors reviewed with counsel the terms of the pending agreement and plan of merger with VGX and related ancillary agreements, including all revisions made to the proposed agreements since the directors last reviewed them on June 5, 2008, and the board's fiduciary duties in evaluating the proposed transaction. Inovio's board of directors discussed at length the proposed transaction structure, the manner of calculation of the proposed consideration for the merger, the treatment of both parties' outstanding securities, and the other topics discussed under *"Inovio's Reasons for the Transaction"* on page 65. The Inovio board also discussed the course of negotiations with VGX and the perceived benefits that Inovio's stockholders would potentially derive as a result of the proposed transaction. Also at this meeting, Oppenheimer reviewed with Inovio's board of directors its financial analysis of the Merger Exchange Ratio and rendered to Inovio's board of directors an oral opinion, which was confirmed by delivery of a written opinion dated July 2, 2008, to the effect that, as of that date and based on and subject to the matters described in the opinion, the Merger Exchange Ratio provided for in the original agreement and plan of merger (prior to its amendment) was fair, from a financial point of view, to Inovio.

After further discussion and for the reasons set forth in "Inovio's Reasons for the Transaction" on page 65, the Inovio board concluded that the proposed transaction with VGX was advisable and fair to the company and its stockholders and authorized and approved the agreement and plan of merger and the transactions contemplated thereby, and resolved to recommend that the Inovio stockholders approve the transactions contemplated by the agreement and plan of merger.

On July 2, 2008, the VGX board of directors held a special meeting at its corporate headquarters in Blue Bell, Pennsylvania, in which the directors reviewed the terms of the pending definitive merger agreement between VGX and Inovio. A representative from Needham was also present to provide Needham's insights on the market condition and on the deal between VGX and Inovio. The evolution of the key terms of the deal and the impact the terms would have on VGX and its stockholders were discussed with the board by VGX's management, along with the prospects of the combined company and management's expectations for the combined group's contributions in the field of DNA vaccines. Management also reviewed the expected technological and financial synergies of the combined company resulting from the Merger. After further discussion, and for the reasons set forth in "*VGX's Reasons for the Transaction*" on page 68, the VGX board of directors unanimously concluded that the proposed transaction with Inovio was advisable and fair to VGX and its stockholders and authorized and approved the agreement and plan of merger and the transactions contemplated thereby, and resolved to recommend that the VGX stockholders approve the transactions contemplated by the agreement and plan of merger.

The parties executed an agreement and plan of merger on July 7, 2008, which the parties announced via a joint press release, followed by a joint conference call to answer initial questions from investors and analysts.

Subsequent to announcement of the transaction, the parties continued to analyze the potential accounting treatment of the Merger, the potential treatment of the Merger by the NYSE Amex, the tax treatment of the Merger and the proposed combined group's operational goals. As a result, the parties negotiated an amended and restated agreement and plan of merger, adjusting the structure of the planned transaction, providing for certain shares to be issued in the Merger to be deposited into a voting trust, adjusting the combined group's proposed management and board structure and implementing other changes clarifying the terms of the Merger. The amendments did not impact the type of consideration to be issued in the Merger or the methodology for calculation of the Merger Exchange Ratio. The Inovio board of directors met on December 5, 2008, during which the directors approved the Acquisition Agreement and confirmed their recommendation to the Inovio stockholders to approve the Merger. The VGX board of directors met on December 5, 2008, during which the directors approved the Acquisition Agreement and confirmed their recommendation to the VGX stockholders to approve the Merger. The parties executed the Acquisition Agreement on December 5, 2008 and announced the Acquisition Agreement on December 8, 2008. On March 31, 2009, the parties executed an amendment to the Acquisition Agreement which solely amends Section 7.1(b) of the Acquisition Agreement, extending the End Date, as defined in the section, from March 31, 2009 to June 30, 2009. On April 27, 2009, VGX waived the registration of Submerger's assumption of the VGX convertible debt and the shares of Inovio common stock issuable post-Merger upon conversion of the assumed convertible debt, which the parties determined was not necessary and would cause commercially unreasonable delays in the Merger process. Inovio instead committed to file a resale registration statement for the shares of Inovio common stock issuable post Merger upon any conversion of the assumed convertible debt within seven business days after consummation of the Merger.

Inovio's Reasons for the Transaction

In reaching its decision to approve the Merger and related agreements and proceed with the transaction with VGX, Inovio's board of directors consulted with Inovio's management regarding the



strategic, operational and financial aspects of the transaction. These consultations included, among other things, extensive discussions regarding:

strategic alternatives to the proposed transaction, including extensive discussions of other potential business combination candidates and of continuing to operate the Inovio's business without entering into a business combination transaction,

the business and strategic plans and financial position of the proposed combined group and of an independent Inovio,

the risks associated with executing the business and strategic plans of the combined group and of an independent Inovio,

the historical trading prices of Inovio's common stock, and

the terms and conditions of the proposed agreement and plan of merger, and subsequently the Acquisition Agreement.

In evaluating the Merger, Inovio's board of directors considered both Inovio's short-term and long-term interests, as well as those of its stockholders, consulted with management and legal counsel and considered the following factors, which in the aggregate it deemed favorable in reaching its decision to approve the Merger, the original agreement and plan of merger and the other transactions contemplated by the original merger agreement, and to recommend approval of the Merger to the Inovio stockholders, as well as to approve the Acquisition Agreement and reaffirm its recommendation of approval of the transaction:

the assessment of Inovio's management regarding, the business, operations, properties and assets, financial condition, business strategy, the estimated net asset value of VGX's assets and prospects of VGX, as well as the risks involved in achieving those prospects, the nature of the industry in which VGX competes, industry trends and economic and market conditions, both on an historical and on a prospective basis;

the results of Inovio's due diligence reviews of VGX, including the operational due diligence report received from PRTM;

the scope of VGX's clinical development programs, the depth of VGX's product lines and the number of potential near-term development milestones;

the perceived value and potential of VGX's intellectual property portfolio;

the potential markets for VGX's drug candidates and various other market analyses;

the experience of VGX's management and scientific teams;

the current and historical market prices of Inovio's common stock, including recent trading in Inovio's common stock near or below \$1 per share;

the potential enhancement of stockholder value via business combination as compared to Inovio's current business strategy, derived from the perceived ability of the proposed combined group to better address the risks and uncertainties of changes in the pharmaceuticals, biotechnology and vaccines market, changes in general economic conditions and changes in the degree of patent protection afforded Inovio's products;

the comparative potential stockholder value that could be expected to be generated from the various strategic alternatives available to Inovio, including (1) the alternative of remaining independent, (2) restructuring alternatives involving the sale of certain assets and subsidiaries and (3) other measures to create value and the risks associated with executing such strategic alternatives and achieving such potential values, and the board of directors' resulting belief that the transaction was more favorable to Inovio stockholders than other strategic alternatives reasonably available to Inovio and its stockholders;

the perceived high probability that the transaction could and would be completed;

the terms and conditions of the Merger-related agreements, which were reviewed by Inovio's board of directors with Inovio's outside legal counsel, and in particular the fact that such terms were the product of arm's-length negotiations between the parties;

Oppenheimer's opinion, and its financial presentation, dated July 2, 2008, to Inovio's board of directors as to the fairness, from a financial point of view and as of the date of the opinion, to Inovio of the Merger Exchange Ratio provided for in the original agreement and plan of merger (prior to its amendment), as more fully described below under the caption "*Opinion of Inovio's Financial Advisor*;"

Inovio's ability, under terms of the original agreement and plan of merger and as amended and restated, under certain circumstances, to consider and respond to an unsolicited written acquisition proposal, and if, after consultation with Inovio's legal advisors, the board of directors determines in good faith that such acquisition proposal is a superior proposal and determines in good faith, after consultation with legal counsel, that failure to take such action would be inconsistent with the board's duties to Inovio's stockholders under applicable law, Inovio's ability to terminate the such agreement upon the payment of a termination fee of \$3,500,000;

the fact that Inovio's management team recommended the Merger to Inovio's board of directors;

the fact that the closing of the Merger is subject to the approval of Inovio's stockholders;

the scope of the representations and warranties of VGX provided in the original agreement and plan of merger and confirmed in the Acquisition Agreement; and

the absence from another party or group of parties of a potential merger, business combination or similar transaction with Inovio that is more desirable than the proposed Merger.

In its review of the proposed transaction, Inovio's board of directors considered the potential adverse impact of other factors, including:

the risk that the Merger might not be completed;

the substantial time and effort of management required to consummate the Merger and related disruptions to the operation of Inovio's current business;

the substantial expenses to be incurred in connection with the transaction, and the impact of those expenses if the transaction is not completed;

the restrictions on the conduct of Inovio's business prior to the completion of the Merger, as set forth in the original agreement and plan of merger and in the Acquisition Agreement, which could delay or prevent Inovio from undertaking business opportunities that may arise pending completion of the Merger;

the risk that the pending Merger or failure to complete the Merger may cause substantial harm to relationships with Inovio's employees and may divert management and employee attention away from the day to day operation of Inovio's current business;

the risk that pursuing the Merger could disrupt the listing of Inovio's common stock on the NYSE Amex, if the Merger is deemed a "Reverse Merger" under Company Guide Section 341, which would require Inovio to re-apply for initial listing of its common stock;

the concern that Inovio's inability to solicit competing acquisition proposals, and the possibility that the \$3,500,000 termination fee payable by Inovio upon the termination of the original agreement and plan of merger and the Acquisition Agreement under certain circumstances could discourage other potential bidders from making a competing bid to acquire Inovio; and

the other risks described under the section of this joint proxy statement/prospectus entitled "*Risk Factors*" beginning on page 26, including that the combined group may not be able to raise sufficient capital to grow the group's business and maintain and/or increase the value of Inovio's common stock.

The above discussion of the material factors is not intended to be exhaustive, but does set forth the principal factors considered by Inovio's board of directors. After due consideration, Inovio's board of directors concluded that the potential benefits of the transaction outweighed the risks associated with the transaction. In view of the wide variety of factors considered by Inovio's board of directors in connection with the evaluation of the transaction and the complexity of these matters, Inovio's board of directors did not consider it practical to quantify, rank or otherwise assign relative weights to the foregoing factors, and it did not attempt to do so. Rather, Inovio's board of directors made its recommendation based on the totality of the information presented to it, and the investigation conducted by it. Inovio's board of directors considered all these factors and determined that these factors, as a whole, supported the conclusions and recommendations described below.

This summary of the reasoning of Inovio's board of directors, as well as certain information presented in this section, is forward-looking in nature. This information should be read in light of the factors discussed under the section entitled "*Cautionary Note Regarding Forward Looking Statements*" on page 24. Inovio cannot assure you that the potential benefits or opportunities considered by Inovio's board of directors will be achieved through completion of the transaction. See the section entitled "*Risk Factors*" beginning on page 26.

Recommendation of Inovio's Board of Directors

After careful consideration, Inovio's board of directors determined that the proposed transaction is fair to, and in the best interests of, Inovio and its stockholders. **Inovio's board of directors recommends that Inovio stockholders vote FOR the Merger, including the issuance of Inovio securities in the transaction, as well as the related 2000 Plan Amendment.** Each of the individual proposals, as recommended by the Inovio board of directors, is described in greater detail, beginning on page 206 of this joint proxy statement/prospectus.

In considering the recommendation of Inovio's board of directors with respect to the issuance of securities pursuant to the transaction and the change of control resulting from such issuance, Inovio stockholders should be aware that certain directors and officers of Inovio have interests in the transaction that are different from, or are in addition to, the interests of Inovio's stockholders generally. See the section entitled *"Interests of Directors, Officers and Affiliates"* on page 85.

VGX's Reasons for the Transaction

In reaching its decision to approve the Merger, including the original agreement and plan of merger and the Acquisition Agreement, VGX's board of directors consulted with VGX's management and financial and legal advisors regarding the strategic, operational and financial aspects of the transaction. The management team of VGX performed analyses of the business, financial performance and condition, competitive environment, and prospects of each Inovio and VGX as separate entities and on a combined basis for VGX's board of directors. The VGX board of directors also considered an assessment of other potential strategic opportunities and alternatives to the Merger, including development opportunities and other possible merger or acquisition alternatives, and determined that the Merger with Inovio was the best strategic fit and presented a unique opportunity to enhance and expand VGX's operations and product offerings and best positioned VGX for future growth.

In the course of reaching its decision to approve the Merger, VGX's board of directors considered a variety of factors, including but not limited to, the following:

Pipeline and Markets. The combined group's two lead DNA vaccine programs, utilizing electroporation delivery, would likely target what VGX's management believes are significant and growing major market needs.

Management Team. The combined group would be led by an experienced senior management with representation from both VGX and Inovio.

Access to Capital. The combined group would remain a public reporting company traded on a national securities exchange and thereby the legacy VGX programs may gain access to additional funding sources.

Due Diligence. The results of VGX's due diligence review of Inovio.

The VGX board of directors considered the following factors pertaining to the strategic rationale for the combination of the two companies, supporting its decision to approve the Merger:

the fact that both VGX and Inovio have a strong commitment to advancing the treatment of infectious diseases and cancer;

that the anticipated combined group's product portfolio would include internally developed clinical-stage vaccine candidates for prevention and treatment of HIV infection and cervical cancer therapy and a clinical-stage small molecule therapeutic candidate for inflammatory diseases including rheumatoid arthritis and type I diabetes;

VGX would will gain access to Inovio's partnered programs with pharmaceutical companies, which would complement VGX's current internal development programs, including significant alliances with Merck; Wyeth; Vical; Tripep; University of Southampton; Moffitt Cancer Center, and potentially mitigate the overall risk to the development programs of both companies;

VGX's collaborative relationships with Dow Chemical and The University of Pennsylvania would likely be maintained and further enhance the combined group's development initiatives;

the anticipation that the combined group would have a robust R&D pipeline and that the combined group would be able to leverage both companies' expertise in DNA vaccines and electroporation devices to drive development;

the expectation that the combined group would have more financial and human resources and expertise to dedicate to the research and development of more biopharmaceutical products and the engineering of its electroporation technology, while benefiting from potential operational efficiencies; and

the combined group would be able to offer wider electroporation based DNA delivery device choices to its licensing partners than VGX alone.

The VGX board of directors also considered the following financial factors pertaining to the Merger, which supported its decision to approve the Merger and enter into the related agreements:

information concerning the financial performance, financial condition, business and prospects of VGX as a separate entity and on a potential combined basis with Inovio, including revenues, complementary products and technologies, and the potential for revenue enhancement and cost savings;

information concerning the recent and past financing history of VGX and the stock price performance of Inovio common stock;

the prices paid in comparable transactions involving other biopharmaceutical companies, as well as the trading performance of the stock of comparable companies in the industry;

the primarily stock-based consideration for the Merger, which should preserve the financial strength of the combined company for continued business investment;

the significant ownership position of legacy VGX stockholders in the combined group after the Merger; and

the anticipation that the combined group, with its greater capitalization, would obtain additional interest and coverage from the financial community, providing increased access to capital if needed and provide the combined group's stockholders with increased liquidity.

The VGX board of directors also considered the following governance factors as support for its decision to approve the Merger:

representation of legacy VGX directors on the board of directors of the combined company;

that J. Joseph Kim, the current chairman of the board, president and chief executive officer of VGX, will become the chief executive officer of the combined company;

that the management team would be drawn from both VGX and Inovio, providing strength from both management teams; and

the perceived complementary cultural fit and organizational structure of both companies and the management team members from VGX and Inovio that would integrate the companies.

The VGX board of directors evaluated the reasonableness of terms and conditions of the Merger, including:

the structure of the Merger and the level of certainty provided by the Merger Exchange Ratio, as well as the projected percentage of the total outstanding shares of Inovio common stock that current VGX stockholders would own after the Merger;

the provisions that prohibit Inovio from soliciting other acquisition offers;

the circumstances under which a termination fee and expenses are payable by Inovio to VGX and the nature of the negotiating process that resulted in the termination fee provisions;

the perceived likelihood of the parties' obtaining the necessary regulatory and stockholder approvals;

the belief of VGX's management that the Merger would be approved by the requisite authorities, without the imposition of conditions to preclude or materially diminish the benefits expected from the Merger, and would otherwise be completed in accordance with the terms of the agreement; and

the ability to complete the Merger as a reorganization for U.S. federal income tax purposes.

The VGX board of directors weighed these advantages and opportunities against the following material factors that may weigh negatively against the Merger:

the risk that anticipated cost savings, operational synergies and other benefits sought in the Merger might not be fully realized;

the time, effort and costs involved in integrating the management teams, strategies, cultures and organizations of the two companies, including the risk of diverting management's attention from other strategic priorities to implement merger integration efforts;

the risk that the per share value of the consideration to be paid in the Merger to the VGX stockholders could decrease significantly from the value prior to the announcement of the original agreement and plan of merger because the Merger Exchange Ratio would not be adjusted for changes in the market price of Inovio common stock;

the possibility that the Merger might not be completed or might be unduly delayed and the potential adverse consequences if the Merger is not completed or is delayed;

the effect of the public announcement of the Merger on Inovio's stock price;

the substantial costs to be incurred in connection with the Merger, including the costs of integrating the businesses of VGX and Inovio and retaining key personnel and the transaction expenses arising from the merger, such as certain retention payments that may be required to be made to directors, officers and other employees of Inovio;

the risk that, despite VGX's efforts and the efforts of Inovio after the Merger, the combined company may lose key personnel;

the risk that the restrictions on the conduct of VGX's business during the period between the signing of the agreement and plan of merger and the completion of the Merger may negatively impact VGX's business;

litigation risks associated with the transaction or with the combination of the two companies; and

the other risks of the type and nature described under "Risk Factors."

In reaching its decision to approve the Merger, VGX's board of directors also considered the interests that certain directors and officers of VGX have in the transaction. See the section entitled "Interests of Directors, Officers and Affiliates" on page 85.

After consideration of these factors, the VGX board of directors determined that these risks could be mitigated or managed by VGX or Inovio or by the combined company following the Merger, were reasonably acceptable under the circumstances or, in light of the anticipated benefits, the risks were unlikely to have a materially adverse impact on the Merger or on the combined company following the Merger, and that, overall, these risks were significantly outweighed by the potential benefits of the Merger.

Although this discussion of the information and factors considered by the VGX board of directors is believed to include the material factors considered by the VGX board of directors, it is not intended to be exhaustive and may not include all of the factors considered by the VGX board of directors. In reaching its determination to approve the Merger and approve and adopt the original agreement and plan of merger and the Acquisition Agreement, the VGX board of directors did not find it useful and did not attempt to quantify or assign any relative or specific weights to the various factors that it considered in reaching its determination that the Merger and the related agreements are advisable and fair to and in the best interests of VGX and the VGX stockholders. Rather, the VGX board of directors based its position and determination on the totality of the information presented to and factors considered by it. In addition, individual members of the VGX board of directors may have given differing weights to different factors.

This summary of the reasoning of VGX's board of directors, as well as certain information presented in this section, is forward-looking in nature. This information should be read in light of the factors discussed under the section entitled *"Cautionary Note Regarding Forward Looking Statements"* on page 24. VGX cannot assure you that the potential benefits or opportunities considered by VGX's board of directors will be achieved through completion of the transaction. See the section entitled *"Risk Factors"* beginning on page 26.

Recommendation of VGX's Board of Directors

After careful consideration and with advice from Needham, VGX's board of directors determined that the Acquisition Agreement and the transactions contemplated by the Acquisition Agreement, including the terms of the Merger, are fair, reasonable and in the best interests of VGX. VGX's board of directors recommends that VGX stockholders vote FOR the proposal seeking approval of the Merger, including adoption of the Acquisition Agreement. The individual proposal, as recommended by the VGX board of directors, is described in greater detail, beginning on page 216 of this joint proxy statement/prospectus.

In considering the determination by the VGX board of directors that the Merger and the related agreements are advisable and fair to and in the best interests of VGX and the VGX stockholders, you should be aware that certain VGX directors and officers have arrangements that may cause them to have interests in the transaction that are different from, or are in addition to, the interests of VGX stockholders generally. See the section entitled "Interests of Directors, Officers and Affiliates" on page 85.

Resulting Ownership of Inovio; Change of Control

The Acquisition Agreement anticipates the calculation of the Merger Exchange Ratio such that the legacy holders of Inovio's securities and VGX's securities will respectively hold 50 percent of the fully-diluted share capital upon closing of the Merger, excluding the shares of Inovio common stock underlying VGX convertible debt assumed by Submerger in the Merger. If the Merger is consummated, based on the fully-diluted share capital outstanding of each of Inovio and VGX as of April 14, 2009, current holders of Inovio securities will own approximately 48.18% and holders of VGX securities will own approximately 51.82% of the fully-diluted share capital of the combined company (including the VGX convertible debt) and 51.48% and 48.52%, respectively, of the anticipated issued and outstanding shares of capital stock post-Merger (including the outstanding shares of Inovio Series C preferred stock on an as-converted basis). This shift in the ownership of Inovio as a result of the Merger, if completed, or the related shift in the voting power of the legacy Inovio stockholders, will constitute a "Change of Control" or "Change in Control" as defined in a number of Inovio agreements, or other qualifying triggering event, impacting the rights of Inovio and/or the other parties to such agreements, as follows:

Inovio 2000 Plan. The Inovio 2000 Plan currently does not define a "Change in Control," instead defining certain "Terminating Events" upon which the vesting of options outstanding pursuant to the Inovio 2000 Plan accelerates and after which, if not exercised upon such acceleration, the outstanding options terminate. Under the existing terms of the Inovio 2000 Plan, a Terminating Event includes a merger or consolidation of Inovio where immediately following such transaction the Inovio stockholders as a group will hold less than a majority of the outstanding capital stock of the surviving corporation. Thus, under the existing Inovio 2000 Plan, the resulting shift of ownership of Inovio's outstanding capital stock post-Merger would result in a Terminating Event under the Inovio 2000 Plan. If amended, as proposed in Proposal 2, contained elsewhere in this joint proxy statement/prospectus, prior to the closing of the Merger, the resulting shift in the ownership of Inovio shall instead constitute a "Change in Control" under the proposed amended and restated Inovio 2000 Plan, the consummation of a merger or consolidation involving Inovio following which the beneficial owners of the outstanding Inovio capital stock immediately prior to such transaction continue to beneficially own less than 75% of the outstanding shares of common stock and the combined voting power immediately after such transaction. As the legacy Inovio common stockholders will not retain beneficial ownership and voting power in excess of 75%, upon approval of the 2000 Plan will become fully vested and exercisable.



Inovio 2007 Plan. Under the Inovio 2007 Omnibus Incentive Plan, a "Change in Control" includes the consummation of a merger or consolidation involving Inovio following which the beneficial owners of the outstanding Inovio capital stock immediately prior to such transaction continue to beneficially own less than 75% of the outstanding shares of common stock and the combined voting power immediately after such transaction. As the legacy Inovio common stockholders will not retain beneficial ownership and voting power in excess of 75%, upon closing of the Merger any Inovio options or other equity awards issued and outstanding under the Inovio 2007 Omnibus Incentive Plan will become fully vested and exercisable.

Sponsored Research, License and Collaborative Arrangements: Some of Inovio's sponsored research, license and/or collaborative arrangements contain "Change of Control" provisions that that will be triggered by the resulting shift in the ownership of Inovio, if the Merger is completed, which may enable premature termination of such arrangements or otherwise may impact the status of such arrangements for the combined group. For example, Inovio's agreement with Wyeth requires Inovio provide Wyeth with certain notifications of a pending qualifying transaction and enables Wyeth to terminate the arrangement if such notice and certain other written assurances regarding the priority and commitment to the arrangement are not timely provided to Wyeth by Inovio prior to consummation of such transaction. Similarly, Inovio's arrangement with Merck requires certain notice of a Change of Control transaction and also enables termination under limited circumstances as a result. Other of Inovio's and VGX's arrangements require that the company seek and obtain prior written consent from the collaborative party ahead of the consummation of any Change of Control transaction. Inovio intends to comply with the notice, information and/or consent requirements of these various provisions, and does not anticipate any changes in its arrangements with these collaborative parties, however in some instances, even if Inovio complies with such requirements, the other parties to these arrangements may control whether there will be changes to such arrangements as a result of the Merger.

In addition, Inovio has reviewed the rights of the holders of the outstanding shares of its Series C preferred stock and its outstanding warrants, and has determined that the Merger should not have any impact on the current rights of such securities, on the basis that the Merger does not qualify as a "Change of Control" or other qualifying event as defined for such securities, or if the Merger does trigger potential consequences, such adjustments are not applicable due to the significant negative differential between the pricing of the security in question and the current market price of Inovio's common stock. For example, the majority of the outstanding Inovio warrants include a Change of Control provision that, if triggered, only requires adjustment of the exercise price or allows cash redemption of the warrant if changes in rights are being made to the underlying security, the Inovio common stock, or such class of underlying security is being purchased or exchanged in a transaction, which would not occur upon closing of the Merger, if completed. However, Inovio has identified one form of warrant issued in 2004 that also provides the warrantholder, upon a "consolidation" of Inovio with another company, the ability to elect to receive cash consideration equal to the fair market value of the warrant as determined in accordance with customary valuation, Inovio anticipates that its cash redemption obligation for such warrants would be significantly less than \$1,000 total, if the current transaction is deemed a qualifying consolidation and the warrantholder seeks such redemption.

Opinion of Inovio's Financial Advisor

Oppenheimer acted as a financial advisor to Inovio to evaluate, and to render an opinion to the Inovio board of directors with respect to, the fairness, from a financial point of view, to Inovio of the consideration payable by Inovio in the Merger. On July 2, 2008, at a meeting of Inovio's board of



directors held to evaluate the Merger, Oppenheimer rendered to Inovio's board of directors an oral opinion, which was confirmed by delivery of a written opinion dated July 2, 2008, to the effect that, as of that date and based on and subject to the matters described in its opinion, the Merger Exchange Ratio provided for in the original agreement and plan of merger (prior to its amendment) was fair, from a financial point of view, to Inovio. Oppenheimer's opinion, dated July 2, 2008, relates only to the Merger Exchange Ratio provided for in the original merger agreement and does not take into account any events or developments after the date of such opinion, including any modification to the proposed Merger or the Merger Exchange Ratio provided for in the Acquisition Agreement, dated as of December 5, 2008, as further amended on March 31, 2009.

The full text of Oppenheimer's written opinion, dated July 2, 2008, which describes the assumptions made, procedures followed, matters considered and limitations on the review undertaken, is attached to this joint proxy statement/prospectus as *Annex B*. *Oppenheimer's opinion was provided to Inovio's board of directors in connection with its evaluation of the Merger Exchange Ratio from a financial point of view to Inovio and does not address any other aspect of the Merger. Oppenheimer's opinion does not address the underlying business decision of Inovio to effect the Merger, the relative merits of the Merger as compared to any alternative business strategies that might exist for Inovio or the effect of any other transaction in which Inovio might engage and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to any matters relating to the Merger. The summary of Oppenheimer's opinion described below is qualified in its entirety by reference to the full text of its opinion.*

In arriving at its opinion, Oppenheimer:

reviewed a draft, dated July 1, 2008, of the original agreement and plan of merger (prior to its amendment);

reviewed audited financial statements of Inovio and VGX for fiscal years ended December 31, 2007, 2006 and 2005 and unaudited financial statements of Inovio and VGX for the three months ended March 31, 2008;

reviewed historical market prices and trading volumes of Inovio common stock;

held discussions with the senior managements of Inovio and VGX with respect to the businesses and prospects of Inovio and VGX;

reviewed and analyzed the market values of companies that Oppenheimer deemed relevant in evaluating Inovio and VGX;

reviewed and analyzed publicly available financial terms of transactions that Oppenheimer deemed relevant in evaluating the Merger;

reviewed and analyzed publicly available financial terms of licensing transactions that Oppenheimer deemed relevant in evaluating the product candidates of Inovio and VGX;

discussed with Inovio's management its assessments as to the anticipated pro forma funding needs of, and cash available to, Inovio;

reviewed public information concerning Inovio and VGX; and

performed such other analyses, reviewed such other information and considered such other factors as Oppenheimer deemed appropriate.

In rendering its opinion, Oppenheimer relied upon and assumed, without independent verification or investigation, the accuracy and completeness of all of the financial and other information provided to or discussed with Oppenheimer by Inovio, VGX and their respective employees, representatives and affiliates or otherwise reviewed by Oppenheimer. Oppenheimer was advised that financial forecasts

relating to Inovio and VGX had not been prepared by the managements of Inovio and VGX and, accordingly, Oppenheimer did not undertake an analysis of the future financial performance of Inovio and VGX. Oppenheimer assumed, with Inovio's consent, that the final terms of the merger agreement would not vary materially from those set forth in the draft reviewed by Oppenheimer. Oppenheimer also assumed, with Inovio's consent, that the Merger would qualify for federal income tax purposes as a tax-free reorganization under Section 368(a) of the Code. Oppenheimer further assumed, with Inovio's consent, that the Merger and related transactions, including the (i) sale by VGX to VGXI of certain assets relating to its DNA plasmid products for total cash consideration of \$9,110,000, referred to as the VGXI asset sale, and the use of the proceeds from the VGXI asset sale and (ii) repayment of an aggregate of \$7.75 million of the outstanding convertible debt of VGX not converted into Inovio common stock in the then anticipated automatic conversion of certain convertible debt to be assumed in the Merger, referred to as the VGX convertible debt conversion, as such debt becomes due and payable, would be consummated in accordance with their respective terms without waiver, modification or amendment of any material term, condition or agreement and in compliance with all applicable laws and other requirements and that, in the course of obtaining the necessary regulatory or third party approvals, consents and releases with respect to the Merger and related transactions, no delay, limitation, restriction or condition would be imposed that would have an adverse effect on Inovio, VGX or the contemplated benefits of the Merger. Oppenheimer neither made nor obtained any independent evaluations or appraisals of the assets or liabilities, contingent or otherwise, of Inovio or VGX.

Oppenheimer's opinion relates to the relative values of the fully diluted equity of Inovio and VGX after giving effect, in the case of VGX, to the VGX convertible debt conversion. Oppenheimer did not express any opinion as to the underlying valuation, future performance or long-term viability of Inovio or VGX, the actual value of Inovio common stock when issued or the price at which Inovio common stock would trade at any time. Oppenheimer was not requested to, and it did not, participate in the negotiation or structuring of the Merger or any related transaction. Oppenheimer expressed no view as to, and its opinion did not address, any terms or other aspects or implications of the Merger (other than the Merger Exchange Ratio to the extent expressly specified in its opinion) or any related transaction or any aspect or implication of any other agreement, arrangement or understanding entered into in connection with the Merger or otherwise, including, without limitation, the form or structure of the Merger or any related transaction, including the VGX convertible debt conversion, or any terms or aspects of the VGXI asset sale or the use of the proceeds from the VGXI asset sale. Oppenheimer also expressed no view as to, and its opinion did not address, the fairness of the amount or nature of, or any other aspect relating to, the compensation to be received by any individual officers, directors or employees of any parties to the Merger, or any class of such persons, relative to the Merger Exchange Ratio. In addition, Oppenheimer expressed no view as to, and its opinion did not address, Inovio's underlying business decision to proceed with or effect the Merger nor did its opinion address the relative merits of the Merger as compared to any alternative business strategies that might exist for Inovio or the effect of any other transaction in which Inovio might engage. Oppenheimer's opinion was necessarily based on the information available to it and general economic, financial and stock market conditions and circumstances as they existed and could be evaluated by Oppenheimer on the date of its opinion. Although subsequent developments may affect its opinion, Oppenheimer does not have any obligation to update, revise or reaffirm its opinion. Except as described above, Inovio imposed no other instructions or limitations on Oppenheimer with respect to the investigations made or the procedures followed by it in rendering its opinion.

This summary is not a complete description of Oppenheimer's opinion or the financial analyses performed and factors considered by Oppenheimer in connection with its opinion. The preparation of a financial opinion is a complex analytical process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances and, therefore, a financial opinion is not readily susceptible to summary

description. Oppenheimer arrived at its ultimate opinion based on the results of all analyses undertaken by it and assessed as a whole, and did not draw, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion. Accordingly, Oppenheimer believes that its analyses and this summary must be considered as a whole and that selecting portions of its analyses and factors or focusing on information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, could create a misleading or incomplete view of the processes underlying Oppenheimer's analyses and opinion.

In performing its analyses, Oppenheimer considered industry performance, general business, economic, market and financial conditions and other matters existing as of the date of its opinion, many of which are beyond the control of Inovio and VGX. No company, business or transaction used in the analyses is identical to Inovio, VGX or the Merger, and an evaluation of the results of those analyses is not entirely mathematical. Rather, the analyses involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the acquisition, public trading or other values of the companies, business segments or transactions analyzed.

The assumptions and estimates contained in Oppenheimer's analyses and the ranges of valuations resulting from any particular analysis are not necessarily indicative of actual values or future results, which may be significantly more or less favorable than those suggested by its analyses. In addition, analyses relating to the value of businesses or securities do not purport to be appraisals or to reflect the prices at which businesses or securities actually may be sold. Accordingly, the assumptions and estimates used in, and the results derived from, Oppenheimer's analyses are inherently subject to substantial uncertainty.

The type and amount of consideration payable in the Merger were determined through negotiation between Inovio and VGX, and the decision to enter into the transaction was solely that of Inovio's board of directors. Oppenheimer's opinion and financial presentation were only one of many factors considered by Inovio's board of directors in its evaluation of the Merger and should not be viewed as determinative of the views of Inovio's board of directors or management with respect to the Merger or the Merger Exchange Ratio.

The following is a summary of the material financial analyses reviewed with Inovio's board of directors in connection with Oppenheimer's opinion dated July 2, 2008. The financial analyses summarized below include information presented in tabular format. In order to fully understand Oppenheimer's financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data in the tables below without considering the full narrative description of the financial analyses. For purposes of the financial analyses summarized below, the "Implied Merger Exchange Ratio" refers to the implied Merger Exchange Ratio of approximately 0.9803x calculated as set forth in the original agreement and plan of merger (prior to its amendment) based on outstanding common stock, warrant and option information for Inovio and VGX.

Sum-of-the-Parts Analysis

Oppenheimer performed separate sum-of-the-parts analyses of Inovio and VGX based on the sum of (i) the implied values of their respective product candidates and other operating assets, plus (ii) their respective net cash, calculated as cash and cash equivalents less debt, and the book value of their respective non-operating assets as of March 31, 2008 as adjusted, in the case of VGX's net cash, to reflect the VGXI asset sale and the VGX convertible debt conversion.

Inovio. In performing the sum-of-the-parts analysis of Inovio, implied values were calculated as follows:

in the case of each of Inovio's vaccine product candidates currently in Phase One clinical trials, Oppenheimer applied a discount, to take into account, among other things, the fact that development rights to these product candidates have already been licensed to third parties and the early development stage of these product candidates, of 70% (or, in the case of prostate cancer and hepatitis C programs, a discount of 50% given recent public announcements of positive clinical developments for such programs) to a selected range of transaction values, calculated as the consideration (excluding contingent payments) payable in the relevant transaction, derived from the following 12 selected vaccine licensing transactions:

Transaction Date	Parties to Transaction	
12/2007	Maxygen, Inc. / Sanofi Pasteur, Inc.	
2/2007	AVANT Immunotherapeutics, Inc. / Select Vaccines Limited	
10/2006	Intercell AG / Merck & Co., Inc.	
6/2006	Sanofi Pasteur, Inc. / Emergent BioSolutions Inc.	
3/2006	Hawaii Biotech, Inc. / Avantogen Limited	
7/2005	Merck & Co., Inc. / Geron Corporation	
6/2004	Kirin Brewery Co., Ltd. (Pharmaceutical Division) /	
	Merix Corporation	
5/2004	Intercell AG / Merck & Co., Inc.	
4/2004	Cerus Corporation / MedImmune, Inc.	
3/2004	Innogenetics N.V. / Genencor International, Inc.	
12/2002	Corixa Corporation / Kirin	
	Brewery Co., Ltd. (Pharmaceutical Division)	
4/2002	Bavarian Nordic A/S / PowderJect Pharmaceuticals PLC	

in the case of Inovio's pre-clinical electroporation devices, approximately 50% of Inovio's pre-clinical electroporation devices were assumed, at the direction of Inovio's management, not to progress to Phase One clinical trials (and, accordingly, were assigned no value) and, for each of the remaining devices, Oppenheimer utilized a selected range of transaction values derived from the selected vaccine licensing transactions and applied a discount of 50%, to take into account, among other things, the likelihood that development rights to these devices will be licensed to third parties and the early development stage of these devices as well as the fact that publicly announced studies had published positive findings relating to electroporation technology; and

in the case of Inovio's auction rate securities investments that have been reclassified by Inovio as long-term assets, Oppenheimer applied a 10% discount to the face value of the securities to reflect lack of liquidity with respect to such securities.

VGX. In performing the sum-of-the-parts analysis of VGX, implied values were calculated as follows:

in the case of each of VGX's vaccine product candidates, Oppenheimer utilized a selected range of transaction values derived from the selected vaccine licensing transactions;

in the case of VGX's animal health division, Oppenheimer utilized a selected range of enterprise values, calculated as fully-diluted market value based on closing stock prices on July 1, 2008, less cash, cash equivalents and investments in unconsolidated affiliates, plus straight debt and preferred stock, out-of-the-money convertible securities and minority interests, derived from the

following five selected publicly traded companies with operations in the animal health segment of the biopharmaceutical industry:

Bioniche Life Sciences Inc. Daesung Microbiological Labs Co., Ltd. Heska Corporation ImmuCell Corporation Imugene Limited

in the case of VGX's 30.4% equity interest in VGX International, Inc., Oppenheimer utilized the implied market value of such equity interest based on the closing stock price of VGX International, Inc. on July 1, 2008 and applied a discount of 25% to reflect emerging market risk and lack of liquidity with respect to such equity interest;

in the case of VGX's 1027 Program, Oppenheimer utilized a selected range of transaction values, calculated as the consideration (excluding contingent payments) payable in the relevant transaction, derived from the following five selected autoimmune licensing transactions:

Transaction Date	Parties to Transaction
2/2007	Roche Holdings, Ltd. / BioCryst Pharmaceuticals, Inc.
7/2006	Actelion Pharmaceuticals Ltd. / Roche Holdings, Ltd.
6/2006	Schering-Plough Corporation / Celera Genomics Group
1/2003	Genentech, Inc. / TolerRx Inc.
5/2000	Repligen Corporation / Tolerance Therapeutics LLC

in the case of VGX's pre-clinical research program with the University of Pennsylvania, Oppenheimer utilized a selected range of transaction values derived from the selected vaccine licensing transactions and applied a discount of 10% to reflect the early development stage of the program.

Based on implied per share equity reference ranges for Inovio and VGX derived from the sum of (i) the implied aggregate value of their respective product candidates and operating assets plus (ii) their respective net cash and the book value of non-operating assets as of March 31, 2008 (as adjusted, in the case of VGX's net cash, to reflect the VGXI asset sale and the VGX convertible debt conversion), the sum-of-the-parts analyses of Inovio and VGX indicated the following implied exchange ratio reference range, as compared to the Implied Merger Exchange Ratio:

Implied Exchange Ratio	
Reference Range	Implied Merger Exchange Ratio
1.1961x - 1.7544x	0.9803x

Selected Companies Analyses

Oppenheimer performed separate selected companies analyses of Inovio and VGX in which Oppenheimer reviewed financial and stock market information of Inovio, VGX and the following eight selected publicly held companies with operations in the vaccine or immunotherapy segments of the biopharmaceutical industry, which are segments of such industry in which Inovio and VGX operate:

Antigenics Inc. AVANT Immunotherapeutics, Inc. Biovest International, Inc. CEL-SCI Corporation Dynavax Technologies Corporation Introgen Therapeutics, Inc.

Novavax, Inc.

Vical Incorporated

Oppenheimer reviewed enterprise values of the selected companies, calculated as fully-diluted market value based on closing stock prices on July 1, 2008, less cash, cash equivalents and investments in unconsolidated affiliates, plus straight debt and preferred stock, out-of-the-money convertible securities and minority interests, of the selected companies. Financial data for the selected companies were based on public filings. Based on implied per share equity reference ranges for Inovio and VGX derived by applying the amount of Inovio's and VGX's net cash as of March 31, 2008 (as adjusted, in the case of VGX's net cash, to reflect the VGXI asset sale and the VGX convertible debt conversion) to the range of enterprise values of the selected companies, the selected companies analyses of Inovio and VGX indicated the following implied exchange ratio reference range, as compared to the Implied Merger Exchange Ratio:

Implied Exchange Ratio	
Reference Range	Implied Merger Exchange Ratio
0.0646x - 11.0995x	0.9803x

Selected Precedent Transactions Analysis

Oppenheimer performed separate selected precedent transactions analyses of Inovio and VGX in which Oppenheimer reviewed the transaction values of the following nine selected transactions in the biopharmaceutical industry (a) involving companies with either operations in the vaccine segment of such industry, which is a segment in which Inovio and VGX operate, or product candidates in an early development stage or (b) in which the acquiror and the target had complementary technologies:

Announcement Date	Acquiror	Target
5/12/2008	Intercell AG	Iomai Corporation
10/22/2007	Celldex Therapeutics, Inc.	AVANT Immunotherapeutics, Inc.
7/25/2007	Cell Therapeutics, Inc.	Systems Medicine, Inc.
5/7/2007	Peptech Ltd.	Evogenics Pty Ltd.
6/8/2006	Axonyx Inc.	TorreyPines Therapeutics, Inc.
4/12/2006	Infinity Pharmaceuticals, Inc.	Discovery Partners
		International, Inc.
1/9/2006	Cancervax Corporation	Micromet, Inc.
9/26/2005	Corgentech Inc.	AlgoRx Pharmaceuticals Inc.
9/14/2005	MedImmune, Inc.	Cellective Therapeutics, Inc.

Oppenheimer reviewed transaction values in the selected transactions, calculated as the equity value implied for the target company based on the consideration payable in the selected transaction, including contingent payments, less cash, cash equivalents and investments in unconsolidated affiliates, plus straight debt and preferred stock, out-of-the-money convertible securities and minority interests. Financial data for the selected transactions were based on publicly available information at the time of announcement of the relevant transaction. Based on implied per share equity reference ranges for Inovio and VGX derived by applying the amount of Inovio's and VGX's net cash as of March 31, 2008 (as adjusted, in the case of VGX's net cash, to reflect the VGXI asset sale and the VGX convertible debt conversion) to the range of transaction values of the selected transactions, the selected precedent transactions analyses of Inovio and VGX indicated the following implied exchange ratio reference range, as compared to the Implied Merger Exchange Ratio:

Implied Exchange Ratio		
Reference Range		Implied Merger Exchange Ratio
0.1471x - 5.2720x		0.9803x
	79	

Miscellaneous

Inovio has agreed to pay Oppenheimer for its financial advisory services with respect to the rendering its opinion in connection with the Merger an aggregate fee of \$325,000, a portion of which was payable upon Oppenheimer's engagement by Inovio and the balance of which was payable upon delivery of Oppenheimer's opinion (regardless of the conclusion reached in the opinion). Inovio also has agreed to reimburse Oppenheimer for its reasonable expenses, including reasonable fees and expenses of its legal counsel, and to indemnify Oppenheimer and related parties against liabilities, including liabilities under the federal securities laws, relating to, or arising out of, its engagement. Oppenheimer and its affiliates in the past have performed investment banking and other services for Inovio unrelated to the Merger, for which services Oppenheimer and its affiliates have received compensation, including financial advisory services to Inovio in connection with potential acquisition transactions in 2007. In the ordinary course of business, Oppenheimer and its affiliates may actively trade the securities of Inovio for Oppenheimer's and its affiliates' own accounts and for the accounts of customers and, accordingly, may at any time hold a long or short position in such securities.

The issuance of Oppenheimer's opinion was approved by an authorized committee of Oppenheimer. Inovio selected Oppenheimer to provide certain financial advisory services in connection with the Merger based on Oppenheimer's reputation and experience and its familiarity with Inovio and its business. Oppenheimer is an internationally recognized investment banking firm and, as a part of its investment banking business, is regularly engaged in valuations of businesses and securities in connection with acquisitions and mergers, underwritings, secondary distributions of securities, private placements and valuations for other purposes.

Appraisal Rights

Under the DGCL, holders of VGX common stock have the right to seek appraisal of their shares of VGX common stock in connection with the Merger and to receive payment in cash for the fair value of their shares of VGX common stock as determined by the Delaware Court of Chancery, or the "Chancery Court," together with a fair rate of interest, if any, in lieu of the consideration they would otherwise be entitled to pursuant to the Acquisition Agreement. These rights are known as "appraisal rights." VGX stockholders electing to exercise appraisal rights must comply with the provisions of Section 262 of the DGCL, or "Section 262," the full text of which appears in *Annex E* to this joint proxy statement/prospectus, in order to perfect their rights. Strict compliance with the Delaware statutory procedures will be required. For VGX stockholders who have properly exercised appraisal rights to receive the fair value of their shares, at least one VGX stockholder who has properly exercised appraisal proceeding in the Chancery Court.

The following is intended as a brief summary of the material provisions of the Delaware statutory procedures required to be followed by a VGX stockholder in order to dissent from the Merger and to perfect appraisal rights. This summary, however, is not a complete statement of all applicable requirements and is qualified in its entirety by reference to Section 262. Failure to precisely follow any of the statutory procedures set forth in Section 262 may result in a termination or waiver of a VGX stockholder's appraisal rights.

Section 262 requires that stockholders be notified that appraisal rights will be available not less than 20 days before the stockholders' meeting to vote on the Merger. A copy of Section 262 must be included with such notice. This joint proxy statement/prospectus constitutes VGX's notice to its stockholders of the availability of appraisal rights in connection with the Merger in compliance with the requirements of Section 262. If a VGX stockholder wishes to consider exercising his or her appraisal rights, he or she should carefully review the text of Section 262 contained in *Annex E* since failure to timely and properly comply with the requirements of Section 262 will result in the loss of his or her appraisal rights under Delaware law.

If a VGX stockholder elects to demand appraisal of his or her shares, he or she must satisfy each of the following conditions:

The VGX stockholder must deliver to VGX a written demand for appraisal of his or her shares of common stock before the vote with respect to the Merger is taken. This written demand for appraisal must be in addition to and separate from any proxy or vote abstaining from or voting against the adoption of the Acquisition Agreement. Voting against or failing to vote for the adoption of the Acquisition Agreement by itself does not constitute a demand for appraisal within the meaning of Section 262.

The VGX stockholder must not vote in favor of the adoption of the Acquisition Agreement. A vote in favor of the adoption of the Acquisition Agreement, by proxy or in person, will constitute a waiver of his or her appraisal rights in respect of the shares so voted and will nullify any previously filed written demands for appraisal. A proxy card which is signed and does not contain voting instructions will, unless revoked, be voted "FOR" the adoption of the Acquisition Agreement and will nullify any previous written demand for appraisal.

If a VGX stockholder fails to comply with either of these conditions and the Merger is completed, he or she will be entitled to receive the merger consideration for his or her shares of VGX common stock as provided for in the Acquisition Agreement, but he or she will have no appraisal rights with respect to his or her shares of VGX common stock.

All demands for appraisal should be addressed to VGX Pharmaceuticals, Inc., 450 Sentry Parkway, Blue Bell, Pennsylvania 19422, Attention: Secretary, and must be delivered before the vote on the Acquisition Agreement is taken at the VGX special meeting, and should be executed by, or on behalf of, the record holder of the shares of VGX common stock. The demand must reasonably inform VGX of the identity of the stockholder and the intention of the stockholder to demand appraisal of such stockholder's shares of VGX common stock.

To be effective, a demand for appraisal by a holder of VGX's common stock must be made by, or in the name of, such registered stockholder, fully and correctly, as the stockholder's name appears on the stock certificate(s). Beneficial owners who are not record holders may not directly make appraisal demands to VGX. The beneficial holder must, in such cases, have the registered owner, such as a broker, bank or other nominee or other nominee, submit the required demand in respect of those shares. If shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, execution of a demand for appraisal should be made by or for the fiduciary; and if the shares are owned of record by more than one person, as in a joint tenancy or tenancy in common, the demand should be executed by or for all joint owners. An authorized agent, including an authorized agent for two or more joint owners, may execute the demand for appraisal for a stockholder of record; however, the agent must identify the record owner or owners and expressly disclose the fact that, in executing the demand, he or she is acting as agent for the record owner. A record owner, such as a broker, who holds shares as a nominee for others, may exercise his or her right of appraisal with respect to the shares held for one or more beneficial owners, while not exercising this right for other beneficial owners. In that case, the written demand should state the number of shares as to which appraisal is sought. Where no number of shares is expressly mentioned, the demand will be presumed to cover all shares held in the name of the record owner.

If a VGX stockholder holds his or her shares of VGX common stock in a brokerage account or in other nominee form and he or she wishes to exercise appraisal rights, he or she should consult with his or her broker, bank or other nominee to determine the appropriate procedures for the making of a demand for appraisal by the nominee.

Within ten days after the Effective Time of the Merger, the surviving corporation must give written notice that the Merger has become effective to each VGX stockholder who has properly filed a written demand for appraisal and who did not vote in favor of the Acquisition Agreement. At any time within 60 days after the Effective Time, any VGX stockholder who has demanded an appraisal has the right to withdraw the demand and to accept the consideration specified by the Acquisition Agreement for his or her shares of VGX common stock. Within 120 days after the Effective Time of the Merger, the surviving corporation or any stockholder who has complied with Section 262 shall, upon written request to the surviving corporation, be entitled to receive a written statement setting forth the aggregate number of shares not voted in favor of the Acquisition Agreement and with respect to which demands for appraisal rights have been received and the aggregate number of holders of such shares. Within 120 days after the Effective Time, either the surviving corporation or any VGX stockholder who has complied with the requirements of Section 262 may file a petition in the Chancery Court demanding a determination of the fair value of the shares held by all VGX stockholders entitled to appraisal. Upon the filing of the petition by a VGX stockholder, service of a copy of such petition shall be made upon the surviving corporation. The surviving corporation has no obligation to file such a petition in the event there are dissenting stockholders. Accordingly, the failure of a stockholder to file such a petition within the period specified could nullify the stockholder's previously written demand for appraisal.

If a petition for appraisal is duly filed by a VGX stockholder and a copy of the petition is delivered to the surviving corporation, the surviving corporation will then be obligated, within 20 days after receiving service of a copy of the petition, to provide the Chancery Court with a duly verified list containing the names and addresses of all VGX stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached by the surviving corporation. After notice to dissenting stockholders who demanded appraisal of their shares, the Chancery Court is empowered to conduct a hearing upon the petition, and to determine those VGX stockholders who have complied with Section 262 and who have become entitled to the appraisal rights provided thereby. The Chancery Court may require the VGX stockholders who have demanded payment for their shares to submit their stock certificates to the Register in the Chancery Court for notation thereon of the pendency of the appraisal proceedings, and if any stockholder fails to comply with that direction, the Chancery Court may dismiss the proceedings as to that stockholder.

After determination of the VGX stockholders entitled to appraisal of their shares of VGX common stock, the appraisal proceeding shall be conducted in accordance with the rules of the Chancery Court, including any rules specifically governing appraisal proceedings. The appraisal proceeding is a litigation proceeding. At the conclusion of the litigation, the Chancery Court will appraise the shares, determining their fair value exclusive of any element of value arising from the accomplishment or expectation of the Merger, together with a fair rate of interest, if any. When the value is determined, the Chancery Court will direct the payment of such value in cash, with interest thereon accrued during the pendency of the proceeding, if the Chancery Court so determines, to the VGX stockholders entitled to receive the same, upon surrender by such holders of the certificates representing those shares.

In determining fair value, the Chancery Court is required to take into account all relevant factors. VGX stockholders should be aware that the fair value of their shares as determined under Section 262 could be more, the same or less than the value that they are entitled to receive under the terms of the Acquisition Agreement. Stockholders also should be aware that investment banking opinions as to the fairness from a financial point of view of the consideration payable in a merger are not opinions as to "fair value" under Section 262. Unless the Chancery Court in its discretion determines otherwise for

good cause shown, interest from the Effective Time of the Merger through the date of the payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the Effective Time of the Merger and the date of payment of the judgment.

Costs of the appraisal proceeding may be imposed upon the surviving corporation and the VGX stockholders participating in the appraisal proceeding by the Chancery Court as the Chancery Court deems equitable in the circumstances. Upon the application of a VGX stockholder, the Chancery Court may order all or a portion of the expenses incurred by any VGX stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorneys' fees and the fees and expenses of experts, to be charged pro rata against the value of all shares entitled to appraisal. Any VGX stockholder who had demanded appraisal rights will not, after the Effective Time of the Merger, be entitled to vote shares subject to that demand for any purpose or to receive payments of dividends or any other distribution with respect to those shares, other than with respect to payment as of a record date prior to the Effective Time; however, if no petition for appraisal is filed within 120 days after the Effective Time of the Merger, or if the VGX stockholder delivers a written withdrawal of his or her demand for appraisal and an acceptance of the terms of the Merger within 60 days after the Effective Time of the Merger, then the right of that VGX stockholder to appraisal will cease and that stockholder will be entitled to receive the merger consideration for shares of VGX's common stock held by such stockholder pursuant to the Acquisition Agreement. Any withdrawal of a demand for appraisal made more than 60 days after the Effective Time of the Surviving corporation and must, to be effective, be made within 120 days after the Effective Time.

Failure to comply with all of the procedures set forth in Section 262 will result in the loss of a stockholder's statutory appraisal rights. In view of the complexity of Section 262, VGX stockholders who may wish to dissent from the Merger and pursue appraisal rights should consult their legal advisors.

Accounting Treatment

The Merger will be accounted for using the purchase method of accounting for business combinations under U.S. GAAP. Although the business combination of Inovio and VGX is a "merger of equals," generally accepted accounting principles require that one of the two companies in the transaction be designated as the acquirer for accounting purposes. After a review of relevant factors, in accordance with the provisions of Statement of Financial Accounting Standards No. 141R, Business Combinations (SFAS 141R), Inovio has been determined to be the accounting acquirer. In evaluating the appropriate accounting treatment under SFAS 141R, the parties and their accountants considered all relevant facts and circumstances, including, without limitation, the entity issuing equity securities, the relative operational size of the legacy entities, the relative voting rights of the legacy holders in the combined group, the composition of the post-Merger company's board of directors and its committees, and the composition and relevant experience of senior management; a majority of these factors favored a determination of Inovio as the accounting acquirer. Accordingly, the historical consolidated financial statements of Inovio will be carried forward at their historical cost, the purchase price will be allocated to VGX's identifiable assets and liabilities based on their estimated fair values at the date of the consummation of the Merger, and any excess of the purchase price over those fair values will be accounted for as goodwill. The results of final valuations of property, plant and equipment, and intangible and other assets and the finalization of any potential plans of restructuring have not yet been completed. Inovio will revise the allocation of the purchase price based on VGX's net assets at the time of the Merger and when additional information becomes available.

Listing or Quotation of Inovio Common Stock

Inovio has notified the NYSE Amex of the Acquisition Agreement, the Merger and the other agreements contemplated by the Acquisition Agreement and provided the NYSE Amex with a copy of the Acquisition Agreement, the schedules and exhibits thereto and other documentation requested by the NYSE Amex. After reviewing these items, the NYSE Amex determined that the Merger does not constitute a Reverse Merger under Section 341 of the exchange's Company Guide, and Inovio promptly filed an additional listing application with respect to the shares of Inovio common stock to be issued or become issuable upon closing of the Merger consistent with its covenants in the Acquisition Agreement to use commercially reasonable efforts to obtain approval of such additional listing, as well as maintain the current listing of its common stock on the NYSE Amex. However, the NYSE Amex warned Inovio and VGX that if facts material to the Section 341 determination change, whether prior to or after the closing, the Merger could subsequently be determined to constitute a "Reverse Merger" under Section 341, which would require Inovio to meet the initial listing requirements of the NYSE Amex at such time. Under such circumstances, if Inovio is able to satisfy such initial listing requirements using commercially reasonable efforts, it will file an initial listing application with the NYSE Amex. However, if Inovio is not able to meet the NYSE Amex's initial listing requirements using commercially reasonable efforts, or NYSE Amex otherwise notifies Inovio that it is out of compliance with the NYSE Amex continued listing standards and Inovio cannot maintain the listing of its common stock using commercially reasonable efforts, then Inovio will, in consultation with VGX if pre-closing, pursue listing or quotation of the Inovio common stock to be issued or become issued or become issuable (or issued, if post-closing) in relation to the Merger.

Restrictions on Ability to Sell Inovio Common Stock

The Acquisition Agreement provides that certain shares of Inovio common stock issued at closing of the Merger, or issuable pursuant to securities assumed in the Merger, will be subject to lock-up restrictions for an initial period post-Merger, in conjunction with which certain holders of Inovio and VGX securities will be asked to execute lock-up agreements. Specifically, shares of Inovio common stock held at the closing, received pursuant to the Merger, or received upon exercise or conversion of options, warrants or convertible debt assumed in the Merger (the "Restricted Securities") held by any of the following persons shall be subject to lock-up restrictions: (a) certain holders of Restricted Securities named in the Acquisition Agreement, (b) directors, executive officers and employees of VGX just prior to closing, (c) holders of the outstanding convertible debt of VGX just prior to closing, and (d) the directors, executive officers, and employees of Inovio (each a "Restricted Party" and together, the "Restricted Parties").

For the duration of the applicable lock-up period, each Restricted Party shall not (a) sell, assign, exchange, transfer, pledge, hypothecate, distribute or otherwise dispose of (other than by operation of law where the transferee remains subject to and bound by the provisions of the Acquisition Agreement applicable during the lock-up period) (i) any Restricted Securities, or (ii) any interest (including, without limitation, an option to buy or sell) in any Restricted Securities, in whole or in part, or (b) engage in any transaction in respect to Restricted Securities or any interest in the Restricted Securities, the intent or effect of which is the effective economic disposition of such shares (the foregoing restrictions are referred to in this joint proxy statement/prospectus as the "Lock-Up Restrictions"). However, in no event shall any of the Lock-Up Restrictions restrict the transfer of the Restricted Securities pursuant to a tender offer, exchange offer or merger transaction relating to any shares of Inovio common stock subsequent to the Merger.

The Lock-Up Restrictions shall generally apply to Restricted Securities held by the Restricted Parties, *except* with respect to shares of Inovio common stock issued upon conversion of the VGX



convertible debt, for 24 months from the closing of the Merger. However, the Lock-Up Restrictions shall lapse as to 25% of the shares of Inovio common stock (held directly or underlying other Restricted Securities) initially subject to such Lock-Up Restrictions at closing upon each six-month anniversary of the date of the closing, and, if the Restricted Party is an employee and/or director of Inovio or VGX or any of their subsidiaries just prior to the Effective Time of the Merger, the Lock-Up Restrictions shall no longer apply at all upon the termination of such Restricted Party's employment or directorship with Inovio or any of its subsidiaries. The Lock-Up Restrictions shall apply to any shares of Inovio common stock issued upon conversion of the converted VGX convertible debt for six months from the closing, but shall lapse as to 50% of the shares of Inovio common stock underlying the VGX convertible debt upon the three-month anniversary of the date of closing.

To effect the Lock-up Restrictions, upon closing Inovio will issue a stop order to its transfer agent with respect to the shares of Inovio common stock held by or issuable to the Restricted Parties, and the shares of Inovio common stock issued to the Restricted Parties in the Merger and thereafter during the effective period for the Lock-Up Restrictions shall bear a restrictive legend reflecting the Lock-Up Restrictions. Prior to the closing, Inovio shall also obtain from the chief executive officer of Inovio and shall use its best efforts to obtain from all other Inovio-affiliated Restricted Parties lock-up agreements in customary form detailing the Lock-Up Restrictions. Prior to the closing, VGX shall also obtain from the chief executive officer of VGX and shall use its best efforts to obtain from all other VGX-affiliated Restricted Parties, except those who will hold Restricted Securities consisting of solely of shares of Inovio common stock issued at the Effective Time pursuant to the Merger, lock-up agreements in customary form detailing the Lock-Up Restrictions.

Upon the expiration of the general periods during which the Lock-Up Restrictions are applicable, Inovio shall instruct its transfer agent to remove the stop order. Prior to such times, Inovio shall also notify its transfer agent regarding the interim lapsing of the Lock-Up Restrictions as to Restricted Securities held by the Restricted Parties within five business days of each of the applicable anniversary dates. To the extent a holder of previously Restricted Securities needs assistance with the issuance of new share certificates in order to make a transfer of some or all of that portion of its shares of Inovio common stock which were previously issued with the restrictive legend, the post-Merger company intends to assist such holder in its communications with the transfer agent to effectuate such issuance and/or transfer.

Interests of Directors, Officers and Affiliates

In considering the recommendation of Inovio's board of directors that Inovio stockholders vote in favor of the issuance of Inovio's securities in conjunction with the Merger and the resulting change of control of Inovio, Inovio stockholders should be aware that some Inovio executive officers and directors have interests in the transaction that may be different from, or in addition to, their interests as stockholders of Inovio. These interests include the execution of new employment agreements, to be effective upon closing of the Merger, between Inovio and its current executive officers, which provide for certain payments upon closing of the Merger and eligibility for future severance payments under certain terms and conditions.

As of December 31, 2008, Inovio's directors and executive officers as a group beneficially held 2,640,925 shares of Inovio common stock including options and warrants to purchase 2,169,381 shares of Inovio common stock exercisable within 60 days of the record date also held by the Inovio directors and executive officers, equivalent to approximately 5.93% of the shares of Inovio common stock entitled to vote at the Inovio special meeting. Approval of the proposals at the Inovio special meeting requires the affirmative vote of the holders of a majority of the outstanding shares of Inovio common stock present at the Inovio special meeting, in person or by proxy duly authorized.

Inovio's board of directors was aware of these interests and considered them, among other matters, in making its recommendation to Inovio's stockholders that they approve the transaction and other related proposals. In addition, subsequent to such recommendation, Dr. Avtar Dhillon, Simon Benito and Mr. Tee Khiang Ng were selected to continue service on the Inovio board as directors post-closing, for which Mr. Benito and Mr. Ng will continue to receive customary director compensation.

In considering the recommendation of VGX's board of directors that VGX stockholders vote in favor of the issuance of Inovio's securities in conjunction with the Merger and the resulting change of control of VGX, VGX stockholders should be aware that some VGX executive officers and directors have interests in the transaction that may be different from, or in addition to, their interests as stockholders of VGX. These interests include

Dr. J. Joseph Kim, Chief Executive Officer of VGX, will become the Chief Executive Officer and a director of Inovio post-closing;

Dr. Morton Collins, a current director of VGX, will serve on the post-Merger board of directors; and

Dr. C. Jo White, Chief Medical Officer of VGX, will serve as the Chief Medical Officer of Inovio post-closing.

Dr. Collins will receive customary director compensation for his service on the post-Merger board of directors.

As of the record date, all directors and executive officers of VGX as a group owned approximately 33.2% of the shares of VGX common stock entitled to vote at the VGX special meeting; this percentage does not include options and warrants to purchase 5,973,000 shares of VGX common stock exercisable within 60 days of the record date also held by the VGX executive officers and directors. The affirmative vote at the VGX special meeting of the holders of a majority of the outstanding shares of VGX common stock, or approximately 21,143,853 shares based on the number of shares of outstanding VGX common stock on March 6, 2009, is required to approve the Merger and the Acquisition Agreement.

VGX's board of directors was aware of these interests and considered them, among other matters, in making its recommendation to VGX's stockholders that they approve the transaction.

Directors and Management of Inovio Following the Transaction

Directors

The Acquisition Agreement provides that Inovio shall identify and nominate three individuals from its current board of directors and that VGX shall identify and nominate two individuals from its current board of directors to serve on the board of directors of the post-Merger company. At least two of the individuals put forth by Inovio and one individual put forth by VGX must be "independent" pursuant to the rules and regulations of the NYSE Amex and the Rule 10A-3(b) as promulgated under the Exchange Act. Inovio's current board of directors will take all actions necessary such that the following individuals nominated by Inovio and VGX pursuant to the terms of the Acquisition Agreement shall be appointed to the Inovio board of directors at the closing. The following is a list and brief biography of each person who is expected to serve as a director of Inovio upon and after the

closing of the Merger pursuant to the arrangement described above, annotated with the anticipated service of such individuals on the committees of the post-Merger board of directors:

Name	Age	Position
Avtar Dhillon, M.D.	48	Chairman of the Board, President, Director
J. Joseph Kim, Ph.D.	40	Chief Executive Officer, Director
Simon X. Benito(1)(2)(3)	63	Director
Tee Khiang $Ng(1)(2)(3)$	46	Director
Morton Collins, Ph.D.(1)(2)(3)	72	Director

(1)

Member of the Compensation Committee

(2)

Member of Nomination and Corporate Governance Committee

(3)

Member of the Audit Committee

AVTAR DHILLON, M.D. joined Inovio as the President and Chief Executive Officer, and as a director, in October 2001. Post-Merger, Dr. Dhillon will remain as President and a director of the combined company and is anticipated to serve as Chairman of the Board. Prior to joining Inovio, Dr. Dhillon was engaged by MDS Capital Corp. (now Lumira Capital Corp.), one of North America's leading healthcare venture capital organizations, as a consultant in July 1998, and subsequently became Investment Manager in August 1999 and Vice President in 2000. In July 1989, Dr. Dhillon started a medical clinic and subsequently practiced family medicine for over 12 years. From March 1997 to July 1998, Dr. Dhillon served as consultant to Cardiome Pharmaceuticals, a biotechnology company listed on NASDAQ National Market and the Toronto Stock Exchange. Dr. Dhillon has a Bachelor of Science, honors degree in physiology and M.D. degree from the University of British Columbia. Dr. Dhillon is also a director of Protox Therapeutics, a publicly traded specialty pharmaceutical company and Auricle Biomedical, a capital pool company.

J. JOSEPH KIM, PH.D. will join Inovio at closing of the Merger as its Chief Executive Officer and a director. A co-founder of VGX Pharmaceuticals and its current President, Chief Executive Officer and a director since 2000, Dr. Kim is a veteran of the biopharmaceutical industry. Prior to VGX, Dr. Kim led efforts in manufacturing and process development of several FDA-approved products and developmental therapeutics at Merck. These products include FDA-approved vaccines for Hepatitis as well as developmental vaccines and therapeutics for HIV/AIDS. Dr. Kim has published over 70 peer-reviewed scientific papers and book chapters, holds numerous patents and sits on several editorial boards and review panels. In 2002, Dr. Kim was named as one of the world's top 100 young innovators by Technology Review magazine and as one of the "40 under 40" by the Philadelphia Business Journal, which highlights most dynamic professionals who are under 40 years of age in the region. Dr. Kim was also selected on the list of the "50 Most Influential Men" in the October 2003 and in the October 2006 "Power Issue" of Details Magazine. In 2004, Dr. Kim and VGX Pharmaceuticals were selected as one of 30 Technology Pioneers by the World Economic Forum. Furthermore, Dr. Kim was featured in the "Who's Next 2005" issue of Newsweek International, which included a group of 10 leaders, scientists, and executives at the forefront of change and impact in the world. Most recently in 2006, Dr. Kim has been named a Young Global Leader by the Forum of Young Global Leaders, an affiliate of the World Economic Forum. Dr. Kim was among 175 leading executives, public figures and intellectuals under the age of 40 from 50 countries. Dr. Kim has also been featured in articles in Forbes and the New Yorker and in numerous other Media Outlets. Dr. Kim was trained in economics, engineering and biological sciences at MIT where he was a U.S. Senate Honors Scholar. He holds a Ph.D. in Biochemical Engineering from the University of Pennsylvania and an MBA in Finance from the Wharton School.

SIMON X. BENITO has been a director of Inovio since December 2003. Prior to his retirement, Mr. Benito had a successful and extensive career serving several health care companies in senior

executive positions, including 25 years at Merck & Co, Inc. His most recent positions included Senior Vice President, Merck Vaccine Division; Executive Vice President, Merck-Medco Managed Care; and Executive Director and Vice President, Merck Human Health, Japan. In addition, Mr. Benito was a Fellow of the Institute of Chartered Accountants in England and Wales for over thirty years until his retirement in 1999. Since April 2005, Mr. Benito has served as a director of DURECT Corporation, a publicly traded specialty pharmaceutical company.

TEE KHIANG NG has been a director of Inovio since April 2009. Mr. Ng has over 15 years of entrepreneurial and investment management experience. He is a co-founder, partner and director of multiple investment companies, including Evia Capital Partners Pte. Ltd. and Evia Growth Opportunities Ltd. since 2004, and has been a director of Grenidea Technologies Pte. Ltd. since 2003, of Venture TDF Pte. Ltd. since 2001 and of Wing Huat Loong Pte. Ltd. since 1991. He has also been Chairman and Director of CNT Health Food Pte. Ltd., a nutraceutical supplements contract manufacturer, since 2000. In such positions, Mr. Ng has focused on seed, pre-IPO, and IPO investment opportunities. From 2002 through 2006, Mr. Ng served as a director of Asia Growth Opportunities Ltd. and Raintree Ventures, investors in Inovio. In the 1990s, he was chairman of three technology companies, Vital Technology, MediaRing Ltd., and AceFusion, helping secure seed and venture capital, guide strategic growth, and facilitate sale of the companies (Vital and Acefusion) or a public listing (MediaRing). Mr. Ng has a M.Sc. in Industrial Engineering from Stanford University.

MORTON COLLINS, PH.D. has been a director of VGX since June 2008. Dr. Collins has been a General Partner of Battelle Ventures since July 2003 and Innovations Valley Partners since August 2005. For the past 40 years, Dr. Collins has acquired broad expertise in venture capital funding of early-stage high-technology companies as a founder and managing partner of five different funds, Developmental Science Ventures I, II, III, and IV and Cardinal Partners. He chaired President Reagan's Task Force on Innovation and Entrepreneurship and served as a technology policy advisor to President George H. W. Bush. He is a former President, Director and Chairman of the National Venture Capital Association, and currently serves as Director to Kopin Corporation and Strategic Diagnostics, Inc. and several private companies. Dr. Collins holds a B.S. in Engineering from the University of Delaware, and his M.A. and Doctorate Degrees in Engineering from Princeton University.

Executive Officers

In addition to Dr. Kim, who shall serve as Chief Executive Officer, and Dr. Dhillon, who shall serve as President of the post-Merger company, as noted above under "*Directors*," the management team of Inovio shall consist of the following persons effective as of the closing and contingent upon the occurrence of the closing:

Name	Age	Position
Peter Kies	45	Chief Financial Officer
C. Jo White	54	Chief Medical Officer
Niranjan Sardesai	41	Senior Vice President, Research and Development
Kevin Rassas	62	Senior Vice President, Business Development
Gene Kim	40	Vice President, Finance
Punit Dhillon	28	Vice President, Operations
Iacob Mathiesen	42	Vice President, Research and Development
Michael Fons	49	Vice President, Corporate Development

PETER KIES Chief Financial Officer. Mr. Kies has been employed by Inovio as Chief Financial Officer since June 2002. For the 15 years prior to joining Inovio, Mr. Kies acquired broad expertise in the functional and strategic management of biotechnology and high technology companies across the full spectrum of corporate growth, from Initial Public Offering to profitability. From May 1996 until

joining Inovio, he served as Chief Financial Officer for Newgen Results Corporation, and prior to that served as Controller for Cytel Corporation and as an auditor for Ernst & Young LLP. Mr. Kies holds a B.S. in Business Administration from United States International University in San Diego, California.

C. JO WHITE, M.D. Chief Medical Officer. Dr. White has served as Chief Medical Officer of VGX since 2005. She has 21 years of senior level clinical/medical affairs positions with major pharmaceutical companies including BMS, Wyeth and Merck. Her experience has been focused in the area of infectious diseases and she is trained as an Internist and Infectious Disease specialist. Dr. White has designed and conducted over 40 Phase 1-4 trials, filed several Biologics License Applications/Marketing Authorization Applications and has obtained regulatory approval for 5 different vaccines and drugs in both the U.S. and Europe. Dr. White completed a fellowship in Infectious Diseases at the National Institutes of Health (NIH) in the National Institute of Allergy and Infectious Diseases (NIAID). Dr. White is board certified in both Internal Medicine and Infectious Diseases. She graduated summa cum laude from the University of Texas in Austin with a B.A. in Microbiology. She received her medical degree with honors from Baylor College of Medicine in Houston, Texas.

NIRANJAN SARDESAI, PH.D. Senior Vice President, Research and Development. Dr. Sardesai has served as Senior Vice President, Research and Development of VGX since November 2007. Dr. Sardesai is an experienced veteran of the pharmaceutical industry, with a special focus in R&D and Management of Technology. Prior to joining VGX in September 2006, Dr. Sardesai was the President of Nvision Consulting, Inc. for the period from June 2005 to September 2006. He also served as the Director of R&D and Director of Applied Research at the Fujirebio Diagnostics, Inc. from October 2000 to December 2005. At Fujirebio, Dr. Sardesai oversaw all aspects of the company's R&D activities, with a special focus on new product development. Prior to Fujirebio, he worked as a Senior Scientist at IGEN International, Inc. Dr. Sardesai received a Ph.D. in Chemistry from California Institute of Technology and an MBA in Entrepreneurial Management from the Wharton School of the University of Pennsylvania. Dr. Sardesai also completed post-doctoral fellowships at the Scripps Research Institute and the Massachusetts Institute of Technology. Dr. Sardesai received his M. Sc. in Chemistry from the Indian Institute of Technology.

KEVIN RASSAS Senior Vice President, Business Development. Mr. Rassas has served as Senior Vice President, Business Development of VGX since July 2006. He first joined VGX in December 2003 to head VGX's business development efforts. Mr. Rassas has over 30 years of pharmaceutical industry experience, including senior level general management responsibility for several major international markets with Wyeth and G.D.Searle. Mr. Rassas' background includes significant experience in International Operations, P&L Management, Strategic Planning, Business Development, Finance and Administration, New Product Introductions, Joint Ventures, Project Management, and Human Resources. Mr. Rassas received a Bachelor of Arts in Economics from the University of Notre Dame and his MBA in Finance from the Kellogg School of Management at Northwestern University.

GENE KIM Vice President, Finance. Mr. Kim has joined VGX in 2005 as Director of Finance and has served as Chief Financial Officer of VGX since May 2006. Mr. Kim has over 13 years of experience in the financial services and energy related industries. Prior to joining VGX, he served as a financial advisor to several small start-ups in the Washington DC area as a part of AEG Capital, a position he held from November 2003 to October 2005. He has also served as a Director of Finance for several high-tech start-ups in Silicon Valley, including Yodlee, a firm providing technology solutions for the financial services industry, and Pandesic, a joint venture between Intel and SAP. His duties included the establishment and integration of policies and procedures, implementation of accounting systems, and financial planning and analysis. Prior to his work with start-ups, he worked for Bankers Trust/Deutsche Bank as a trader in the interest rate arbitrage group. Mr. Kim began his career as a chemical engineer with Unocal where he worked as a refinery engineer. Mr. Kim has an M.B.A. in

Finance from the Wharton School of Business at the University of Pennsylvania and a Bachelor of Science in Chemical Engineering from UCLA, and is a Certified Public Accountant.

PUNIT DHILLON Vice President, Operations. Punit Dhillon was promoted by Inovio to Vice President, Finance and Operations in January 2008. Mr. Dhillon joined Inovio in September 2003 and has played a role in various corporate finance projects, including management of financing transactions, as well as day-to-day management of operational functions. Mr. Dhillon was most recently Executive Director of Finance and Operations. Prior to joining Inovio, he worked for a corporate finance law firm as a law clerk. He previously worked with MDS Capital Corp. (now Lumira) and was a consultant to several early stage health and life-science companies where he acquired broad experience in corporate management, finance and capital markets. Mr. Dhillon has a Bachelor of Arts, Honors, in Political Science and a minor in Business Administration from Simon Fraser University. Mr. Dhillon is also a director of Auricle Biomedical, a capital pool company.

MICHAEL FONS, PH.D. Vice President, Corporate Development. Michael Fons, PhD, was promoted by Inovio to Vice President of Corporate Development in August 2007. Dr. Fons joined Inovio as Executive Director of Corporate Development in June 2004. In such capacity, he has been instrumental in defining Inovio's corporate strategy relating to DNA vaccines and DNA delivery, including assisting in securing DNA-related license agreements, acquiring valuable intellectual property assets, and establishing a strong standard for the management of Inovio's corporate relationships. From 2002 to 2004, Dr. Fons held the position of Executive Director, Business Development and Technology Assessment at Vical, Inc. Dr. Fons previously held business development roles with GeneMedicine, and Valentis. He is an Adjunct Associate Professor of Microbiology and Immunology with the University of Texas Medical Branch. Dr. Fons is a published author of 24 papers in scientific journals and numerous book chapters.

IACOB MATHIESEN Vice President, Research and Development. Iacob Mathiesen is currently the managing director of Inovio's Norwegian subsidiary, Inovio AS, which is conducting preclinical research on DNA vaccines. Mr. Mathiesen joined Inovio when a company he co-founded in 1999 to pursue research and development relating to electroporation and for which he was chief executive officer was acquired by Inovio in 2005. Mr. Mathiesen has pioneered novel advancements for electroporation methods and devices for DNA delivery and has been named as inventor or co-inventor on multiple patents and co-authored numerous scientific papers relating to the use of electroporation for DNA delivery. Mr. Mathiesen received a B.Sc. in Mathematics and Natural Sciences in 1991, an M.Sc. in Mathematics and Natural Sciences in 1993, and a Ph.D. in Medicine in 1999, all from the University of Oslo, Norway.

Family Relationships

No family relationships exist between any of the directors or executive officers of Inovio or VGX or the combined group, except that Mr. Punit Dhillon, Inovio's current Vice President, Finance and Operations and the combined group's intended Vice President, Operations, is the nephew of Dr. Avtar Dhillon, Inovio's President and Chief Executive Officer and director and the combined group's intended President, director and Chairman of the Board. Neither Mr. Dhillon nor Dr. Dhillon have been party to any transaction requiring disclosure pursuant to Item 404(a) of Regulation S-K.

Legal Proceedings

No current Inovio or VGX directors or executive officers, nor any intended directors or executive officers of the combined group, have been involved in the certain legal proceedings listed in Item 401 of Regulation S-K.

Corporate Governance

Inovio's Corporate Governance Policy, which includes the charters of the committees of the board of directors, is available on its website, *www.inovio.com*. Historically the Inovio board of directors has implicitly and explicitly acknowledged its responsibility for the stewardship of Inovio in the following ways, and the parties do not anticipate any changes in such policies and procedures upon closing of the Merger.

Committees of the Board of Directors

Audit Committee

The functions of the Audit Committee include retaining Inovio's independent registered public accounting firm, reviewing its independence, reviewing and approving the planned scope of Inovio's annual audit, reviewing and approving any fee arrangements with Inovio's independent registered public accounting firm, overseeing its audit work, reviewing and pre-approving any non-audit services that may be performed by it, reviewing the adequacy of accounting and financial controls, reviewing Inovio's critical accounting policies and reviewing and approving any related party transactions. The Inovio board of directors amended the charter for the Audit Committee on March 6, 2008, to better reflect the practices and responsibilities of the Audit Committee. The Audit Committee's charter, a component of Inovio's Corporate Governance Policy, is available separately on its website at: http://media.corporate-ir.net/media_files/irol/10/105128/corpGov/AuditCommittee.pdf.

Upon closing of the Merger, the parties anticipate that Simon Benito, Tee Khiang Ng, and Dr. Morton Collins will serve as members of the Audit Committee; each of these individuals is independent under the NYSE Amex listing standards. The Inovio board of directors previously determined that Mr. Benito is an "audit committee financial expert" as defined under Item 407(d)(5)(ii) of Regulation S-K under the Securities Act.

Compensation Committee

The Compensation Committee determines the salary of the executive officers of Inovio, grants stock options under the 2007 Omnibus Incentive Plan and performs such other functions regarding compensation as the board of directors may delegate. The Inovio board of directors amended the charter for the Compensation Committee on March 27, 2008. The Compensation Committee's charter, a component of our corporate governance policy, is available separately on our website at:

http://media.corporate-ir.net/media_files/irol/10/105128/corpGov/CompCommit.pdf.

Upon closing of the Merger, the parties anticipate that Simon Benito, Tee Khiang Ng and Dr. Morton Collins will serve as the members of the Compensation Committee. Each member of the Compensation Committee is independent under the NYSE Amex listing standards.

Nomination and Corporate Governance Committee

The Nomination and Corporate Governance Committee identifies and recommends candidates for election to the Inovio board of directors. It advises the board of directors on all matters relating to directorship practices, including the criteria for selecting directors, policies relating to tenure and retirement of directors and compensation and benefit programs for non-employee directors. While the Nomination and Corporate Governance Committee has not established any minimum criteria for serving as a director, the Committee focuses on selecting individuals that have skill sets that augment the skill sets of the current directors and are most likely to assist in the building and success of Inovio. In addition, the Committee believes it appropriate for at least one member of the board of directors to meet the criteria for an "audit committee financial expert," as defined by the SEC rules, that independent members of the board who serve on the audit committee are able to read and understand

fundamental financial statements, including a balance sheet, income statement, and cash flow statement and that at least a majority of the members of the board of directors meet the definition of "independent" under NYSE Amex rules.

The Nomination and Corporate Governance Committee also makes recommendations relating to the duties and membership of committees of the board of directors, recommends processes to evaluate the performance and contributions of individual directors and the board of directors as a whole, approves procedures designed to provide that adequate orientation and training are provided to new members of the board of directors, consults with the Chief Executive Officer in the process of recruiting new directors and assists in locating senior management personnel and selecting members for the scientific advisory board.

The Nomination and Corporate Governance Committee has developed a policy to govern Inovio's approach to corporate governance issues and provides a forum for concerns of individual directors about matters not easily or readily discussed in a full board meeting (e.g., the performance of management). Individual directors are entitled to engage outside advisors at the expense of Inovio, with the prior approval of the Nomination and Corporate Governance Committee, and with the full knowledge of management. The board of directors amended the charter for the Nomination and Corporate Governance Committee on March 27, 2008. The Nomination and Corporate Governance Committee's charter, a component of Inovio's Corporate Governance Policy, is available separately on Inovio's website at: http://media.corporate-ir.net/media_files/irol/10/105128/corpGov/NomandCorpGov.pdf.

Upon closing of the Merger, the parties anticipate that Simon Benito, Tee Khiang Ng and Dr. Morton Collins will serve as the members of the Nomination and Corporate Governance Committee, and each is independent under the NYSE Amex listing standards.

Strategic Planning and Identification of Risks

Management prepares an annual business plan for Inovio and presents the plan to the Inovio board of directors for its review and comments. In connection therewith, the board of directors discusses various strategic matters with management and identifies business risks associated with Inovio's activities.

Senior Management

The board of directors takes responsibility for appointing those members of senior management who become Inovio's officers. Currently, the members of senior management of Inovio are: Dr. Avtar Dhillon, president and chief executive officer; Peter Kies, chief financial officer and human resources manager; Dr. Michael Fons, vice president, corporate development; and Punit Dhillon, vice president, finance and operations; however, if the Merger is completed, the executive officers of the post-Merger company will be the individuals noted under "*Executive Officers*" above.

Communications Policy

The board of directors has procedures in place to ensure effective communication between Inovio, its stockholders, prospective investors, and the public, including the dissemination of information on a regular and timely basis. Historically, the Chairman of the board of directors, the chief executive officer, the chief financial officer and the vice president, finance and operations, along with various other Inovio employees and consultants, devoted a portion of their time to dealing with stockholders and prospective investors. Stockholders who want to communicate with the board or any individual director can write to Inovio's Secretary at the following address: 11494 Sorrento Valley Road,

San Diego, CA 92121-1318; such correspondence should indicate that status as an Inovio stockholder. Depending on the subject matter, management will:

Forward the communication to the director or directors to whom it is addressed;

Attempt to handle the inquiry directly, for example, where it is a request for information about Inovio or it is a stock-related matter; or

Not forward the communication if it is primarily commercial in nature or if it relates to an improper or irrelevant topic.

Internal Control and Management Information Systems

Along with management, the board of directors is responsible for Inovio's internal control and management information systems. The Audit Committee of the board of directors meets with Inovio's independent registered public accounting firm quarterly to review Inovio's financial statements and to review Inovio's financial reporting procedures.

Independence from Management

To ensure that the board of directors functions independently of management, Inovio has separated the office of chairman of the Board from that of chief executive officer. Further the independent directors meet on a regular basis as often as necessary to fulfill their responsibilities, including at least annually in executive session without the presence of non-independent directors and management.

Upon the closing of the Merger, the parties anticipate that Simon Benito, Tee Khiang Ng, and Dr. Morton Collins will serve on the board of directors, and each is independent under the NYSE Amex listing standards.

Modified Plurality Voting Policy

On December 5, 2008, the Inovio board of directors, upon recommendation from its Nomination and Corporate Governance Committee adopted a Modified Plurality Voting Policy as an addition to its Corporate Governance Policy. The Modified Plurality Voting Policy provides that any nominee for director in an uncontested election who receives (a) a greater number of votes "withheld" from his or her election than votes "for" his or her election and (b) votes "withheld" from his or her election that constitute thirty-five percent (35%) or more of the outstanding shares of Inovio common stock, must promptly tender his or her written resignation following the certification of the stockholder vote. The Inovio board of directors, in accordance with the procedures set out in the policy and upon a recommendation from the Nomination and Corporate Governance Committee, shall either accept such resignation or defer its acceptance for no more than thirty days to enable the Inovio board to maintain compliance with applicable rules and regulations. Inovio shall promptly disclose such determination on any pending resignation via a Current Report on Form 8-K. A copy of the Modified Plurality Voting Policy is posted to Inovio's website as part of Inovio's overall Corporate Governance Policy.

Code of Ethics

Inovio has adopted a Code of Ethics, which applies to all directors, officers and employees, including the principal executive officer, principal financial and accounting officer and controller. The purpose of the Code of Ethics is to promote honest and ethical conduct. The Code of Ethics was previously filed with Inovio's Annual Report on Form 10-K for the year ended December 31, 2004 as Exhibit 14.1, is available on Inovio's website and is also available in print, without charge, upon written request to the Secretary at 11494 Sorrento Valley Road, San Diego, CA 92121-1318. Any amendments

to or waivers of the Code of Ethics will be promptly posted on the Inovio's website at *www.Inovio.com* or in a report on Form 8-K, as required by applicable laws.

Material Contracts and Relationships Between Inovio and VGX

In November 2006, Inovio granted VGX a world-wide non-exclusive license to its DNA delivery technology for intratumoral delivery of a proprietary gene to control growth of melanoma and other cancers. Under the terms of the license agreement, Inovio received an upfront license fee from VGX and may receive payments from VGX based on successful completion of clinical and regulatory milestones. Inovio exclusively supplies VGX with electroporation devices for the therapy covered by the license agreement and would receive royalties on the sale of products covered by the license. As of December 31, 2008, VGX has paid Inovio \$50,000 related to an upfront payment for the licensing agreement and issued Inovio 25,000 shares of VGX common stock (which were valued at \$125,000 at the time of issuance in 2006).

In December 2008, Inovio entered into a master research agreement with VGX so that Inovio may provide clinical and regulatory services as well as advanced electroporation delivery of DNA vaccines for each company's research uses. The cross-license is strictly for research use only and will permit Inovio and VGX, to conduct certain internal research on DNA vaccines delivered using electroporation and other research and development services. Under the terms of the agreement VGX will own all data and new intellectual property created by Inovio related to VGX's proprietary materials and technology and Inovio will own all data and new intellectual property created by VGX related to Inovio's proprietary materials and technology. The master research agreement can be terminated by either party with 90 days notice. The scope of each specific research project will be governed by a project agreement between Inovio and VGX. Each company will be compensated for its services based on a pre-determined hourly rate per full time employee outlined in the specific project agreement. Currently, it is contemplated that Inovio through its wholly-owned subsidiary in Norway, Inovio AS, will assist VGX to manage clinical and regulatory aspects for certain planned clinical trials.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER

The following discussion summarizes the material U.S. federal income tax consequences of the Merger that are generally applicable to holders of VGX common stock. This discussion is based on the Code, judicial decisions and administrative regulations and interpretations in effect as of the date of this proxy statement/prospectus, all of which are subject to change, possibly with retroactive effect. Accordingly, the U.S. federal income tax consequences of the Merger to the holders of VGX common stock could differ from those described below.

The discussion assumes that VGX stockholders hold their shares of VGX common stock as a capital asset. This discussion does not address all aspects of U.S. federal income taxation that may be relevant to holders of VGX common stock in light of their particular circumstances, nor does it address the U.S. federal income tax consequences to holders that are subject to special rules under U.S. federal income tax law, including:

dealers in securities or foreign currencies;

tax-exempt organizations;

financial institutions or insurance companies;

holders who have a "functional currency" other than the U.S. dollar;

holders who own their shares indirectly through partnerships, trusts, S corporations or any other entity treated as a flow-through entity for U.S. federal income tax purposes that may be subject to special treatment;

holders all or part of whose Inovio stock received in the Merger will be subject to forfeiture provisions;

holders who acquired their shares in connection with stock options or stock purchase plans or other compensatory transactions; and

holders who hold their shares as a hedge or as part of a straddle, constructive sale, conversion transaction, or other risk management transaction.

This discussion is also limited to United States persons who hold VGX common stock (a "U.S. holder") and receive Inovio common stock therefor in the Merger. For purposes of this discussion, the term "United States person" means:

An individual citizen or resident of the United States;

A corporation (or an entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

An estate, the income of which is subject to U.S. federal income tax regardless of its source; or

A trust that (x) is subject to the supervision of a court within the United States and the control of one or more United States persons or (y) has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

In addition, this discussion does not address the tax consequences of the Merger to a VGX option holder, warrant holder, or convertible debt holder, including the assumption by Inovio of outstanding options and warrants to acquire VGX common stock or convertible debt of VGX.

In addition, this discussion does not address any tax consequences of the Merger under foreign, state or local law or U.S. federal estate and gift tax laws. No ruling has been or will be obtained from the IRS regarding any matter relating to the Merger and no assurance can be given that the IRS will not assert, or that a court will not sustain, a position contrary to any aspect of this discussion. Inovio and VGX urge holders

of VGX common stock to consult their own tax advisors as to the U.S. federal income tax consequences of the Merger, as well as the effects of state, local and foreign tax laws in light of their own situations.

In addition, completion of the Merger is contingent upon the receipt by (i) VGX of an opinion of its counsel, Duane Morris LLP, dated as of the closing date, to the effect that, on the basis of facts, representations and assumptions set forth in such opinion, the Merger will be treated as a reorganization within the meaning of Section 368(a) of the Code and (ii) Inovio of an opinion of its counsel, K&L Gates LLP, dated as of the closing date, to the effect that, on the basis of facts, representations and assumptions set forth in such opinion, the Merger will be treated as a reorganization within the meaning of Section 368(a) of the Code and assumptions set forth in such opinion, the Merger will be treated as a reorganization within the meaning of Section 368(a) of the Code.

The opinions of K&L Gates LLP, counsel to Inovio, and Duane Morris LLP, counsel to VGX, which are required as a condition to closing the Merger, are and will be based on U.S. federal income tax laws in effect as of the date of these opinions. An opinion of counsel is not binding on the IRS or any court. In rendering their respective opinions, Duane Morris LLP and K&L Gates LLP will rely on certain assumptions, including assumptions regarding the absence of changes in existing facts and the completion of the Merger strictly in accordance with the Merger agreement and this proxy statement/prospectus. The opinions will also rely upon certain representations and covenants made by the management of Inovio, Submerger and VGX and will assume that these representations are true, correct and complete without regard to any knowledge limitation, and that Inovio and VGX, as the case may be, will comply with these covenants. If any of these assumptions or representations is inaccurate in any way, or any of the covenants are not complied with, the opinions could be adversely affected.

Assuming that the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Code, the material U.S. federal income tax consequences of the Merger to holders of VGX common stock are as follows.

Exchange of VGX common stock solely for Inovio common stock. A holder of VGX common stock who exchanges such holder's shares solely for Inovio common stock in the Merger will not recognize gain or loss. Such holder will have an aggregate tax basis in the Inovio common stock received in the Merger equal to the holder's aggregate adjusted tax basis in the VGX common stock surrendered in the Merger, and the holding period for the Inovio common stock will include the holding period for the VGX common stock.

Dissenting Stockholders. Holders of VGX common stock are entitled to dissenters rights under Delaware law in connection with the Merger. If a U.S. holder receives cash pursuant to the exercise of dissenters' rights, that U.S. holder generally will recognize gain or loss measured by the difference between the cash received and the adjusted tax basis of such holder's shares. This gain should be long-term capital gain or loss if the U.S. holder held VGX common stock as a capital asset for more than one year. If a holder of VGX common stock who receives cash pursuant to the exercise of dissenters rights is treated as owning Inovio common stock after the Merger, as the result of the application of the constructive ownership rules, all or a portion of the cash received by the holder may be taxed as a dividend. Any holder of VGX common stock that plans to exercise dissenters' rights in connection with the Merger is urged to consult a tax advisor to determine the related tax consequences.

Failure of the Merger to Qualify as a Reorganization. If the Merger is not treated as a "reorganization" within the meaning of Section 368(a) of the Code, then VGX would recognize gain or loss equal to the difference between the amount realized in the Merger and the tax basis of its assets. In addition, each U.S. holder would recognize gain or loss equal to the difference between the sum of the fair market value of the Inovio common stock and such holder's tax basis in VGX common stock surrendered in exchange therefor.

Backup Withholding. Non-corporate holders of VGX common stock may be subject to information reporting and backup withholding at a rate of 28% on any cash payments received. Generally, backup withholding will not apply, however, if a holder of VGX common stock:

furnishes a correct taxpayer identification number and certifies that such holder is not subject to backup withholding on the substitute Form W-9 or successor form included in the election form/letter of transmittal received; or

is otherwise exempt from backup withholding.

Any amounts withheld under the backup withholding rules will generally be allowed as a refund or credit against a holder's U.S. federal income tax liability, provided the required information is furnished to the IRS.

Reporting Requirements. A significant holder of VGX common stock for U.S. federal income tax purposes who receives shares of Inovio common stock as a result of the Merger will be required to retain records pertaining to the Merger and to file with such holder's U.S. federal income tax return for the year in which the Merger takes place a statement setting forth certain facts relating to the Merger. Such statement must include the holder's tax basis in and fair market value of VGX common stock surrendered in the Merger.

THIS SUMMARY IS NOT A SUBSTITUTE FOR AN INDIVIDUAL ANALYSIS OF THE TAX CONSEQUENCES OF THE MERGER TO YOU. WE URGE YOU TO CONSULT A TAX ADVISOR REGARDING THE PARTICULAR FEDERAL, STATE, LOCAL AND FOREIGN TAX CONSEQUENCES OF THE MERGER TO YOU.



THE ACQUISITION AGREEMENT

The following summary of the Acquisition Agreement is qualified in its entirety by reference to the complete text of the Acquisition Agreement, which is incorporated by reference and a copy of which is attached as Annex A to this joint proxy statement/prospectus. The rights and obligations of the parties are governed by the express terms and conditions of the Acquisition Agreement and not by this summary or any other information contained in this joint proxy statement/prospectus. We urge you to read the Acquisition Agreement carefully and in its entirety, as well as this joint proxy statement/prospectus, before making any decisions regarding the Merger.

The Acquisition Agreement has been included with this joint proxy statement/prospectus to provide you additional information regarding its terms. The Acquisition Agreement sets forth the contractual rights of Inovio and VGX but is not intended to be a source of factual, business or operational information about Inovio or VGX. That kind of information can be found elsewhere in this joint proxy statement/prospectus and in the other filings Inovio makes with the SEC, which are available as described in "Where You Can Find More Information."

As a stockholder, you are not a third party beneficiary of the Acquisition Agreement and therefore you may not directly enforce any of its terms or conditions. The parties' representations, warranties and covenants were made as of specific dates and only for purposes of the Acquisition Agreement and are subject to important exceptions and limitations, including a contractual standard of materiality different from that generally relevant to investors. In addition, the representations and warranties may have been included in the Acquisition Agreement for the purpose of allocating risk between Inovio and VGX, rather than to establish matters as facts. Certain of the representations, warranties and covenants in the Acquisition Agreement are qualified by information Inovio filed with the SEC prior to the date of the Acquisition Agreement, as well as by disclosure schedules each of Inovio and VGX delivered to the other party prior to signing the Acquisition Agreement. The disclosure schedules have not been made public because, among other reasons, they include confidential or proprietary information. The parties believe, however, that all information material to a stockholder's decision to approve the Merger is included or incorporated by reference in this document.

You should also be aware that none of the representations or warranties has any legal effect among the parties to the Acquisition Agreement after the effective time of the Merger, nor will the parties to the Acquisition Agreement be able to assert the inaccuracy of the representations and warranties as a basis for refusing to close the transaction unless all such inaccuracies as a whole have had or would be reasonably likely to have a material adverse effect on the party that made the representations and warranties.

Furthermore, you should not rely on the covenants in the Acquisition Agreement as actual limitations on the respective businesses of Inovio and VGX, because either party may take certain actions that are either expressly permitted in the confidential disclosure letters to the Acquisition Agreement or as otherwise consented to by the appropriate party, which may be given without prior notice to the public.

Structure of and Consideration for the Transaction

The Transaction

The Acquisition Agreement contemplates that VGX will merge with and into Inovio's wholly-owned subsidiary Submerger, with Submerger surviving as the continuing entity and a wholly-owned subsidiary of Inovio, to be renamed "VGX Pharmaceuticals, LLC." In conjunction with the consummation of the merger, based upon an exchange ratio defined by the Acquisition Agreement, Inovio will exchange shares of its common stock for outstanding shares of VGX common stock and will assume and convert VGX's other outstanding securities into securities exercisable or convertible, as the case may be, for Inovio common stock. Upon issuance of such Inovio securities in conjunction with the merger of Submerger and VGX, holders of VGX securities will become holders of securities in Inovio,

the parent, public reporting entity of the combined group. At the Effective Time of the transaction, an integrated board of directors and management team will also take over leadership of the combined group.

Effect of Merger on Inovio Securities

Inovio stockholders will continue to own their existing shares of Inovio common stock upon closing of the Merger. The closing will not have any effect on the Inovio securities outstanding prior to the Effective Time, except that the closing may constitute a "Change of Control" or "Change in Control", as such terms are used in the Inovio incentive plans and related agreements, Inovio's organizational documents and certain of Inovio's outstanding warrants, resulting in:

Subsequent to the 2000 Plan Amendment as contemplated by the Acquisition Agreement, the acceleration of vesting for Inovio's outstanding stock options;

Potential claims for redemption of some or all of the shares of outstanding Inovio Series C preferred stock pursuant to the terms and conditions set forth in the applicable Certificates of Designations, Rights and Preferences, at the discretion of each holder of shares of the Inovio Series C preferred stock; and

Potential claims for redemption of certain of Inovio's outstanding warrants.

Outstanding membership interests in Submerger immediately prior to the Effective Time shall continue unchanged as membership interests in the Surviving Entity.

Effect of Merger on VGX Securities

Subject to the terms and conditions of the Acquisition Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any of VGX's outstanding securities, the following will occur:

VGX Common Stock. Each share of VGX common stock issued and outstanding immediately prior to the Effective Time (other than any shares held by Inovio, which are to be canceled outright, and any dissenting shares) will be canceled and extinguished and automatically converted into the right to receive a number of shares of Inovio common stock based on the Merger Exchange Ratio, as defined in the Acquisition Agreement and discussed below. Any fraction of a share of Inovio common stock that would otherwise be received by a holder of VGX common stock upon the exchange will be aggregated per holder and will be rounded up to the nearest whole share.

VGX Options. All outstanding options to purchase shares of VGX common stock immediately prior to the Effective Time, whether or not then exercisable or vested, will be assumed by Inovio, and each such option will cease to represent an option to acquire shares of VGX common stock and will be converted automatically into an option to purchase shares of Inovio common stock in an amount, at an exercise price and subject to such terms and conditions determined as provided below. Each such VGX option so assumed by Inovio will be subject to, and shall become exercisable and vested upon, the same terms and conditions as are currently applicable to the VGX option, except that (i) each assumed VGX option shall be exercisable for, and represent the right to acquire, that number of shares of Inovio common stock (rounded up to the nearest whole share) equal to: (A) the number of shares of VGX common stock subject to each assumed VGX option shall be an amount equal to: (A) the exercise price per share of Inovio common stock subject to such VGX option in effect immediately prior to the Effective Time divided by (B) the Merger Exchange Ratio (rounded up to the nearest whole cent).

VGX Warrants. All outstanding warrants to purchase shares of VGX common stock immediately prior to the Effective Time, whether or not then exercisable, will be assumed by Inovio, and each such VGX warrant will cease to represent a warrant to acquire shares of VGX common stock and will be converted automatically into a warrant to purchase shares of Inovio common stock in an amount, at an exercise price and subject to such terms and conditions determined as provided below. Each such VGX warrant so assumed by Inovio will be subject to, and will become exercisable upon the same terms and conditions as are currently applicable to such VGX warrant, except that (i) each assumed VGX warrant will be exercisable for, and represent the right to acquire, that number of shares of Inovio common stock (rounded up to the nearest whole share) equal to: (A) the number of shares of VGX common stock subject to such VGX warrant immediately prior to the Effective Time multiplied by (B) the Merger Exchange Ratio and (ii) the exercise price per share of VGX common stock subject to such VGX warrant in effect immediately prior to the Effective Time divided by (B) the Merger Exchange Ratio (rounded up to the nearest whole cent).

VGX Convertible Debt. All VGX debt and convertible debt outstanding immediately prior to the Effective Time will be assumed by operation of the Merger. Pursuant to the closing conditions of the Acquisition Agreement, the parties anticipate that all notes evidencing non-convertible VGX debt and all VGX convertible debt not explicitly scheduled in the Acquisition Agreement shall be paid in full, principal and interest accrued, prior to or concurrent with closing of the Merger. The remaining \$4.4 million of VGX convertible debt outstanding just prior to the Effective Time shall have been amended prior to closing of the Merger to allow for optional conversion at \$1.05 per share of Inovio common stock after the Effective Time and to provide for mandatory conversion at \$1.05 per share of Inovio common stock should the Inovio common stock trade at or above \$2.10 per share for five consecutive trading days after the Effective Time. As of the Effective Time, each note evidencing VGX convertible debt not repaid as of the Effective Time will continue to represent a right to receive repayment of principal and interest thereon, but will cease to represent a right to acquire shares of VGX common stock in satisfaction thereof and will be converted automatically, in accordance with its terms and conditions at the Effective Time, into a right to acquire that number of shares of Inovio common stock (rounded up to the nearest whole share) equal to (i) the principal amount of the assumed note, plus the accrued and unpaid interest thereon (if provided for by the terms of such note), as of the Effective Time, divided by (ii) \$1.05.

Cancellation of Inovio and VGX-Owned VGX Securities. Each share of VGX common stock, or any VGX option, VGX warrant or VGX convertible debt, held by VGX or owned by Inovio or Submerger or any direct or indirect wholly-owned or majority owned subsidiary of VGX or of Inovio immediately prior to the Effective Time will be canceled and extinguished without any conversion thereof.

Inovio and VGX also agreed that, at the Effective Time, any other contractual rights to receive shares of VGX common stock, other than the VGX options, warrants and convertible debt (which will be assumed and converted in as discussed above), shall cease to represent a right to receive shares of VGX common stock in accordance with the terms and conditions of the contract providing such rights and shall be converted into a right to receive a number of shares of Inovio common stock equal to (A) the number of shares of VGX common stock subject to such right immediately prior to the Effective Time multiplied by (B) the Merger Exchange Ratio, in accordance with the terms and conditions of the contract providing such right.

Merger Exchange Ratio

The Merger Exchange Ratio to be utilized to calculate the number of Inovio securities to be issued at the Effective Time, and the pricing of the assumed options and warrants, shall be equal to the quotient obtained by dividing:

the sum of the (i) total number of shares of Inovio common stock outstanding, (ii) the total number of shares of Inovio common stock issuable upon conversion of shares of Inovio preferred stock, (iii) the total number of shares of Inovio common stock issuable upon exercise of Inovio options, whether vested or unvested, and (iv) the total number of shares of Inovio common stock issuable upon exercise of Inovio warrants, each as outstanding immediately prior to the Effective Time, less (i) the total number of any shares of Inovio common stock held by VGX or any of its subsidiaries immediately prior to the Effective Time and (ii) the total number of any shares of Inovio common stock issuable under other securities held by VGX or any of its subsidiaries immediately prior to the Effective Time; by

the sum of the (i) total number of shares of VGX common stock outstanding, (ii) the total number of shares of VGX common stock issuable upon exercise of the VGX options, whether vested or unvested, and (iii) the total number of shares of VGX common stock issuable upon exercise of the VGX warrants, each as outstanding immediately prior to the Effective Time, less (i) the total number of any shares of VGX common stock held by and (ii) the total number of any shares of VGX common stock issuable under other securities held by Inovio or any of its subsidiaries immediately prior to the Effective Time. For clarity, this calculation will not include the number of shares of VGX common stock issuable upon conversion of the VGX convertible debt outstanding immediately prior the Effective Time.

Effective Time of the Transaction

Subject to the provisions of the Acquisition Agreement, Inovio, Submerger and VGX shall cause the Merger to be consummated by filing a certificate of merger with the Secretary of State of the State of Delaware in such form as is required by, and executed and acknowledged in accordance with, the relevant provisions of the DGCL and making all other filings or recordings required under the DGCL to effect the Merger. The Certificate of Merger, when duly filed with the Secretary of State of the State of Delaware in accordance with the relevant provisions of the DGCL, shall state an effective date for the Merger of the same date as the closing date and the Effective Time of the Merger shall be the same time as the time when the closing is completed, unless Inovio and VGX shall mutually agree to a different date and time for filing and effectiveness.

Exchange of Securities

Procedure for Exchange of VGX Common Stock

Within three business days following the Effective Time of the Merger, Inovio shall cause Inovio's transfer agent, Computershare Trust Company, or the "Exchange Agent," to mail to each holder of record (as of the Effective Time) of a certificate or certificates prior to the Effective Time represented outstanding shares of VGX common stock and which shares were converted into the right to receive the per share applicable consideration, pursuant Acquisition Agreement: (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the certificates shall pass, only upon delivery of the certificates to the Exchange Agent and shall be in such form and have such other provisions as the Exchange Agent, VGX and Inovio may reasonably specify) and (ii) instructions for use in effecting the surrender of the Certificates (including a means of hand-delivery) in exchange for the applicable consideration as set forth in Acquisition Agreement. Promptly after surrender of certificates for cancellation to the Exchange Agent, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto and such other documents

as may be reasonably specified in the letter of transmittal, the holder of record of such certificates shall receive in exchange therefor the applicable consideration as set forth in the Acquisition Agreement in respect of each share of VGX common stock represented by the certificates, and the certificates so surrendered shall be canceled. Until so surrendered, outstanding certificates will be deemed from and after the Effective Time, for all corporate purposes, to evidence the ownership of the applicable consideration as set forth in the Acquisition Agreement, into which such shares of VGX common stock shall have been so converted.

Procedures for Exchange of VGX Options, Warrants and Convertible Debt

From and after the Effective Time, for all corporate purposes, the instruments evidencing outstanding VGX options, VGX warrants and the VGX convertible debt will be deemed to evidence the ownership of the applicable consideration as set forth in the Acquisition Agreement into which such securities shall have been so converted. These instruments will not be automatically exchanged.

No Fractional Shares

No fraction of a share of Inovio common stock will be issued or paid by virtue of the Merger. Adjustments for fractional shares issued upon exchange of Inovio common stock for VGX common stock or issuable pursuant to assumed and converted VGX options, VGX warrants and VGX convertible debt will be made pursuant to the terms and conditions for such assumption and conversion set forth in the Acquisition Agreement.

Representations and Warranties

The Acquisition Agreement contains customary representations and warranties of VGX relating to, among other things:

Organization; Standing and Power; Charter Documents; Subsidiaries;

Capital Structure;

Authority; Non-Contravention; Necessary Consents;

Records; Financial Information;

Absence of Certain Changes or Events;

Taxes;

Intellectual Property;

Regulatory Compliance; Permits;

Litigation;

Brokers' and Finders' Fees; Fees and Expenses;

Employee Matters and Benefit Plans;

Title to Properties;

Environmental Matters;

Contracts;

Board Approval;

Transactions with Related Parties;

Insurance;

Liabilities;

Product Claims;

Accounts Receivable;

Anti-Takeover Statute Not Applicable; and

Foreign Corrupt Practices.

The Acquisition Agreement contains customary representations and warranties of Inovio and Submerger relating to, among other things:

Organization; Standing and Power; Charter Documents; Subsidiaries;

Capital Structure;

Authority; Non-Contravention; Necessary Consents;

Records; SEC Reports; Financial Statements; Controls;

Absence of Certain Changes or Events;

Tax Returns and Audits;

Intellectual Property;

Regulatory Compliance; Permits;

Litigation;

Brokers' and Finders' Fees; Fees and Expenses;

Employee Matters and Benefit Plans;

Title to Properties;

Environmental Matters;

Contracts;

Board Approval;

Transactions with Related Parties;

Insurance;

Liabilities;

Product Claims;

Accounts Receivable;

Anti-Takeover Statute Not Applicable;

Foreign Corrupt Practices;

Listing and Maintenance Requirements;

Opinion of Financial Advisor; and

Operations of Submerger.

Conduct of Business Prior to Completion of the Transaction

During the period prior to the Effective Time or the termination of the Acquisition Agreement, Inovio and VGX and each of its subsidiaries shall, except as otherwise expressly contemplated by the Acquisition Agreement,

carry on its business in the usual, regular and ordinary course, in substantially the same manner as conducted prior to the execution of the original agreement and plan of merger and in compliance in all material respects with all applicable laws and regulations;

pay its debts and taxes when due, pay or perform other material obligations when due;

use all commercially reasonable efforts to preserve intact each of their present business organization, taken as a whole;

use all commercially reasonable efforts to keep available the services of the current officers, employees and consultants and

manage in the ordinary course its business relationships with third parties.

Without limiting the generality of the foregoing and without exception, VGX and/or each subsidiary will use all reasonable efforts to prepare all tax returns that are required to be filed by VGX or such subsidiary on or before the Effective Time. VGX or such subsidiary shall use all reasonable efforts to deliver each such income and franchise tax return, in a form ready to be filed, to Inovio for review at least ten business days before the due date for such income and franchise tax return.

VGX has also agreed that, prior to the earlier of the Effective Time or the termination of the Acquisition Agreement, it will refrain from doing any of the following without the prior written consent of Inovio, which consent may not be unreasonably withheld or delayed:

Cause, permit or propose any amendments to VGX charter documents or any of the VGX subsidiary charter documents;

Adopt a plan of complete or partial liquidation or dissolution;

Declare, accrue, set aside or pay any dividends on or make any other distributions, whether in cash, stock, equity securities or property, in respect of any capital stock or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction effected in the ordinary course of business by a wholly owned subsidiary of it that remains a wholly owned subsidiary of it after consummation of such transaction;

Purchase, redeem or otherwise acquire, directly or indirectly, any shares of its capital stock or the capital stock of its subsidiaries, except repurchases of unvested shares in connection with the termination of the employment relationship with any employee pursuant to stock option or purchase agreements in effect on the date of the Acquisition Agreement;

Issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, or any securities convertible into shares of capital stock, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into shares of capital stock, or enter into other agreements or commitments of any character obligating it to issue any such securities or rights, other than (A) issuances of VGX common stock upon the exercise of VGX options, VGX warrants or VGX convertible debt outstanding as of the date of the Acquisition Agreement in accordance with the terms of such securities as of the date of the Acquisition Agreement, (B) grants of stock options under VGX's existing option plan at fair market value, *provided* that such options (1) are issued in the ordinary course of business consistent with past practice, (2) vest in accordance with VGX's standard vesting schedule under the applicable

option plan, and (3) are issued no later than five business days prior to the initial filing of the Form S-4 for the transaction and (C) reservation of VGX common stock in connection with certain amendments to the notes evidencing some or all of the VGX convertible debt to provide for their conversion in connection with the Merger as contemplated by the Acquisition Agreement;

Acquire or agree to acquire by merging or consolidating with, or by purchasing any material equity or voting interest in or a material portion of the assets of, or by any other manner, any business of any person or division thereof, or otherwise acquire or agree to acquire any assets of any other person, which acquisition would be material to the business of VGX;

Sell, lease, license, encumber or otherwise dispose of any properties or assets except (A) the sale, lease or disposition (other than through licensing) of property or assets which are not, individually or in the aggregate, material to the business of VGX and its subsidiaries or (B) the sale, licensing or distribution of VGX products and services in the ordinary course of business;

Make any loans, advances or capital contributions to, or investments in, any other person, other than: (A) loans or investments by it or a wholly owned subsidiary of it to it or any wholly-owned subsidiary of it or (B) employee advances for travel and entertainment expenses made in the ordinary course of business;

Except as required by US GAAP as concurred with by its independent auditors, make any material change in its methods or principles of accounting since the date of VGX balance sheet;

Make any tax election or accounting method change that is reasonably likely to adversely affect the tax liability or tax attributes of VGX or any of its subsidiaries or settle or compromise any income tax liability or consent to any extension or waiver of any limitation period with respect to taxes;

Revalue any of its assets other than in the ordinary course of business;

Commence or enter into any settlement of litigation other than the settlements involving the payment of money only in an amount not in excess of \$250,000 individually for any one settlement or \$500,000 in the aggregate for all such settlements, other than in connection with the Acquisition Agreement and the transactions contemplated by the Acquisition Agreement;

Commence or enter into any clinical scientific program prior to the closing;

Except as required by legal requirements, VGX employee plans, this Agreement or contracts currently binding on VGX or its subsidiaries or policies of VGX currently in effect,

increase in any manner the amount of compensation or fringe benefits of, pay any bonus to or grant severance or termination pay to any employee of VGX or any subsidiary of VGX (other than increases in connection with performance reviews or annual salary increases of amounts up to 110% of current salary and bonuses not exceeding \$1,000,000 in the aggregate to all employees),

make any increase in or commitment to increase any benefits provided under any employee plan (including any severance plan), adopt or amend or make any commitment to establish, terminate, adopt or amend any employee plan or

waive any stock repurchase rights, accelerate, amend or change the period of exercisability of VGX options or other securities outstanding pursuant to the VGX option plan, or reprice any VGX options or authorize cash

payments in exchange for any VGX options;

Sell, grant or modify in any material respect any material contract which is a license with respect to VGX intellectual property other than in connection with the sale or license of VGX's

products in the ordinary course of business or grant any exclusive rights with respect to any VGX intellectual property;

Enter into, renew or modify any contracts containing, or otherwise subject the Surviving Entity or Inovio to, any non-competition, exclusivity or other material restrictions on VGX or any of its businesses prior to closing, or the Surviving Entity or Inovio, or any of their respective businesses, following the closing;

Enter into any agreement or commitment the effect of which would be to grant to a third party following the Merger any actual or potential right of license to any intellectual property owned by Inovio or any of its subsidiaries (other than VGX and its subsidiaries);

Take any action that would result, or is reasonably likely to result, in any of the conditions to the Merger set forth in the Acquisition Agreement not being satisfied, that would materially impair the ability of VGX to consummate the Merger in accordance with the terms in the Acquisition Agreement or materially delay such consummation;

Hire any executive officer level employees;

Incur any indebtedness for borrowed money or guarantee any such indebtedness of another person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of VGX or any of its subsidiaries, guarantee any debt securities of another person, enter into any "keep well" or other agreement to maintain any financial statement condition of any other Person (other than any wholly-owned subsidiary of it) or enter into any arrangement having the economic effect of any of the foregoing, other than (A) in connection with the financing of ordinary course trade payables, (B) indebtedness for money borrowed in an amount not exceeding \$100,000 in the aggregate, or (C) entry into a line of credit of up to \$2,000,000 with Inovio or one of its subsidiaries consistent with the terms of the Acquisition Agreement;

Make or commit to make capital expenditures in excess of \$1,000,000 in the aggregate in any consecutive twelve (12) month period;

Modify in any material respect, amend or terminate any VGX scheduled contract currently in effect, or waive, release or assign any material rights or claims thereunder, except in the ordinary course consistent with past practice or enter into any agreement that would constitute a VGX scheduled contract;

Enter into any contract requiring VGX or any of its subsidiaries to pay in excess of \$1,000,000 in the aggregate in any consecutive twelve month period;

Enter into any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC;

Make or commit to make any payment for any brokerage or finders' fee or agents' commissions or any similar charges in connection with the Acquisition Agreement or the transactions contemplated hereby; or

Agree to take any of the actions described above.

Inovio has also agreed that, prior to the earlier of the Effective Time or the termination of the Acquisition Agreement, it will refrain from doing any of the following without the prior written consent of VGX:

Fail to file any periodic reports required to be filed with the SEC pursuant to the Exchange Act, except in such case as (i) the consent of Inovio's auditors is required in connection with such filing and the auditors have not delivered such consent or (ii) filing without the consent of

Inovio's auditors would cause its auditors to withdraw from representing Inovio and the auditors have not delivered such consent;

Cause or permit or propose any amendments to Inovio charter documents or any of the Inovio subsidiary charter documents;

Adopt a plan of complete or partial liquidation or dissolution;

Declare, accrue, set aside or pay any dividends on or make any other distributions (whether in cash, stock, equity securities or property) in respect of any capital stock, except as required pursuant to the terms of the Inovio preferred stock outstanding as of the date of the Acquisition Agreement, or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction effected in the ordinary course of business by a wholly owned Subsidiary of it that remains a wholly owned Subsidiary of it after consummation of such transaction;

Purchase, redeem or otherwise acquire, directly or indirectly, any shares of its capital stock or the capital stock of its subsidiaries, except repurchases of unvested shares in connection with the termination of the employment relationship with any employee pursuant to stock option or purchase agreements in effect on the date of the Acquisition Agreement;

Issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, or any securities convertible into shares of capital stock, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into shares of capital stock, or enter into other agreements or commitments of any character obligating it to issue any such securities or rights, other than:

issuances of Inovio common stock upon the exercise of Inovio options or Inovio warrants outstanding as of the date of the Acquisition Agreement in accordance with the terms of such securities as of the date of the Acquisition Agreement;

grants of stock options under the Inovio's equity incentive plans at fair market value, *provided* that such options (1) are issued in the ordinary course of business consistent with past practice, (2) vest in accordance with Inovio's standard vesting schedule under the applicable equity incentive plan, and (3) are issued no later than five business days prior to the initial filing of the Form S-4 related to the transaction; and

issuance of Inovio common stock upon conversion of Inovio preferred stock outstanding as of the date of the Acquisition Agreement in accordance with the terms of such securities;

Acquire or agree to acquire by merging or consolidating with, or by purchasing any material equity or voting interest in or a material portion of the assets of, or by any other manner, any business of any person or division thereof, or otherwise acquire or agree to acquire any assets of any other person, which acquisition would be material to the business of Inovio;

Sell, lease, license, encumber or otherwise dispose of any properties or assets except (A) the sale, lease or disposition (other than through licensing) of property or assets which are not, individually or in the aggregate, material to the business of Inovio and its subsidiaries or (B) the sale, licensing or distribution of Inovio products and services in the ordinary course of business;

Make any loans, advances or capital contributions to, or investments in, any other person, other than: (A) loans or investments by it or a wholly owned Subsidiary of it to it or any wholly-owned subsidiary of it, (B) employee advances for travel and entertainment expenses made in the ordinary course of business, or (C) extension of a line of credit up to

\$2,000,000, upon Inovio board approval and consistent with the terms of the Acquisition Agreement;

Except as required by US GAAP as concurred with by its independent auditors, make any material change in its methods or principles of accounting since the date of Inovio balance sheet;

Make any tax election or accounting method change that is reasonably likely to adversely affect the tax liability or tax attributes of Inovio or any of its subsidiaries or settle or compromise any income tax liability or consent to any extension or waiver of any limitation period with respect to taxes;

Revalue any of its assets other than in the ordinary course of business;

Commence or enter into any settlement of litigation other than the settlements involving the payment of money only in an amount not in excess of \$250,000 individually for any one settlement or \$500,000 in the aggregate for all such settlements, other than in connection with the Acquisition Agreement and the transactions contemplated by the Acquisition Agreement;

Commence or enter into any clinical scientific program prior to the Effective Time;

Except as required by legal requirements, employee plans, the Acquisition Agreement or contracts currently binding on Inovio or its subsidiaries or policies of Inovio currently in effect, (A) increase in any manner the amount of compensation or fringe benefits of, pay any bonus to or grant severance or termination pay to any employee of Inovio or any subsidiary of Inovio (other than increases in connection with performance reviews or annual salary increases of amounts up to 110% of current salary and bonuses not exceeding \$1,000,000 in the aggregate to all employees), (B) make any increase in or commitment to increase any benefits provided under any employee plan (including any severance plan), adopt or amend or make any commitment to establish, terminate, adopt or amend any employee plan or (C) waive any stock repurchase rights, accelerate, amend or change the period of exercisability of Inovio options or other securities outstanding pursuant to the Inovio equity incentive plans, or reprice any Inovio options or authorize cash payments in exchange for any Inovio options;

Sell, grant or modify in any material respect any material contract which is a license with respect to Inovio intellectual property other than in connection with the sale or license of Inovio's products in the ordinary course of business or grant any exclusive rights with respect to any Inovio intellectual property;

Enter into, renew or modify any material contracts containing, or otherwise subject the Surviving Entity or Inovio or any of its subsidiaries to any non-competition, exclusivity or other material restrictions on their respective businesses following the Effective Time;

Enter into any agreement or commitment the effect of which would be to grant to a third party following the Merger any actual or potential right of license to any intellectual property owned by VGX or any of its subsidiaries (other than Inovio and its subsidiaries);

Take any action that would result, or is reasonably likely to result, in any of the conditions to the Merger set forth in the Acquisition Agreement not being satisfied, that would materially impair the ability of Inovio to consummate the Merger in accordance with the terms hereof or materially delay such consummation;

Hire any executive officer level employees;

Incur any indebtedness for borrowed money or guarantee any such indebtedness of another Person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of Inovio or any of its subsidiaries, guarantee any debt securities of another person, enter into any "keep well" or other agreement to maintain any financial statement condition of any other person (other than any wholly-owned Subsidiary of it) or enter into any

arrangement having the economic effect of any of the foregoing, other than (A) in connection with the financing of ordinary course trade payables or (B) indebtedness for money borrowed in an amount not exceeding \$100,000 in the aggregate;

Make or commit to make capital expenditures in excess of \$1,000,000 in the aggregate in any consecutive twelve month period;

Modify in any material respect, amend or terminate any Inovio scheduled contract currently in effect, or waive, release or assign any material rights or claims thereunder, except in the ordinary course consistent with past practice or enter into any agreement that would constitute an Inovio scheduled contract;

Enter into any contract requiring Inovio or any of its subsidiaries to pay in excess of \$1,000,000 in the aggregate in any consecutive twelve month period;

Enter into any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC;

Make or commit to make any payment for any brokerage or finders' fee or agents' commissions or any similar charges in connection with the Acquisition Agreement or the transactions contemplated the Acquisition Agreement;

Adjust the tax treatment of Submerger; or

Agree to take any of the actions described above.

Inovio and VGX have each granted the other party certain limited consents allowing actions otherwise barred by such provisions, related to entry into certain material agreements, issuance of securities and incurrence of cetain debt.

Regulatory Matters

Inovio, Submerger and VGX are required to make all filings, notices, petitions, statements, registrations, submissions of information, application or submission of other documents required by any governmental entity in connection with the Merger and the transactions contemplated hereby, including:

notification and report forms with the U.S. Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice as required by the HSR Act, if applicable;

any other filing or correspondence necessary to obtain any necessary consent;

filings under any other comparable pre-merger notification forms required by the merger notification or control laws of any applicable jurisdiction; and

any filings required under the Securities Act, the Exchange Act, any applicable state or securities or "blue sky" laws and the securities laws of any foreign country, or any other legal requirement relating to the Merger, including, if applicable, assisting any foreign stockholders in making such individual registrations and filings as may be necessary for individual acquisition of Inovio securities in the Merger or the other transactions contemplated by the Acquisition Agreement.

No Solicitation

From and after the date of the original agreement and plan of merger until the Effective Time or termination of the Acquisition Agreement, Inovio or VGX has not and will not, nor will they authorize or has either authorized any of their respective officers, directors, affiliates or employees or any investment banker, attorney or other advisor or representative retained by any of them to, directly or indirectly

solicit, initiate, encourage or induce the making, submission or announcement of any acquisition proposal,

participate in any discussions or negotiations regarding, or furnish to any person any information with respect to, or take any other action to facilitate any inquiries or the making of any proposal that constitutes or may reasonably be expected to lead to, any acquisition proposal,

engage in discussions with any person with respect to any acquisition proposal, except as to the existence of these provisions,

approve, endorse or recommend any acquisition proposal, or

enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any acquisition transaction.

However, until the date on which the Acquisition Agreement is approved by the required vote of the Inovio and VGX stockholders, this provision shall not prohibit Inovio or VGX from furnishing information regarding Inovio or VGX and its subsidiaries to, entering into a confidentiality agreement with or entering into discussions with, any person or group in response to a superior offer submitted by such person or group to the extent and so long as:

neither Inovio or VGX nor any representative of Inovio or VGX and its subsidiaries shall have violated any of the restrictions set forth in the Acquisition Agreement in connection with obtaining such superior offer,

the Inovio board of directors or the VGX board of directors concludes in good faith, after consultation with its outside legal counsel, that such action is required in order for the Inovio board or the VGX board to comply with its fiduciary obligations to the Inovio or VGX stockholders under applicable law,

(x) at least one business day prior to furnishing any such information to, or entering into discussions or negotiations with, such person or group, Inovio gives VGX written notice or VGX gives Inovio written notice, as applicable, of the identity of such person or group and of Inovio's or VGX's intention to furnish information to, or enter into discussions or negotiations with, such person or group and (y) Inovio or VGX receives from such person or group an executed confidentiality agreement containing terms no less favorable to the disclosing party than the terms of the confidentiality agreement, and

contemporaneously with furnishing any such information to such person or group, Inovio or VGX furnishes such information to Inovio or VGX, as applicable (to the extent such information has not been previously furnished by Inovio to VGX or VGX to Inovio, as applicable).

At the time of the signing of the original agreement and plan of merger, Inovio and VGX and their subsidiaries immediately ceased any and all existing activities, discussions or negotiations with any parties conducted prior to signing the merger agreement with respect to any acquisition proposal.

In addition to the foregoing, Inovio or VGX are required to: (i) provide the each other with at least forty-eight hours prior written notice (or such lesser prior written notice as provided to the members of the other party's board but in no event less than eight hours) of any board meeting at which the board is reasonably expected to consider an acquisition proposal for evaluation of whether it constitutes a superior offer and together with such notice deliver a copy of the acquisition proposal for review and (ii) provide each other with at least three business days' prior written notice of a board meeting at which the board is reasonably expected to recommend a superior offer to the stockholders in lieu of the Acquisition Agreement and the Merger and recommend withdrawal of its prior recommendation pursuant to the Acquisition Agreement and together with such notice deliver a copy of the superior offer for review.

Other Covenants

Some of the other material terms to which Inovio and VGX agreed, other than those related to the preparation, filing and mailing of this joint proxy statement/prospectus and holding of the Inovio and VGX special meetings, include:

Promptly following the execution of the Acquisition Agreement, four significant VGX stockholders identified in the Acquisition Agreement who hold approximately 41% of the issued and outstanding VGX common stock executed voting agreements, to be effective at the time VGX solicits the approval of the Merger by the VGX stockholders, pledging support for the transaction.

Immediately after the Effective Time, the Surviving Entity or Inovio will mail all notices and disclosures required under Section 262 of the DGCL to the extent not already mailed to VGX stockholders.

Inovio and VGX agreed to provide access to its books and records to each other and each party's accountants, counsel, directors, officers, employees and other representatives, and comply with its obligations under the existing confidentiality agreement between the parties.

Inovio and VGX agreed to consult with each other and agree on any press releases or public statements about the transaction.

Inovio and VGX agreed to use reasonable best efforts to comply with all legal requirements with respect to the transaction, to make all filings reasonably determined by the parties to be required by any governmental entity in connection with the transaction, and to fully cooperate with one other to identify the detailed steps and procedures necessary or desirable to effect the transactions contemplated by the Acquisition Agreement.

Inovio and VGX agreed to provide prompt notice to the other party through the Effective Time if either becomes aware that any of its representations or warranties have become untrue or inaccurate, or that it has failed to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it under the Acquisition Agreement.

Inovio and VGX agreed that upon request of VGX subsequent to the effective date of the registration statement of which this joint proxy statement/prospectus is a part and subject to approval of Inovio's board of directors at such time, Inovio shall provide VGX with a line of credit up to \$2,000,000 for use to fund continuing operations, to be documented upon issuance with customary terms and conditions.

Inovio agreed to arrange for each employee who is a participant in a VGX welfare benefit plan (within the meaning of Section 3(1) of ERISA), including any vacation plan or program, who becomes an employee of Inovio, any Inovio subsidiary or the Surviving Entity and their dependents to be eligible for substantially similar employee welfare benefits as those received by Inovio employees with similar positions and responsibilities.

Inovio agreed to take all corporate action necessary to reserve for issuance a sufficient number of shares of Inovio common stock for delivery upon exercise of the assumed VGX options and warrants and any conversion of the VGX convertible debt assumed by Submerger.

Inovio agreed to seek and obtain a determination from the NYSE Amex regarding the applicability to the Merger of Section 341 of the Company Guide of the NYSE Amex and the definition of "Reverse Merger" Section 341 provides, as soon as possible after the date of the Acquisition Agreement and no later than the effective date of the registration statement of which this joint proxy statement/prospectus is a part. Inovio further agreed to use commercially reasonable efforts to (i) maintain the listing of its common stock on the NYSE Amex and

(ii) file and seek approval for either an additional listing application or initial listing application, depending on the outcome of the NYSE Amex's Section 341 analysis, provided, however, if Inovio is unable to maintain its listing on the NYSE Amex or satisfy the initial listing standards for the NYSE Amex using commercially reasonable efforts prior to the closing, then Inovio agreed to use commercially reasonable efforts to have the Inovio common stock, including the shares to be issued or issuable in relation to the Merger, listed or quoted on an alternate securities exchange or quotation system for which it can qualify, as selected in consultation with VGX.

Inovio agreed to, and agreed to cause the Surviving Entity to, fulfill and honor all rights to indemnification existing as of the date of the Acquisition Agreement (i) in favor of an officer, director or employee of VGX or any of its subsidiaries, whether provided in the VGX charter documents or pursuant to any contractual agreement (as in effect as of the date of the Acquisition Agreement) to survive the Merger and be observed by the Surviving Entity to the fullest extent permitted by applicable law, and (ii) in favor of an officer, director or employee of Inovio or any of its subsidiaries, whether provided in the Inovio charter documents or pursuant to any contractual agreement (as in effect as of the date of the Acquisition Agreement) to survive the Merger and be observed by Inovio to the fullest extent permitted by applicable law, in each case until not earlier than the sixth anniversary of the Effective Time.

Inovio agreed to cause Submerger to comply with all of its obligations under or relating to the Acquisition Agreement, and Submerger agreed that prior to the Effective Time, it shall not engage in any business which is not in connection with the Merger pursuant to the Acquisition Agreement.

Inovio and VGX agreed to use commercially reasonable efforts to take or cause to be taken any action necessary for the transaction to qualify as a reorganization within the meaning of Section 368(a) of the Code, report the transaction as a reorganization within the meaning of such section, and cooperate and use commercially reasonable efforts in order for each party to obtain tax opinions from their respective counsel.

VGX agreed to deliver to Inovio financial information as anticipated by the Acquisition Agreement.

VGX agreed to deliver to Inovio a letter identifying all known persons who, as known to VGX, would be deemed affiliates of the VGX for purposes of Rule 144 of the Securities Act, and to update such letter from time to time prior to the Effective Time if and when VGX learns that additional persons would be deemed affiliates of VGX for such purposes.

Inovio agreed to execute employment agreements with certain individuals from Inovio management as identified in the Acquisition Agreement, to be effective upon closing.

Please see the Acquisition Agreement for additional covenants of Inovio and VGX.

Conditions to the Transaction

Inovio's obligation to consummate the Merger and issue its securities pursuant to the Acquisition Agreement, which we refer to as the "closing," will not take place until the parties satisfy, or waive where allowable, the other conditions listed in the Acquisition Agreement. These closing conditions include but are not limited to the following:

The registration statement, of which this joint proxy statement/prospectus is a part, shall have become effective under the Securities Act and shall not be the subject of any stop order or proceeding seeking a stop order.

Inovio shall have obtained the approval of Inovio's stockholders of (1) the Acquisition Agreement, the Merger and the other transactions contemplated by the Acquisition Agreement, and (2) the amendment of the Inovio 2000 Plan to clarify the acceleration of vesting of Inovio options issued and outstanding at the Effective Time and to remove the termination of unexercised Inovio options issued and outstanding under the Inovio 2000 Plan at the Effective Time.

VGX shall have obtained the approval of VGX's stockholders of the Acquisition Agreement, the Merger and the other transactions contemplated by the Acquisition Agreement.

The number of dissenting VGX stockholders shall not exceed ten percent (10%) of the number of shares of outstanding VGX common stock.

No governmental entity, as defined in the Acquisition Agreement, shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which has the effect of making the Merger illegal or otherwise prohibiting consummation of the Merger, the issuance of the Inovio's securities to VGX stockholders or the assumption of the VGX securities.

The directors and officers of VGX and Inovio in office immediately prior to the closing shall have resigned as directors and officers, unless they will continue in the same capacity with the combined group.

The waiting period, if any (and any extension thereof), applicable to the Merger under the HSR Act shall have been terminated or shall have expired.

Inovio shall have received an opinion of K&L Gates LLP, and VGX shall have received an opinion of Duane Morris LLP, each to the effect that the Merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Code.

The representations and warranties by Inovio, VGX and Submerger contained in the Acquisition Agreement shall continue to be true and correct in all material respects as of the closing.

There shall not have occurred an event having a material adverse effect with respect to Inovio or VGX.

Inovio, VGX and Submerger shall have performed or complied in all material respects with the agreements and covenants required by the Acquisition Agreement to be performed or complied with by them, and VGX and Inovio shall have received certificate from each other to such effect signed by a duly authorized officer.

Each of Inovio and VGX shall have furnished the other party all consents, approvals and waivers required by the Acquisition Agreement to be obtained by it.

There shall not have been a suspension in trading of Inovio's common stock on the NYSE Amex or, if applicable pursuant to the terms of the Acquisition Agreement, an alternate securities exchange or quotation system, at any time during the five trading days prior to and on the closing date. However, this closing condition will be automatically waived if the Inovio common stock is in the process of being listed or quoted on an alternate securities exchange or quotation system and such transition requires a halt of trading on the closing date or the two trading days prior to the closing date.

If Inovio has filed an additional listing application with the NYSE Amex, the Inovio common stock remains listed on the NYSE Amex and the NYSE Amex has not given Inovio any notice that the shares to be issued or issuable pursuant to the Merger may not be authorized for listing on the NYSE Amex, then such shares shall be authorized for listing on the NYSE Amex.

Amex and

Inovio shall not have taken any action which would reasonably be expected to result in the delisting of the Inovio Common Stock from the NYSE Amex (however, the failure to implement a reverse stock split prior to closing shall not constitute an action for this purpose). In all other instances, Inovio shall have either obtained, or have made arrangements to obtain concurrent with the closing, listing or quotation of the Inovio common stock on an alternate securities exchange or quotation system (as selected in consultation with VGX), including any necessary assignment of a new trading symbol and the listing or quotation of the shares to be issued or become issuable in the Merger.

VGX and Inovio shall have received customary legal opinions from each other's counsel reasonably acceptable and consistent with the opinions anticipated pursuant to the Acquisition Agreement.

VGX's auditor's opinion with respect to the VGX audited consolidated financial statements (including restatements thereof, if applicable) for the periods ended December 31, 2005, 2006 and 2007, shall remain in full force and effect and VGX shall not have received any written notice from its auditors that such opinions and related financial statements may no longer be relied upon, nor that VGX's reviewed financial statements for each of the quarters ended subsequent to January 1, 2008 may no longer be relied upon.

VGX shall have (i) paid in full, principal and interest accrued, all VGX debt and convertible debt, other than \$4.4 million of VGX convertible debt specifically identified in the Acquisition Agreement and (ii) amended the remaining VGX convertible debt to allow for optional conversion at \$1.05 per share after the Effective Time and to provide for mandatory conversion at \$1.05 per share should the Inovio common stock trade at or above \$2.10 per share for five consecutive trading days after the Effective Time.

VGX shall have entered into a manufacturing agreement in conjunction with its prior asset sale to VGXI, Inc., such agreement shall upon its terms be effective at the time of the closing and bear a term for at least twelve months post-closing.

VGX shall not have accelerated the vesting of the VGX options prior to or upon the closing.

Inovio and Submerger shall have received a legal opinion from Duane Morris LLP reasonably acceptable to Inovio and Submerger.

VGX shall have received payment in full of all principal and interest owed on all loans to VGX's directors, officers and/or employees and there shall be no outstanding loans from VGX or any affiliate of VGX to any director, officer or employee of VGX or any of its subsidiaries, other than advances made in the ordinary course of business for business purposes.

The signatories to the voting trust agreement contemplated by the Acquisition Agreement shall have provided executed signature pages to the voting trust agreement, to be held in escrow pending the closing.

Termination of the Acquisition Agreement

The Acquisition Agreement may be terminated prior to the date the registration statement, of which this joint proxy statement/prospectus is a part, becomes effective, under several circumstances, including:

by mutual written consent duly authorized by the boards of directors of Inovio and VGX;

by either Inovio or VGX, if, with certain exceptions related to the status of the transaction, the closing shall not have occurred by June 30, 2009;

if a governmental entity shall have issued an order, decree or ruling or taken any other action (including the failure to take action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger, which order, decree or ruling is final and nonappealable;

by VGX, upon a breach of any representation, warranty, covenant or agreement on the part of Inovio set forth in the Acquisition Agreement, or if any representation or warranty of Inovio shall have become untrue, in either case such that the conditions set forth in the Acquisition Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, with certain cure period exceptions;

by Inovio, upon a breach of any representation, warranty, covenant or agreement on the part of Inovio set forth in the Acquisition Agreement, or if any representation or warranty of VGX shall have become untrue, in either case such that the conditions set forth in the Acquisition Agreement would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, with certain cure period exceptions;

by VGX, upon written notice to Inovio setting forth (i) the determination of VGX's board of directors that a competing proposed received constitutes a VGX superior offer, as defined by the Acquisition Agreement, (ii) the determination of VGX's board of directors to withdraw its recommendation in favor of recommending the VGX superior offer to the VGX stockholders, in satisfaction of its fiduciary duties, and (iii) VGX's representation of full and complete compliance with the terms of the Acquisition Agreement's no solicitation provisions prior to such termination, with certain limitations related to compliance with notice and document delivery requirements pursuant to the Acquisition Agreement; or

by Inovio, upon written notice to Inovio setting forth (i) the determination of Inovio's board of directors that a competing proposed received constitutes a Inovio superior offer, as defined by the Acquisition Agreement, (ii) the determination of Inovio's board of directors to withdraw its recommendation in favor of recommending the Inovio superior offer to the Inovio stockholders, in satisfaction of its fiduciary duties, and (iii) Inovio's representation of full and complete compliance with the terms of the Acquisition Agreement's no solicitation provisions prior to such termination, with certain limitations related to compliance with notice and document delivery requirements pursuant to the Acquisition Agreement.

Termination Payment

In the event that the Acquisition Agreement is terminated by Inovio pursuant to the termination provision of the Acquisition Agreement that allows for withdrawal of the Inovio board's recommendation to the Inovio stockholders in favor of the Merger in relation to receipt and recommendation of an Inovio superior offer, Inovio shall promptly, but in no event later than two business days after the date of such event, pay VGX a fee equal to \$3,500,000 in immediately available funds and such payment shall be the sole and exclusive remedy relating therewith. In the event that the Acquisition Agreement is terminated by VGX pursuant to the termination provision of the Acquisition Agreement which allows for withdrawal of the VGX board's recommendation to the VGX stockholders in favor of the Merger in relation to receipt and recommendation of a VGX superior offer, VGX shall promptly, but in no event later than two business days after the date of such event, pay Inovio a fee equal to \$3,500,000 in immediately available funds and such payment shall be the sole and exclusive remedy relating therewith.



Transaction Expenses

Whether or not the transaction is completed, all fees and expenses incurred in connection with the Acquisition Agreement and the transactions contemplated by the Acquisition Agreement will be paid by the party incurring the fees or expenses.

Indemnification

Inovio will, and will cause the Surviving Entity to, fulfill and honor all rights to indemnification existing as of the date of the Acquisition Agreement (i) in favor of an officer, director or employee of VGX or any of its subsidiaries, whether provided in the VGX charter documents or pursuant to any contractual agreement (as in effect as of the date of the Acquisition Agreement) to survive the Merger and be observed by the Surviving Entity to the fullest extent permitted by applicable law, and (ii) in favor of an officer, director or employee of Inovio or any of its subsidiaries, whether provided in the Inovio charter documents or pursuant to any contractual agreement (as in effect as of the Acquisition Agreement) to survive the Merger and be observed by Inovio to the fullest extent permitted by applicable law, in each case until not earlier than the sixth anniversary of the Effective Time.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Amendment and Waiver

Subject to applicable law, any provision of the Acquisition Agreement may be amended by the parties thereto at anytime by execution of an instrument in writing signed on behalf of each of the parties thereto.

Governing Law

The laws of the State of Delaware govern the Acquisition Agreement, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

OTHER AGREEMENTS RELATED TO THE TRANSACTION

VGX Support Stockholders Voting Agreements

The Acquisition Agreement requires that four identified VGX stockholders, who collectively hold approximately 41% of the issued and outstanding VGX common stock, enter into voting agreements with Inovio. Dr. J. Joseph Kim, president, chief executive officer and director of VGX, Dr. David Weiner, a founder of VGX and significant stockholder, Dr. Morton Collins, a director of VGX, and Young K. Park, a significant stockholder of VGX (each referred to in this joint proxy statement/prospectus as a "support stockholder"), have each executed a voting agreement providing that he, in his capacity as a VGX stockholder only, shall vote or cause to be voted for approval and adoption of the Acquisition Agreement and the transactions contemplated thereby all shares of VGX common stock over which he has sole voting agreement, each support stockholder acknowledges that he will not be entitled to exercise and is therefore effectively waiving any rights of appraisal of his shares of VGX common stock that he may otherwise be entitled to with respect to such shares of VGX common stock under Section 262 of the DGCL. Further, each support stockholder agrees in the voting agreement not to offer, sell, transfer

or otherwise dispose of or encumber his right to exercise the voting power of any shares of VGX common stock over which he has sole dispositive power, and to use my commercially reasonable efforts to not permit the offer, sale, transfer or other disposition or encumbrance of his right, if any, to direct the voting of any shares of VGX common stock over which he has shared dispositive power, with limited exceptions.

The voting agreement provides for specific performance of the covenants and agreements upon any breach. The voting agreements shall terminate upon the earlier of the Effective Time of the Merger or any termination of the Acquisition Agreement. Each voting agreement may not be amended except by an instrument in writing signed on behalf of each of the parties, and is governed by the laws of the State of Delaware, without giving effect to the principles of conflicts of law thereof.

Voting Trust Agreement

Five significant stockholders of VGX will enter into a voting trust agreement to be signed and become effective concurrent with the closing of the Merger. These stockholders will place an aggregate of 8,000,000 shares of VGX stock into a voting trust, which will be administered by an independent committee of the board of directors of Inovio post-merger. The trustees would vote the shares in accordance with the percentage of votes cast by all stockholders on any particular matter. The trust will have a term of ten years and would terminate earlier upon a change in control of the combined group. The agreement will also terminate with respect to a stockholder if that stockholder dies or the stockholder's employment with the combined group is terminated other than for cause, as defined in the trust agreement. If Dr. J. Joseph Kim's employment with the combined group is terminated, the trust will terminate with respect to all stockholders party to the agreement upon the date of such termination. A stockholder will have the right to cause the trustees to sell the shares deposited in the trust by that stockholder, or to tender the shares in the event of a tender offer or exchange offer, for the benefit of the stockholder under certain conditions.

Lock-up Agreements

The Acquisition Agreement provides for certain lock-up arrangements with respect to shares of Inovio common stock outstanding at the Effective Time of the Merger or issuable upon the assumption of outstanding VGX securities at the Effective Time of the Merger, as described in *"Restrictions on Ability to Sell Inovio Common Stock"* beginning on page 84. To support the implementation of such restrictions, Inovio agreed to obtain lock-up agreements reflecting the Lock-Up Restrictions prior to the closing from Dr. Avtar Dhillon and, using its best efforts, from all other Inovio related Restricted Parties. Likewise, VGX agreed to obtain lock-up agreements reflecting the Lock-Up Restrictions prior to the closing from Dr. J. Joseph Kim and, using its best efforts, from all other VGX-related Restricted Parties, except those who will hold Restricted Securities consisting of solely of shares of Inovio common stock issued at the Effective Time pursuant to the Merger. In addition to setting forth the Lock-Up Restrictions as dictated by the Acquisition Agreement for acknowledgement by the Restricted Party, the lock-up agreements authorizes Inovio, during the applicable Lock-Up Period, to cause its transfer agent to decline to transfer and to note stop transfer restrictions on the transfer books and records of Inovio with respect to the shares of common stock that are restricted from transfer pursuant to the agreement. The lock-up agreement also provides the Restricted Party's acknowledgement that the lock-up agreement, and the Lock-Up Restrictions set forth in the lock-up agreement, are irrevocable on the part of the Restricted Party and survive the Restricted Party's death or incapacity is the cause of the Restricted Party's full termination of employment or directorship with Inovio or one of its subsidiaries.

Employment Agreements

Inovio has executed new employment agreements with certain members of its management team and other key employees for their continued service post-Merger, to be effective at the Effective Time of the Merger. Until the Effective Time, the terms and conditions of any existing employment agreements between Inovio and these employees continue to govern the employment relationship.

General Terms and Conditions

All of the employment agreements to become effective upon closing of the Merger include the following general acknowledgements, covenants, terms and conditions:

Acknowledgement that the closing of the Merger referenced above will not trigger any severance or change of control provisions of the employee's prior employment arrangements with Inovio or its subsidiaries.

The employee's intended title, hours, duties and the ability of such title or duties to be adjusted.

The employee's annual salary, the employee's eligibility for salary increases, discretionary bonuses and equity incentives, and the role of other management or a committee of the Inovio board in establishing performance objectives related thereto.

The employee's fringe benefits, including participation in health, hospitalization, life or other insurance provided by Inovio, vacation and sick leave, and reimbursement for business-related expenses.

The agreement's initial two year term, unless terminated earlier pursuant to its termination provisions, with an automatic one year renewal on the expiration date and on each successive anniversary date thereafter, unless either party gives written notice of non-renewal and termination to the other party at least ninety (90) days prior to any expiration date.

Occurrence of a "Change in Control" for purposes of the employment agreements as: (i) a majority of the directors elected at any annual or special general meeting of stockholders of the company are not individuals nominated by the company's then incumbent board of directors; (ii) there is occurrence of an event whereby any person or entity becomes the beneficial owner of shares representing 50% or more of the combined voting power of the voting securities of the company; or (iii) there is a merger or consolidation of the company with one or more corporations as a result of which, immediately following such merger or consolidation, the stockholders of the company as a group, as they were immediately prior to such event, will hold less than a majority of the outstanding capital stock of the surviving corporation.

The employee's right to terminate the employment agreement: (i) at any time upon providing six weeks notice in writing to the company, (ii) upon a material breach or default of any term of the employment agreement by the company, including any reduction in salary, if such material breach or default has not been remedied within 15 days after written notice of the material breach or default has been delivered by the employee to the company, or (iii) during the initial two year period or during any one year period immediately after a Change of Control (as defined in the agreement) if (a) the employee ceases to report directly to his or her prior supervising position or (b) there is any other material reduction in the employee's duties, position, authority or responsibilities with the company relative to the duties, position, authority or responsibilities in effect immediately prior to such reduction, if the company does not cure or remedy such issues within 15 days after written notice from the employee.

The company's right to immediately terminate the employee for "Cause" upon the occurrence of any of the following events: (i) the employee acts unlawfully, dishonestly, in bad faith or grossly negligent with respect to the business of the company as determined by the board (in some

cases, upon completion of a reasonable investigation and provision of a detailed report of the results of such investigation to the employee); (ii) the employee commits any crime or fraud against the company or its property or the conviction of employee of any felony offense or crime reasonably likely to bring discredit upon the employee or the company; or (iii) a material breach or default of any term of the employment agreement by the employee if such material breach or default remains unremedied 30 days after the company delivers written notice of the material breach or default to the employee.

The company's right to terminate the employee's employment at any time at its discretion without Cause upon certain written notice to the employee.

The termination of employment upon the occurrence of the employee's death or permanent or extended disability.

The types and amounts of compensation due to the employee upon termination, depending on the terms and circumstances of such termination.

The applicability of the laws of the State of California to the employment agreement, without regard to California's choice of law rule.

The continued effectiveness of any confidentiality, invention assignment, non-solicit and non-compete agreement(s) previously executed in favor of the company by the employee.

Employment Agreement for Dr. Avtar Dhillon President

Dr. Avtar Dhillon's agreement provides for his employment as president of Inovio post-Merger, in which role he will report to the Inovio board of directors. Pursuant to Dr. Dhillon's employment agreement, within 60 days of the beginning of each fiscal year, the Compensation Committee of Inovio's board of directors and Dr. Dhillon shall agree to his performance milestones and the amount of bonus for which Dr. Dhillon will be eligible if Dr. Dhillon as President achieves such milestones. Although Dr. Dhillon's employment agreement has a two year term, the terms and conditions of the employment agreement acknowledge that the terms of Dr. Dhillon's employment shall remain subject to further negotiation and mutual agreement in the month prior to completion of one year of service after the Effective Time. If the parties do not reach mutually agreeable terms prior to the completion of the first year of service after the Effective Time, the employment agreement will terminate, which shall be treated as a voluntary termination upon notice by Dr. Dhillon, effective as of the end of the first year of service.

Upon the Effective Time of the Merger, Inovio will deposit a closing payment equal to 24 months of Dr. Dhillon's current annual salary into a mutually agreed upon escrow account. Inovio agreed to provision of such closing payment as an incentive to retain Dr. Dhillon's services post-Merger, in recognition of the fact that he would have been eligible for full severance under his current employment agreement had Dr. Dhillon terminated employment in conjunction with the Merger, and in recognition of Dr. Dhillon's agreement to alter the structure and scope of his current severance arrangements in his new employment agreement. An amount equal to 50% of the closing payment and any accrued interest on such amount shall be automatically released to Dr. Dhillon upon the six month anniversary of the Effective Time, and the remainder of the closing payment and any remaining accrued interest shall be released to Dr. Dhillon upon the one year anniversary of the Effective Time, unless Dr. Dhillon or Inovio terminate the employment relationship prior to such time. If Dr. Dhillon terminates the agreement) or the company remaines Dr. Dhillon for any reason, the entire closing payment and any accrued interest shall be released from the escrow account upon the date of termination. If Dr. Dhillon voluntarily terminates the employment relationship without a breach by the company or under the other circumstances addressed by the

agreement, then the entire closing payment and any accrued interest shall be released from the escrow account on the later of the date of termination or the six month anniversary of the Effective Time.

In addition to the general provisions for termination of the employment agreement, Dr. Dhillon's employment agreement provides that if the company relocates Dr. Dhillon's place of employment more than 50 miles from its current location in San Diego, California, and Dr. Dhillon does not consent to such relocation, then either the company or Dr. Dhillon may terminate the employment agreement and such termination shall be treated the same as a rightful termination by the employee upon an unremedied material breach by the company.

In the event of the termination of Dr. Dhillon's employment agreement for any reason, the company shall provide Dr. Dhillon, upon receipt of an executed release of claims in favor of Inovio: (i) any earned but unpaid salary as of the date of termination, (ii) any accrued but unused vacation pay as of such date, (iii) any unreimbursed business expenses incurred as of the termination date, (iv) any pending health care benefits, and (v) any earned but unpaid bonus amounts from the closing of the Merger. However, if Dr. Dhillon terminates the agreement due to a material breach or default by the company, a change in his position or duties or a company relocation of his position without his consent within the initial term of the agreement or after a Change of Control, or the company terminates Dr. Dhillon without Cause or upon death or disability, the company shall also pay Dr. Dhillon (or his estate as applicable) an amount equal to the annual bonus, if any, most recently paid to Dr. Dhillon, multiplied by the fraction of which the number of days between the fiscal year end related to the bonus and the date of termination is the numerator, and 365 is the denominator. In addition, if the employment agreement terminates under such enumerated circumstances, and Dr. Dhillon has been employed for less than one year since the Effective Time, Inovio shall pay him an amount equal to the remainder of his salary for such initial one-year period.

Further, under any termination scenario, the company shall continue Dr. Dhillon's group health care benefits for a period of twelve months from his termination date or shall pay 100% the premiums required to continue his group health care coverage for a period of twelve months under the applicable provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, or "COBRA,", provided that Dr. Dhillon elects to continue and remains eligible for these benefits under COBRA, and does not become eligible for health coverage through another employer during such period.

Employment Agreement for Peter Kies Chief Financial Officer

Mr. Kies' agreement provides for his employment as chief financial officer of Inovio post-Merger, in which role he will report to the Inovio board of directors. Pursuant to Mr. Kies' employment agreement, within 60 days of the beginning of each fiscal year, the Compensation Committee of Inovio's board of directors and Mr. Kies shall agree to his performance milestones and the amount of bonus for which Mr. Kies will be eligible if Mr. Kies as chief financial officer achieves such milestones. In addition, upon the Effective Time of the Merger, Mr. Kies shall receive a closing payment equal to six months of his current annual salary and, upon the earlier of the six-month anniversary of the Effective Time or the date of Mr. Kies' termination pursuant to the employment agreement (other than upon his voluntary termination upon notice to the company), shall receive an additional closing payment equal to six months of his current annual salary. Inovio agreed to provision of such closing payment as an incentive to retain Mr. Kies' services post-Merger, in recognition of the fact that he would have been eligible for full severance under his current employment agreement had Mr. Kies terminated employment in conjunction with the Merger, and in recognition of Mr. Kies' agreement to alter the structure and scope of his current severance arrangements in his new employment agreement.

In addition to the general provisions for termination of the employment agreement, Mr. Kies' employment agreement provides that if the company relocates Mr. Kies' place of employment more than 50 miles from its current location in San Diego, California, and Mr. Kies does not consent to such

relocation, then either the company or Mr. Kies may terminate the employment agreement and such termination shall be treated the same as a rightful termination by the employee upon an unremedied material breach by the company.

In the event of the termination of Mr. Kies' employment agreement for any reason, the company shall provide Mr. Kies: (i) any earned but unpaid salary as of the date of termination, (ii) any accrued but unused vacation pay as of such date, (iii) any unreimbursed business expenses incurred as of the termination date, (iv) any pending health care benefits, and (v) any earned but unpaid bonus amounts from the closing of the Merger. However, if Mr. Kies terminates the agreement due to a material breach or default by the company, a change in his position or duties or a company relocation of his position without his consent within the initial term of the agreement or after a Change of Control, or the company terminates Mr. Kies without Cause or upon death or disability, the company shall also pay Mr. Kies (or his estate as applicable) an amount equal to the annual bonus, if any, most recently paid to Mr. Kies, multiplied by the fraction of which the number of days between the fiscal year end related to the bonus and the date of termination is the numerator, and 365 is the denominator. Further, under any termination scenario, the company shall continue Mr. Kies' group health care benefits for a period of six months from his termination date or shall pay 100% the premiums required to continue his group health care coverage for a period of six months under the applicable provisions of COBRA, provided that Mr. Kies elects to continue and remains eligible for these benefits under COBRA, and does not become eligible for health coverage through another employer during such period.

Form of Vice President Employment Agreement

Mr. Punit Dhillon and Mr. Michael Fons have executed employment agreements as Vice President, Operations and Vice President, Corporate Development, respectively, effective upon closing of the Merger. The form of Vice President employment agreement provides that these individuals will report to the Chief Executive Officer of Inovio, and that within 60 days of the beginning of each fiscal year, the Compensation Committee of Inovio's board of directors shall set performance milestones and the amount of bonus for which each Vice President will be eligible if he achieves such milestones. In addition, upon the Effective Time of the Merger, Mr. Dhillon and Mr. Fons shall each receive a closing payment equal to three months of his annual salary at the Effective Time.

In addition to the general provisions for termination of the employment agreement, the form of Vice President employment agreement provides that if the company relocates a Vice President's place of employment more than 50 miles from its current location in San Diego, California, and the Vice President does not consent to such relocation, then either the company or the Vice President may terminate the employment agreement and such termination shall be treated the same as a rightful termination by the employee upon an unremedied material breach by the company.

In the event of the termination of a Vice President's employment agreement for any reason, the company shall provide the terminating Vice President: (i) any earned but unpaid salary as of the date of termination, (ii) any accrued but unused vacation pay as of such date, and (iii) any unreimbursed business expenses incurred as of the termination date. However, if the Vice President terminates the agreement due to a material breach or default by the company, a change in his position or duties or a company relocation of his position without his consent within the initial term of the agreement or after a Change of Control, or the company terminates the Vice President without Cause, the company shall also pay the Vice President an amount equal to six months of the employee's annual salary at the time of termination, to be paid in such regular intervals over the six month period as shall be determined by the company, provided that Employee signs a standard release of all claims as presented by the company, and an amount equal to the Vice President's annual bonus, if any, most recently received, multiplied by the fraction of which the number of days between the fiscal year end related to the bonus and the date of termination is the numerator, and 365 is the denominator. However, if terminated due to death or disability, the Vice President's estate shall only also be entitled to the prorated annual

bonus. Further, under any termination scenario, the company shall either continue the Vice President's healthcare benefits for a six month period post-termination or otherwise secure coverage for the Vice President for such period.

Mr. Dhillon's agreement also allows for his duties to be performed outside of Inovio's headquarters up to five days per calendar month and provides certain travel benefits in support of such efforts.

Form of Executive Director Employment Agreement

Mr. Stephen Kemmerrer has executed an employment agreement as Executive Director, Engineering effective upon closing of the Merger. The form of Executive Director employment agreement provides that Mr. Kemmerrer will report to the Chief Executive Officer of Inovio, and that within 60 days of the beginning of each fiscal year, the Chief Executive Officer shall set performance milestones and the amount of bonus for which the Executive Director will be eligible if he achieves such milestones. In addition, upon the Effective Time of the Merger, Mr. Kemmerrer shall receive a closing payment equal to three months of his annual salary at the Effective Time.

In addition to the general provisions for termination of the employment agreement, the form of Executive Director employment agreement provides that if the company relocates a Executive Director's place of employment more than 50 miles from its current location in San Diego, California, and the Executive Director does not consent to such relocation, then either the company or the Executive Director may terminate the employment agreement and such termination shall be treated the same as a rightful termination by the employee upon an unremedied material breach by the company.

In the event of the termination of a Executive Director's employment agreement for any reason, the company shall provide the terminating Executive Director: (i) any earned but unpaid salary as of the date of termination, (ii) any accrued but unused vacation pay as of such date, and (iii) any unreimbursed business expenses incurred as of the termination date. However, if the Executive Director terminates the agreement due to a material breach or default by the company, a change in his position or duties or a company relocation of his position without his consent within the initial term of the agreement or after a Change of Control, or the company terminates the Executive Director without Cause, the company shall also pay the Executive Director an amount equal to three months of the employee's annual salary at the time of termination, to be paid in such regular intervals over the three month period as shall be determined by the company, provided that the Executive Director's estate is entitled to an amount equal to the Executive Director's estate is entitled to an amount equal to the Executive Director's annual bonus, if any, most recently received, multiplied by the fraction of which the number of days between the fiscal year end related to the bonus and the date of termination is the numerator, and 365 is the denominator.

Form of Key Employee Employment Agreement

Ms. Maggie Campbell and Ms. Catherine Ngo have executed employment agreements as Controller and Accounting Manager, respectively, effective upon closing of the Merger, and are referred to as "Key Employees." The form of Key Employee employment agreement provides that these individuals will report to the Chief Executive Officer of Inovio, and that within 60 days of the beginning of each fiscal year, the Chief Executive Officer shall set performance milestones and the amount of bonus for which each Key Employee will be eligible if she achieves such milestones. In addition, upon the Effective Time of the Merger, each of these Key Employees shall each receive a closing payment equal to two months of her annual salary at the Effective Time.

In the event of the termination of a Key Employee's employment agreement for any reason, the company shall provide the terminating Key Employee: (i) any earned but unpaid salary as of the date

of termination, (ii) any accrued but unused vacation pay as of such date, and (iii) any unreimbursed business expenses incurred as of the termination date. However, if the Key Employee terminates the agreement due to a material breach or default by the company, a change in her position or duties or a company relocation of his position without his consent within the initial term of the agreement or after a Change of Control, or the company terminates the Key Employee without Cause, the company shall also pay the Key Employee an amount equal to three months of the employee's annual salary at the time of termination, to be paid in such regular intervals over the three month period as shall be determined by the company, provided that the Key Employee signs a standard release of all claims as presented by the company. However, if terminated due to death or disability, the Key Employee's estate is entitled to an amount equal to the Key Employee's annual bonus, if any, most recently received, multiplied by the fraction of which the number of days between the fiscal year end related to the bonus and the date of termination is the numerator, and 365 is the denominator.

INFORMATION ABOUT THE COMPANIES

Inovio Biomedical Corporation

Overview

Inovio Biomedical Corporation, or "Inovio," a Delaware corporation, organized in 2001, is a San Diego-based biomedical company focused on the development of next-generation vaccines to prevent or treat cancers and chronic infectious diseases. Such vaccines, which could potentially protect millions of people from debilitation or death from diseases without adequate treatments, may represent multi-billion dollar market opportunities. Historically, successful development of this new generation of vaccines DNA vaccines has been hindered by the lack of safe, efficient and cost effective DNA delivery methods capable of enabling their potency. However, Inovio's electroporation-based DNA delivery technology has shown potential in pre-clinical and clinical studies to play a pivotal role in facilitating delivery and enhancing the potency of preventive and therapeutic vaccines.

Inovio is a leader in developing DNA delivery solutions based on electroporation, which uses brief, controlled electrical pulses to create temporary pores in cell membranes and enable increased cellular uptake of a useful biopharmaceutical. Once the DNA vaccine enters a cell, it can then "express" the proteins it was encoded to produce. These proteins, or antigens, are designed to be uniquely associated with a targeted cancer or infectious disease, and may then stimulate a more powerful immune response if the immune system encounters the targeted disease at a subsequent time.

Inovio's business strategy to realize value for the company and its stockholders is as follows:

First, Inovio has leveraged its patented technologies through licensing and collaborations, such as its licensing arrangements with Merck & Co., Inc., or "Merck," Wyeth Pharmaceuticals, or "Wyeth" and Vical Inc., or "Vical," among other research-driven biopharmaceutical companies as well as government and non-government agencies. Inovio is licensing the use of its electroporation-based DNA delivery systems for partners to use in conjunction with their proprietary DNA vaccines or DNA-based immunotherapies. These arrangements provide Inovio with some combination of upfront payments, development fees, milestone payments, royalties and a supply agreement. These collaborators either have active programs that are pursuing development of proprietary agents or researching the use of Inovio's technology or are currently evaluating such programs. However, there is no assurance that these licensing partners will continue these electroporation-based activities. Currently, Merck has completed electroporation-based treatments in their initial Phase I cancer trial. Merck licensed from Inovio a second target in December of 2007 for which it has filed an IND. There is no assurance that Merck will continue to develop either program into a Phase II study. In addition, Wyeth continues to evaluate internal strategic options prior to initiating further development of electroporation-based infectious disease programs.

Second, Inovio is pursuing proprietary vaccine development or co-development, resulting in whole or partial ownership in promising vaccines to prevent or treat cancers and chronic infectious diseases.

Inovio's technology is protected by an extensive patent portfolio covering in vivo electroporation. Inovio's patent portfolio encompasses a range of apparatuses, methodologies, conditions, and applications including oncology, gene delivery, vascular, transdermal as well as ex vivo electroporation.

Inovio's Core Technology

Most drugs and biologics must enter into a cell through a cell membrane in order to perform their intended function. However, gaining entry into a cell through the outer cell membrane can be a significant challenge. In the 1970s it was discovered that the brief application of high-intensity, pulsed electric fields can create temporary and reversible permeability, or pores, in the cell membrane. This pulse-induced permeabilization of the cellular membrane is generally referred to as electroporation. One observable effect of cell membrane electroporation is less restricted exchange of molecules

between the cell exterior and interior the benefit being that it allows and enhances the uptake of, for example, a biopharmaceutical agent previously injected into local tissue. The extent of membrane permeabilization depends upon various electrical, physical, chemical, and biological parameters.

The transient, reversible nature of this electrical permeabilization of membranes is the underlying basis of Inovio's electroporation instruments, which are designed to harness this phenomenon by delivering controlled electrical pulses into tissue to facilitate the uptake of useful biopharmaceuticals. Inovio's technology generates electric fields in target tissues to induce electroporation, which increases cellular uptake even for large molecules such as DNA. Most cell types and tissue can be successfully electroporated as long as applicators with the appropriate configuration of needle electrodes can be used to expose cells and tissues to the electric field.

DNA vaccines have potential as therapeutic agents for treating various diseases. One of the key obstacles to the successful development and commercialization of DNA vaccines has been the limitations associated with current delivery systems. Alternative approaches based on the use of viruses and lipids are complex and expensive, and have in the past created concerns regarding safety. Electroporation provides a straightforward, cost effective method for delivering DNA into cells with high efficiency and minimal complications (as compared to viral vectors) and, importantly, inducing clinically relevant levels of gene expression.

Inovio has multiple systems designed to create different electroporation conditions for different applications. The current systems consist of two basic components: a pulse generator and an applicator that is inserted into selected tissue.

MedPulser® DNA Electroporation System

Inovio's MedPulser® DNA Electroporation System was designed to create conditions to deliver DNA into tumor cells that promote optimal responses to gene-based immunotherapeutic cytokines. The cytokine-encoding plasmid is first injected with a syringe/needle into the selected tumor. Using a remote control, the pulse generator is switched on. High-voltage electrical pulses are generated and delivered through an attached electrical cord into the injected tissue through an electrode-needle array on the applicator. The electrode-needle array consists of a total of six needle-electrodes. The needle-electrode arrays are available in different sizes and configurations to facilitate access to tumors of different sizes and in different locations.

MedPulser® DNA Delivery System

The MedPulser® DNA Delivery System (DDS) was developed to optimize the delivery of DNA into muscle cells. The modified system is similar to the MedPulser® Electroporation System. The primary differences are in the parameters of the electric pulses delivered by the generator and the needle-electrode configuration of the applicator. The pulse is designed specifically for DNA delivery with a lower strength electrical field of longer duration than for tumor electroporation. The applicator has a four needle-electrode array consisting of one set of opposite pairs. They are available in a range of configurations to meet the requirements of a variety of applications.

Elgen System

The Elgen® DNA Delivery System, Inovio's newest generation of electroporation systems, is designed primarily for muscle delivery. It consists of a computer-controlled, motorized two needle delivery device that injects DNA and delivers electroporation pulses through one pair of needles. An earlier prototype version of this experimental system is currently under evaluation in Inovio's clinical trial for a prostate cancer vaccine at the University of Southampton in the U.K.

Choice of Tissue for DNA Delivery

Muscle Delivery. Inovio's proprietary electroporation method consists of a DNA delivery system designed to introduce a plasmid vector into muscle, skin or tumor tissue. The plasmid(s) may be encoded for therapeutic protein(s) for gene therapy, or antigens for immunization.

Skeletal muscle has been a core focus because it is mainly composed of large elongated cells with multiple nuclei. Muscle cells are non-dividing, hence long-term expression can be obtained without integration of the gene of interest into the genome. Muscle cells have been shown to have a capacity for secretion of proteins into the blood stream. Secreted therapeutic proteins may therefore act systemically and produce therapeutic effects in distant tissues of the body. In this respect, the muscle functions as a factory for the production of the biopharmaceutical needed by the body. It is envisioned that delivery of DNA by electroporation to muscle cells will circumvent the costly and complicated production procedures of viral gene delivery vectors, protein-based drugs, conventional vaccines and monoclonal antibodies. This approach may therefore to provide long-term stable expression of a therapeutic protein or monoclonal antibody at a sustained level. For vaccination the DNA cause muscle cells to produce antigenic proteins that the immune system will identify as foreign and against which it will mount an immune response. As with conventional vaccines, the immune system will then develop memory of this antigen (and related disease) for future reference. Intra muscular delivery by electroporation of DNA encoded antigens has been shown to induce both humoral (antibody) and cellular (T-cell) immune responses. Inovio is currently collaborating in three clinical programs (Merck, Tripep and the University of Southampton) related to DNA delivery to muscle for immunization.

Tumor Delivery. Inovio has an extensive intellectual property position relating to *in vivo* delivery of genes directly into tumor cells. Tumor cells can be readily transfected with genes encoding selected cytokines or potentially lethal proteins for the treatment of a variety of cancers. The goal of effective tumor delivery is the ultimate elimination of the transfected tumor, and Inovio has experienced very few concerns regarding the safety of the procedure in its trials to date. A Phase I/II clinical immunotherapy trial conducted by Vical was designed to deliver IL-2 directly to accessible melanoma lesions. In December, 2008, Inovio announced final results of a similar clinical study conducted by Moffitt to deliver IL-12 directly to accessible melanoma lesions.

Skin Delivery. While Inovio has generated preclinical and preliminary clinical evidence that intramuscular electroporation-based DNA delivery will be effective for a number of vaccines, electroporation of the skin may also be a relevant route of administration. Skin or intradermal administration is important and is becoming an attractive site for immunization given its high density of antigen presenting cells (APCs). Unlike muscle, skin is the first line of defense against most pathogens and is therefore very rich in immune cells and molecules. Skin specifically contains certain cells that are known to help in generating a robust immune response. With intradermal administration of electroporation, Inovio may be able to demonstrate a comparable immune response to muscle delivery. Inovio will continue to invest research and patenting resources into developing a viable skin electroporation system for clinical evaluation.

Applications of DNA Vaccine Technology

Inovio and its partners are developing DNA delivery technology for two broad applications:

Cancer

Cancer is a disease of uncontrolled cell growth. Although cancer has been a major focus of pharmaceutical companies for decades, cancer remains one of the leading causes of death in the United States. Traditionally, three approaches have been available for treatment of cancer: surgery, radiation therapy, and chemotherapy. When detected early and still confined to a single location, cancer may be cured by surgery or radiation therapy. However, neither surgery nor radiation therapy can cure cancer that has spread throughout the body. Although chemotherapy can sometimes

effectively treat cancer that has spread throughout the body, a number of non-cancerous cells, such as bone marrow cells, are also highly susceptible to chemotherapy. As a result, these types of treatments cause significant side effects and morbidity. Finally, it is common to see cancer return after apparently successful treatment by each of these means. The limitations of current cancer treatments are clearly demonstrated by the mortality rate of this disease.

For many decades, it has been suggested that the immune system should also be able to recognize cancer cells as abnormal and destroy these cells. However, cancer cells have developed mechanisms that allow them to escape the surveillance of the immune system. Immunotherapy, a process which uses the patient's own immune system to treat cancer, may have advantages over surgery, radiation therapy, and chemotherapy. Many cancers appear to have developed the ability to "hide" from the immune system. A treatment that can augment the immune response against tumor cells by making the cancer more "visible" to the immune system would likely represent a significant improvement in cancer therapy. Immune-enhancing proteins such as IL-2 and IL-12, used by partners in Phase I/II trials, have shown encouraging results. There is also a need to stimulate a stronger cellular immune response (i.e. generating T-cells) to specifically attack cancerous cells. This requires the use of technology such as DNA vaccines.

Electroporation offers effective delivery of DNA and may help Inovio develop novel cancer therapies. Inovio's current clinical-stage approaches consist of directly injecting tumors with certain plasmids followed by intratumoral electroporation as well as directly delivering certain plasmids into muscle followed by intramuscular electroporation. Upon uptake into cells, the plasmid directs the production of the encoded immunostimulatory proteins. The convenience and ability to repeat administration may offer advantages over current modalities of therapy. In addition, cancer therapies using non-viral DNA delivery may offer an added margin of safety compared with viral-based delivery, as no viral DNA/RNA or viral particles are contained in the formulation. Studies in animals have demonstrated the safety and potential efficacy of electroporation-based delivery. Subsequently, in human studies, a very low incidence of treatment-related serious adverse events has been observed.

In addition to immunotherapy approaches, numerous cancer antigens have been identified over the past few decades and better identification tools are under development by others. Inovio will continue to evaluate opportunities to acquire or partner cancer antigens that may be useful for large market cancers such as breast, lung and prostate.

Infectious Diseases

DNA vaccines for infectious diseases use portions of the genetic code of a pathogen to cause the host to produce proteins of the pathogen that may induce an immune response. Compared with conventional vaccines that use live, weakened, or dead pathogens to produce an immune response, this method potentially offers superior safety and ease of manufacturing, as well as convenient storage and handling characteristics. DNA vaccines have the potential to induce potent T-cell responses against target pathogens as well as trigger production of antibodies. Over the past decade, many scientific publications have documented the effectiveness of DNA vaccines in contributing to immune responses in dozens of species, including non-human primates and humans. Since electroporation can increase uptake of DNA into cells, it may consequently increase the potency of DNA vaccines. Increased T-cell responses and antibody production when DNA vaccines are delivered using electroporation has been demonstrated in a large number of species including nonhuman primates.

Vaccines are generally recognized as the most cost-effective approach for infectious disease healthcare. However, the technical limitations of conventional vaccine approaches have constrained the development of effective vaccines for many diseases. Development of vaccines based on conventional methods requires significant infrastructure in research and manufacturing. In addition, the safety risks associated with certain conventional vaccine approaches may offset their potential benefits. Inovio believes its potential vaccine products may be simpler to manufacture than vaccines made using live



viruses or protein subunit approaches, including those involving mammalian, avian or insect cells, or egg-based culture procedures. In addition, Inovio's DNA delivery technologies may accelerate certain aspects of vaccine product development such as non-clinical evaluation and manufacturing.

Similar to the requirements for fighting cancer, it is apparent that an effective approach for addressing chronic infections, which are also deadly and debilitating, requires the ability to generate a strong cellular immune response. This new generation of vaccines DNA vaccines is showing this capability. In addition to the targets already partnered, Inovio has been evaluating other potential disease targets in its internal development program.

Business Strategy

Inovio's objective is to be a biomedical company focused on developing and commercializing products that address significant unmet medical needs and, as a result, improve patients' quality of life. To achieve this objective, Inovio's business strategy currently includes the following key elements.

Therapeutic Drug and DNA Delivery

Inovio develops equipment designed to enable the use of electroporation to achieve efficient and cost-effective delivery into patients of DNA vaccines targeting a variety of illnesses. Although there are many diseases for which improved drug or DNA delivery is important, Inovio believes that its greatest opportunities lie in applying electroporation to DNA-based therapies (including immunotherapy) in the areas of cancer and chronic infectious diseases.

Advancing Inovio's Product Pipeline

The strategy to advance Inovio's product pipeline has two key components: Inovio has leveraged its patented technologies through licensing arrangements with companies such as Merck, Wyeth and Vical, among other research-driven biopharmaceutical companies, as well as collaborations with government and non-government agencies. These partners are pursuing development of proprietary agents or conducting research using Inovio's electroporation-based DNA delivery systems. Resources used to support Inovio's partners in these efforts are funded by its partners. In addition, these arrangements provide Inovio with some combination of upfront payments, development fees, milestone payments, royalties and a supply agreement.

In addition to expanding and providing electroporation delivery expertise, Inovio is directing resources to proprietary vaccine development or co-development, resulting in whole or partial ownership in DNA vaccine candidates. Inovio is focusing on the development of DNA-based therapies in the areas of cancer and chronic infectious diseases. The selection of targets for Inovio's independent or co-development programs is driven by four key criteria: complexity of the product development program, competition, cost of development and commercial opportunities. Inovio intends to retain significant participation in product development and commercialization of any DNA vaccines and therapeutics in pre-clinical and human trials that receive regulatory approval, although it may choose to secure additional partnerships to accelerate product development and commercialization. Inovio currently has a collaborative commercialization agreement with Tripep AB to co-develop a novel DNA hepatitis C virus (HCV) therapeutic vaccine.

Expand Market Opportunity

Inovio is continually evaluating and implementing opportunities to enhance its core technologies and assessing other DNA delivery technologies. Inovio is developing future product candidates based on these technologies through pre-clinical and clinical testing to determine their safety and efficacy. Inovio also seeks to develop additional applications for its technologies by testing new approaches to disease control or prevention. These efforts could lead to further independent product development or

licensing opportunities. In addition, Inovio continually evaluates compatible technologies or products that may be of potential interest for in-licensing or acquisition.

Expand the Application of Inovio's Technologies and Enable Product Development Through Strategic Collaborations

In pre-clinical trials and early clinical trials, Inovio's technology has enabled high levels of DNA uptake and gene expression without significant acute side effects. Based on the results obtained, Inovio believes that its technology is well positioned and is as capable as competing technologies to meet the delivery requirements for DNA vaccines and immunotherapy. Inovio's strategy is to develop DNA vaccine and immunotherapy applications with major pharmaceutical, biotechnology and government agency partners wherever reasonable and/or possible to license its DNA delivery technology for specific genes or specific medical indications. In most partnering situations, Inovio provides proprietary instruments and expertise to optimize the delivery of DNA for particular applications and the partner company provides its proprietary gene, allowing Inovio access to complementary technologies or greater resources. Inovio believes that entering into selective collaborations as part of its product development programs can enhance the success of Inovio's collaboration with partners allows pre-clinical research, clinical trials and mutually beneficial opportunities to expand Inovio's product pipeline, which may lead to the introduction of a new treatment and/or products in the marketplace at a rate and range which Inovio may not be able to support on its own. Additionally, such collaborations enable Inovio to leverage investment by its collaborators and reduce its net cash burn while retaining significant economic rights. Inovio's goal is to enter into additional agreements to license its electroporation technology for use in the delivery of DNA for specific targets.

Products and Product Development

Together with Inovio's licensees and collaborators, Inovio is currently developing a number of DNA-based vaccines and therapeutics for the prevention or treatment of cancer and chronic infectious diseases. Inovio's current independent development focus is on these areas as well. The table below

summarizes progress in Inovio's independent, collaborative and out-licensed product development programs as of December 5, 2008.

Product Area	Product Target and Indication(s)	Pre-Cl Stuc In Vitro			Develop Phase II	ment Stat Phase III	us Phase IV	Development
DNA Delivery								
Immunotherapy	Malignant Melanoma	Х	Х	Х				Moffitt/RMR
	Metastatic Melanoma	Х	Х	X*				Vical
DNA Delivery Tumor-associated antigen therapeutic	HER-2 and CEA-expressing							
vaccines	cancers	Х	Х	IP				Merck
	Prostate Cancer	Х	Х	IP				Univ. of Southampton
	hTERT-expressing cancers	Х	X	IP				Merck
	Unspecified Cancer	Х	Х					Inovio
DNA Delivery Infectious								
disease vaccine	HCV Vaccine	Х	Х	IP				Tripep/Inovio
	CMV Vaccine	Х	Х					Vical
	Unspecified Targets	Х	Х					Wyeth
	Biodefense Targets	Х	IP					US Army
	HIV Vaccine	Х	IP					National Cancer Institute
	HIV Vaccine	X	IP					International AIDS Vaccine Initiative
	Unspecified Targets	Х	IP					Inovio

Х

= Completed

IP

= In Progress

*

= Final data pending

DNA Vaccines and Immunotherapies

The technical limitations of conventional vaccine approaches have constrained the development of effective vaccines for many diseases. In addition, the safety risks associated with certain conventional vaccine approaches may offset their potential benefits. In the broader vaccine marketplace, it is important to note a changing dynamic. Traditionally, vaccines have been predominantly focused on the pediatric market, intended to protect children from diseases that could cause them serious harm. Today, there is a growing interest in vaccines against diseases that may affect adolescents and adults, which include both sexually transmitted diseases and infections that strike opportunistically, such as during pregnancy or in immuno-compromised individuals, including the geriatric population. Inovio believes its technologies, because of their potential safety and development time advantages, could be ideally suited for the development of this new generation of vaccines. Preclinical studies in animals have demonstrated the safety and potential efficacy of this approach.

DNA vaccines are intended to prevent a disease (prophylactic vaccines) or to treat an existing disease (therapeutic vaccines). A DNA vaccine consists of DNA plasmid molecules encoding a selected antigen or fragment of an antigen that are introduced into cells of humans or animals with the purpose of evoking an immune response to the encoded antigen. Information encoded in the vaccine DNA plasmid molecules directs the cells to produce proteins that may then trigger the immune system to mount one or both of two responses: the production of antibodies, also known as humoral immune response, and/or the activation of T-cells and "killer cells," collectively termed cell-mediated immune response. These responses can neutralize or eliminate infectious agents (viruses, bacteria, and other microorganisms) or abnormal cells (e.g. malignant tumor cells). DNA vaccines have several advantages over traditional vaccines in that they are non-pathogenic (meaning they cannot cause the disease), may be effective against diseases which cannot be controlled by traditional vaccines, and are relatively fast, easy and inexpensive to design and produce. DNA vaccines are stable under normal environmental conditions for extended periods of time and do not require continuous refrigeration. Another potentially major advantage of DNA vaccines is their short development cycle. For example, DNA vaccines against newly identified viral agents may be developed within weeks or months, as opposed to the years often required to develop a traditional vaccine candidate.

DNA vaccines against cancer use a portion of the genetic code of a cancer antigen to cause a host to produce proteins of the antigen that may induce an immune response.

Inovio has acquired considerable expertise in the delivery and efficacy evaluation of DNA vaccines, both against infectious agents and complex diseases, such as cancer. In most cases Inovio has chosen skeletal muscle as the target tissue for vaccine delivery as this muscle is known to facilitate robust and long-lasting immune responses. However, skin is also an attractive target for DNA vaccination and Inovio has developed and patented technology for DNA delivery into skin cells as well.

Inovio is building a DNA franchise around the use of Inovio's proprietary electroporation technology together with gene-based treatments. Inovio's development efforts involve license agreements with Wyeth, Merck and Vical, in which these companies are supporting the development and registration of therapies using Inovio's devices. To date, most of Inovio's DNA vaccine development programs have been primarily initiated by corporate partners who sustain the majority of the development expenses and have the ability to conduct the commercialization activities.

Cancer: DNA-Based Immunotherapies

In December 2004, Inovio initiated a Phase I clinical trial sponsored by the H. Lee Moffitt Cancer Center using its MedPulser® DNA Electroporation System to deliver plasmid DNA coding for IL-12 to tumors with the aim of treating malignant melanoma. The study was designed to assess the use of electrical pulses generated by Inovio's proprietary electroporation technology to deliver into tumor cells a plasmid DNA encoding a cytokine, interleukin-12, which stimulates adaptive and innate immunity. In December, 2008, Inovio reported that final results of this trial was presented in the peer-reviewed *Journal of Clinical Oncology* in a paper prepared by Drs. Adil Daud, Richard Heller et al, titled, "Phase I Trial of Interleukin-12 Plasmid Electroporation in Patients With Metastatic Melanoma."

The paper concluded: "This first human trial, to our knowledge, of gene transfer utilizing in vivo DNA electroporation in metastatic melanoma showed that it is safe, effective, reproducible, and titratable." The findings showed not only regression of treated melanoma skin lesions, but also regression of distant untreated lesions, suggesting a systemic immune response to the localized treatment.

Highlights of the study results, as reported in the paper, include:

Twenty-four patients were enrolled in seven cohorts with escalating dose levels of plasmid IL-12 between December 2004 and February 2007. Locally injected plasmid IL-12 was followed by electroporation.

The experimental regimen was found to be safe and well tolerated, with minimal systemic toxicity. Because there was no dose-limiting toxicity in cohorts one through five, the experimental plan was amended to add two additional cohorts. Transient pain with the administration of the electrical pulses was the most frequent adverse event experienced by patients.

The study demonstrated significant and dose-dependent increases in intratumoral IL-12 protein expression and concomitant increases in intratumoral levels of IFN- γ .

Sixty lesions (76%) were observed to have greater than 20% necrosis (death of tumor cells), with 19 (24%) having 50% 99% necrosis, and 25 (32%) having 100% necrosis.

Ten subjects (53%) showed evidence of a systemic response (either stable disease or a complete response) during the study.

Injected lesions and distant non-injected lesions showed regression after treatment. Of 19 patients with additional sites of disease outside of the treated lesions, two (10%) with untreated distant lesions and no other systemic therapy showing complete regression of all metastases. These responses occurred over 6 18 months, with gradual volume loss occurring at sites distinct from the electroporated sites, arguing for immune system involvement. Neither of these patients has developed any new evidence of distant disease to date. Six of 19 (32%) showed disease stabilization lasting from 4 20 months.

Electroporated tumors demonstrated CD4+ and CD8+ lymphocytic infiltrate in the treated lesions.

In July 2005, Inovio announced, along with its partner, Vical, the initiation of a human Phase I clinical study of an investigational method of delivering plasmid DNA coding for interleukin-2 (IL-2), a potent immune system stimulant, for patients with recurrent metastatic melanoma. Intravenous delivery of IL-2 protein is already approved as a treatment for metastatic melanoma, but frequently causes severe systemic toxicities. The novel treatment approach being studied in this trial involves direct injection into a tumor lesion of plasmid DNA (pDNA) encoding IL-2, followed by electroporation in which local application of electrical pulses is intended to enhance the uptake of pDNA into tumor cells. The pDNA is designed to cause cells within the tumor to produce high levels of IL-2 protein locally and thereby stimulate the immune system to attack the tumor without the systemic toxicities associated with injected IL-2. Interim results on 19 patients from this trial were presented in June, 2007, and demonstrated that intratumoral delivery of pDNA encoding IL-2 into melanoma tumors, followed by electroporation, was administered safely following sedative premedication. No serious adverse events related to the study drug or to the administration procedure were reported and the treatment was well-tolerated. The majority of related adverse events were localized to the treatment site, with the most frequent being mild injection site pain. Individual tumor responses were seen in 12 of 39 (31%) evaluated tumors after injection of different escalating doses (0.5 to 5 mg per tumor). Treated tumors (7 of 18, or 38%) showed local responses more frequently than did untreated tumors (5 of 21, or 24%). No overall clinical responses by standard RECIST (Response Evaluation Criteria in Solid Tumors) criteria were observed among the 19 subjects evaluated following one or two cycles of treatment. Two subjects (11%) showed activity in distant, untreated tumors, including one subject showing shrinkage and disappearance of lung tumors. Th

Cancer: DNA Vaccines

In April 2005, The University of Southampton initiated a U.K. Medicines and Healthcare products Regulatory Agency (MHRA) approved Phase I/II clinical trial undertaken in collaboration with Inovio. The study uses Inovio's electroporation technology to deliver a therapeutic plasmid-based DNA vaccine

to skeletal muscle with the aim of treating recurrent prostate cancer. The trial, sponsored and led by the University of Southampton, is investigating whether the DNA vaccine, developed at the University of Southampton, can stimulate patients to develop immune responses against prostate cancer and whether use of Inovio's electroporation system enhances this response. In June, 2008, *Inovio* reported that Dr. Christian H. Ottensmeier, MD, PhD, Cancer Research UK Senior Clinical Research Fellow at the University of Southampton, presented updated interim data from this clinical study at the American Society of Gene Therapy 11th Annual meeting. The data reaffirmed that, post-treatment, this therapy has proven to be safe and well-tolerated. Additional data further validated higher levels of antibody and anti-DOM CD4 responses achieved in patients treated using electroporation. This academic study is a phase I/II study of 30 HLA A2+ patients with biochemical failure of prostate cancer. The study is testing a DNA fusion vaccine, developed in Southampton, encoding for an immunostimulant sequence from tetanus linked to a sequence from prostate specific membrane antigen (PSMA27). The study is also evaluating electroporation as a novel delivery strategy for DNA vaccines compared to DNA delivered without electroporation.

Patient enrollment for this study has been completed. Monitoring of antibody responses was completed for the 20 patients at the first and second dose levels. Monitoring of CD4 cellular immunity had been completed for the 10 patients at the lowest dose. These 10 patients had additionally been assessed for CD8 T-cell responses. Reported interim results included:

Vaccination with and without electroporation has been safe and well-tolerated.

14 of 20 patients developed increases in anti-DOM (the immunostimulant sequence from tetanus) antibody. Of these increased responses, 5 of 10 were in the arm not using electroporation; 9 of 10 were in the electroporation arm. Antibody responses were generally higher in patients treated using electroporation compared to those treated with the DNA vaccine alone (without electroporation).

In 9 of 10 patients in the low dose cohort, significant increases in CD4 responses were observed relative to pre-treatment. Of these increased responses, 4 of 5 were in the electroporation arm. Patients treated exclusively with electroporation produced a higher average CD4 response; patients initially treated without electroporation and later receiving a boost in conjunction with electroporation also displayed increased CD4 responses following the electroporation boost.

In the low dose cohort, the PSMA27 antigen induced CD8+ cytotoxic T-cells (measured by cultured IFNg ELISPOT) not detected before vaccination in 6 of 10 subjects.

In November 2005, Merck initiated a Phase I clinical trial of a DNA cancer vaccine based on Inovio's DNA gene delivery technology that uses pDNA encoding human epidermal growth factor receptor 2, or HER-2, and carcinoembryonic antigen, or CEA. As a result of Merck reaching this milestone, Inovio received a payment of \$2.0 million. The Phase I trial is evaluating the safety, tolerability and immunogenicity of the vaccine.

In December 2007, Inovio received an additional \$2.0 million milestone payment from Merck, resulting from the filing of a second Investigational New Drug (IND) application to the Food and Drug Administration ("FDA") by Merck for a DNA-based vaccine using Inovio's DNA delivery technology. The milestone relates to Inovio's collaboration and license with Merck initiated in May 2004 for the development of certain DNA vaccines. Further development of the product may lead to additional milestone payments and royalties to Inovio. Inovio received this milestone payment for its contribution to the collaboration, which has so far demonstrated the high level of gene delivery and expression that is thought to be necessary for the induction of a therapeutic immune response. Merck has funded all clinical development costs of these candidates to date.

As of October, 2008, Merck had begun to enroll patients for this study, which is using a DNA vaccine encoding for hTERT to target non-small cell lung and prostate cancers. The vaccine is delivered using Inovio's electroporation DNA delivery technology.

Inovio reported in September, 2008, that in a preclinical study of a proprietary DNA-based therapeutic vaccine, in mice with metastatic melanoma treated with a DNA vaccine via intramuscular delivery, six of eight (75%) were tumor-free at the conclusion of the study.

Numerous cancer antigens have been identified over the past few decades and better identification tools are under development by others. Inovio will continue to evaluate opportunities to acquire or partner cancer antigens that may be useful in large market cancers such as breast, lung and prostate.

Infectious Diseases: DNA Vaccines

In January 2006, Inovio signed an agreement with Sweden-based Tripep to co-develop a therapeutic vaccine for hepatitis C virus (HCV) using electroporation. The vaccine is based on Tripep's proprietary HCV antigen construct and delivered to infected individuals using Inovio's MedPulser® DNA Delivery System. The study is being conducted at the Karolinska Institute's University Hospital in Sweden. The terms of the development agreement call for each party to fund a portion of the Phase I and subsequent Phase II trials and thereafter share profit according to their contribution. Inovio has 33% ownership in the overall product with the option to increase this to 50% after the completion of the Phase I/II trial.

In November, 2008, Inovio announced that Tripep had reported interim results indicating that in the third and highest dose cohort of the study, two of three subjects demonstrated reductions in viral load of 93% and 99.7%. This compares to previously reported middle dose cohort results demonstrating an 87% and 98% reduction in HCV in two of three subjects; no anti-viral effect was observed in the low dose cohort. No safety issues have been noted to date in the trial. These data suggest a potential dose response of the vaccine and support the inclusion of three additional subjects in the high dose cohort.

In November 2006, Inovio entered into a collaboration and license agreement with Wyeth to develop DNA vaccines against multiple infectious disease targets. For further discussion about this agreement, see "*Partnerships and Collaborations*" below. The selection of targets for its proprietary infectious disease program is driven by three key criteria: the complexity of the product development program, competition, and commercial opportunities.

Inovio reported in July, 2008, that in a preclinical study of a proprietary DNA-based therapeutic vaccine, 100% of immunized mice given a lethal challenge of highly pathogenic H5N1 influenza virus (A/Vietnam/1203/04) survived and showed only minor weight loss. The DNA vaccine design was based on a different influenza strain (H1N1) than the influenza strain used in the challenge, providing evidence that a universal vaccine based on conserved genes common to multiple strains of seasonal influenza and even potential pandemic influenza may have the possibility to provide widespread protection against such viruses.

DNA Vaccines for Biodefense

With the adoption of the Project Bioshield Act in 2004 by the U.S. government, there is an opportunity to secure development funding for proof-of-principle DNA vaccine studies for biowarfare pathogens. Inovio has been successful in securing funding from the U.S. government. Inovio believes DNA vaccines delivered with electroporation for bio-defense have the following advantages:

establishment of a platform technology that can be readily adapted for new threats;

ability to rapidly manufacture and scale-up vaccine candidates for newly identified pathogens;

rapid induction of protective immune responses following vaccination; and

long shelf life of products for stockpiling.

As resources obtained from government funding can be leveraged to enhance the development of technology in the area of cancer and chronic infectious disease, Inovio will continue to pursue opportunities in the area of biodefense. As an example of potential applications in the area of biodefense, one of Inovio's partners (RMR, LLC) is currently employing its skin electroporation technology in the pre-clinical development of an anthrax vaccine under a Department of Defense Small Business Innovation Research Program (SBIR) grant. Inovio currently has commercial rights to this skin electroporation system. The technology may also be useful with respect to targets such as the Lassa fever virus currently being studied by the U.S. Army in collaboration with Inovio (as further outlined under Partnerships and Collaborations below).

Gene Therapy

Over the past decade, classic gene therapy or treatment of inherited disorders has proven difficult. Electroporation of genes encoding therapeutic proteins has, however, demonstrated the potential to resolve these difficulties. In vivo production of proteins such as Factor IX for hemophilia and EPO for anemia represent large market opportunities. Pre-clinical studies for Inovio's partners have demonstrated multiple desirable characteristics of Inovio's approach, including:

Long term expression of the desired gene for convenient dosing;

Lack of immune responses to the plasmid vector;

Ability to achieve therapeutic levels of desired protein at a steady state; and

More natural production of the therapeutic protein than current recombinant proteins.

The major technical hurdle for use of Inovio's technology for classic gene therapy is the induction of an unwanted immune response to the transgene product due to the highly efficient delivery and expression seen with electroporation. As this problem may take significant resources to overcome, Inovio has decided not to focus on this market in the near term.

Animal Health/Veterinary

While Inovio is primarily focused on the use of Inovio's technology in the development of novel human therapeutics, it retains certain rights to veterinary applications and may seek to exploit these rights in the future.

Additional Applications of Inovio's DNA Delivery Technology

In addition to using Inovio's electroporation technology for drug and vaccine delivery, it can be used for research to validate new drug targets and to deliver molecules. Such use of Inovio's technology may facilitate transition into clinical development. Inovio continues to pursue, on a limited basis, research and opportunities in the areas of stem cells, ex vivo applications and RNAi.

Collaborations

In September 2008, Inovio announced it has received a contract for \$933,000 from the Department of Defense (US Army) to continue research and development of DNA-based vaccines delivered via its proprietary electroporation system. The contract, titled "Design and Engineering of the Elgen Gene Delivery System for Screening and Validation of Vaccine Candidates of Military Relevance," will run through May 2010. This project is focused on identifying DNA vaccine candidates with the potential to provide rapid, robust immunity to protect against bio-warfare and bioterror attacks.

In November 2006, Inovio entered into a collaboration and license agreement with Wyeth for a worldwide non-exclusive license to Inovio's technology for certain infectious disease targets, for which Inovio received an upfront payment of \$4.5 million. Inovio will also receive research support, annual maintenance fees, royalties on any net product sales and, contingent upon the achievement of clinical and regulatory milestones, payments of up to \$60.0 million over the term of the agreement.

Inovio may not receive any future payments from Wyeth and we believe Wyeth is evaluating internal strategic options prior to initiating further development of electroporation based infectious disease programs.

In October 2006, Inovio announced that it acquired from Valentis, Inc. certain DNA delivery and expression assets, including Valentis' DNAvax® polymer delivery system and GeneSwitch® gene regulation technology.

In July 2006, Inovio announced it extended its license with RMR Technologies, LLC ("RMR") by exercising an existing option to license certain patented technology relating to the delivery of gene-based therapeutics into skin. This extends a long-standing relationship with the University of South Florida scientists and RMR founders Drs. Heller (now Executive Director, Frank Reidy Research Center for Bioelectrics, Old Dominion University), Jaroszeski, and Gilbert. This relationship dates back to the co-development of Inovio's MedPulser® Electroporation Instrument for treatment of solid tumors, including head and neck cancers. RMR is the collective effort of three scientists in collaboration with the University of South Florida and the H. Lee Moffitt Cancer Center and Research Institute. The license included other patents involving the delivery of genes or drugs via ex vivo, intratumoral, and intramuscular electroporation. Recent pre-clinical studies suggest that, for certain indications, needle-less skin electroporation of DNA plasmids encoding selected antigens may also be effective at inducing desired immune responses. The patented technology licensed from RMR covers various skin electroporation electrode designs and methods, including a needle-less design using a flexible material. RMR has agreed to collaborate in an effort to develop research prototypes into commercial grade electrodes for skin delivery as well as other novel forms of electroporation-assisted DNA delivery. Inovio has agreed to provide RMR with other development expertise pertinent to projects such as RMR's SBIR-funded pre-clinical study using RMR's proprietary dermal electrodes to deliver a DNA vaccine against anthrax. In connection with the acquisition of this exclusive license, Inovio issued 86,956 shares of Inovio common stock at a price of \$2.30 per share, worth \$200,000 on the date of issuance.

Inovio also licensed from RMR patents that claim the intratumoral delivery method used in the ongoing clinical trial at the Moffitt Cancer Center & Research Institute, which is delivering the gene encoding IL-12 directly to melanoma lesions. RMR, Inovio, the University of South Florida and Moffitt Cancer Center have been collaborating in the development of this novel therapy for melanoma for the past two years.

In May 2006, Inovio announced the acquisition, under a license with Sphergen SARL, of rights to several patent families relating to the use of electroporation technology. The rights Inovio licensed included two patents with broad claims regarding electroporation of nucleic acids in muscle and tumor tissue. This intellectual property acquisition enhanced the breadth of Inovio's patent portfolio directed to the use of electroporation technology to deliver therapeutic biopharmaceuticals. The license also includes grants of rights to know-how, future improvements, and provisions for exclusivity in applications to human medicine.

In January 2006, Inovio signed a collaborative agreement with Tripep to co-develop a therapeutic hepatitis C virus (HCV) DNA vaccine using electroporation. Under the terms of this agreement, Inovio pledged certain electroporation equipment toward an ongoing Phase I/II study of the proprietary Tripep vaccine in exchange for a minimum of 33% of the licensing revenues or commercial income that might be derived from the vaccine. Under the terms of the agreement, Tripep will only commercialize the

electroporation-based vaccine with Inovio equipment. If Inovio decides not to continue to support the co-development, Inovio will retain a profit share of sub-licensing fees or commercial revenues going forward.

In May 2005, Inovio announced that Merck exercised an option for a non-exclusive license for an additional antigen to be used with Inovio's MedPulser® DNA Delivery System. This option exercise was provided for under the 2004 license and research collaboration agreement between Merck and Inovio, and brought the total number of antigens licensed by Merck to three. Inovio received an option fee for the additional target antigen. Under the terms of Inovio's licensing agreement with Merck, Inovio is eligible for milestone and royalty payments if certain development goals and commercialization of the device are achieved by Merck.

In April 2005, Inovio announced the initiation of a U.K. Medicines and Healthcare products Regulatory Agency (MHRA) approved Phase I/II clinical trial undertaken in collaboration with the University of Southampton. Inovio's electroporation technology is being used to deliver a therapeutic plasmid-based DNA vaccine to skeletal muscle with the aim of treating recurrent prostate cancer. The trial, sponsored and led by the University of Southampton, is investigating whether the DNA vaccine, developed at the University of Southampton, can stimulate patients to develop immune responses against prostate cancer and whether use of Inovio's electroporation system enhances this response.

In October 2004, Inovio announced an agreement with Vical wherein Vical licensed Inovio's DNA delivery technology for use with HIV, cytomegalovirus (CMV) and melanoma (using pDNA IL-2) targets. This agreement was based on an option agreement established with Vical in October of 2003 for a worldwide license for the use of Inovio's proprietary in vivo electroporation delivery technology in combination with Vical's proprietary vaccines.

In May 2004, Inovio announced a significant licensing deal with Merck for the development of Merck's DNA cancer and infectious disease vaccines. The terms of the agreement include milestone and royalty payments for successful completion of the clinical development of the vaccines by Merck. Under the terms of the agreement, Merck reimbursed Inovio for the co-development of a proprietary electroporation system for the delivery of Merck's DNA vaccines. This development and commercialization agreement was an extension of an initial evaluation agreement established in 2003. Merck received the right to use Inovio's proprietary technology for two specific antigens with an option to extend the agreement to include a limited number of additional target antigens. In addition, Merck obtained a non-exclusive license to the intellectual property related to the initial two specific antigens. Merck is responsible for all development costs and clinical programs.

The research carried out under the above agreements may result in new long-term license agreements with the other parties and may provide Inovio with additional data that Inovio believes will assist it in assessing the efficacy of using its MedPulser® DNA Electroporation System for delivery of DNA vaccines and gene therapies. The data should further assist Inovio in its licensing and commercialization efforts. In addition to the above collaboration and licensing arrangements, Inovio may develop proprietary DNA therapeutic product through early stage clinical trials and partner the product for late stage clinical development and marketing. Inovio may have to negotiate license(s) for genes or other components of the product if they are not in the public domain.

Market

Inovio's product development strategy is focused on pursuing significant product opportunities where Inovio's technology is considered enabling. During 2007, Inovio prioritized its efforts after assessing different market opportunities based on an evaluation of technology risk, market size and partner interest in DNA vaccines. Based on Inovio management's assessment of the market opportunities, oncology applications appear to represent the best market opportunities, followed by



applications for infectious diseases, gene therapy for protein deficiency diseases and biodefense DNA vaccines.

Inovio believes there is a significant unmet clinical need to develop more efficacious vaccines that stimulate cellular immunity (i.e. can induce T-cell responses) and can be applied to diseases such as cancer, hepatitis C or HIV infection. For these applications, Inovio's scientists believe that DNA vaccines may offer an improvement over conventional vaccination. Inovio's scientists believe that electroporation of DNA is critical to maximizing the efficiency of DNA vaccination and meeting unmet clinical needs for therapeutic vaccines, which some industry analysts consider to be a multi-billion dollar market opportunity.

Competition

Although there are many competing technologies for DNA delivery, Inovio believes electroporation has a unique strategic position compared to such technologies for the following reasons:

Minimal or no delivery related side effects, and

Enhances DNA vaccine potency.

Minimal or No Delivery Related Side Effects

Any company that is developing a DNA based delivery technology, such as viral delivery systems, lipid-based systems, or electroporation technology with an aim to carry out in vivo gene delivery for the treatment of various diseases, is a potential competitor of Inovio. Currently there are five key DNA delivery technologies: viral, lipids, naked DNA, "gene gun" and electroporation. All are promising technologies, but they each also have their unique obstacles to overcome. Management believes Inovio's electroporation system is strongly positioned to succeed as the dominant delivery method for DNA vaccines.

Viral vectors can be highly effective, however, there continue to be concerns regarding potential mutations, unwanted immune responses against the vector itself (preventing its use for re-administration or booster shots) and other side effects. Viral technology has yet to show predictable, consistent safety and is very expensive. Lipids can be effective, but may also have toxicity issues and are relatively expensive. Naked DNA is widely considered to be safe and is relatively inexpensive, but is not very effective. The gene gun technology (using gold particles as carriers of DNA for skin delivery) looks promising, however, there are data suggesting that electroporation offers equal or better efficacy and may offer broader utility without requiring a carrier. Not requiring a carrier allows electroporation to have a unique advantage over competing technologies because it eliminates one additional component that may independently propagate side effects and create manufacturing and quality control challenges.

Competitive advantages of electroporation over other delivery systems are summarized on Table 1 below:

Carrier/Vector Type	Carrier/Vector Issues	Efficacy	Economics
Viral	Mutations Immune	+++++	\$\$\$\$\$
	Response Infection		
	Symptoms		
Lipids	Toxicity	++	\$\$
Particle Gun	Manufacturability	++++	\$\$\$
Naked DNA	No Vector	+	\$
(Electroporation Enhanced)	No Vector	++++	\$

Table 1: Present comparison of DNA Delivery technologies

Enabling DNA vaccines

Commercial and academic institutions have been trying for over 15 years to develop DNA vaccines with sufficiently potent immune responses to make them commercially viable without much success. One facet of DNA vaccine research and development ("R&D") has been to combine an adjuvant component to help initiate a general immune response to complement the specific immune response induced by the DNA vaccine, but adjuvants complicate manufacturing and may generate additional unwanted side effects.

In addition to being a highly efficient delivery method of plasmid to muscle cells, Inovio has shown that the mild electrical pulses of electroporation also have an adjuvant effect. This adjuvant effect seems to be related to more CpG-containing plasmid gaining access to intracellular toll-like receptors, which stimulate innate immune responses, and to slight muscle damage, which can lead to a danger signal to the immune system(1). To date, few, if any, common adjuvants seem to be required to augment immune responses observed after DNA vaccine delivery with electroporation.

(1)

Babiuk, S. et al., 2004, Increased gene expression and inflammatory cell infiltration caused by electroporation are both important for improving the efficacy of DNA vaccines. J. Biotech. 110:1

General observations to date suggest that for many DNA encoded antigens there has to be an increase in gene expression of 10-100-fold (compared to naked DNA) in order to achieve a therapeutic benefit in large animals including man. Electroporation is currently the only method whereby one can routinely see increases in gene expression approaching or exceeding 100 to 1000 fold, thereby making the development of a large number of vaccines and therapeutics possible. In effect, electroporation increases the trivial levels of gene expression seen with naked DNA alone to the therapeutic levels needed for the development of successful commercial products. This puts Inovio in a unique position relative to competing technologies.

Competitive Technologies in the Area of DNA Delivery

Effective DNA delivery technologies are crucial for DNA vaccines. Many of the leading scientists in these fields have pointed out that the major obstacle to success has been the lack of safe, efficient, and economical methods of delivering DNA. Of the more than 800 gene therapy and DNA vaccine clinical trials started in the U.S. to date, none have progressed to regulatory approval. Inovio believes that existing DNA delivery alternatives have been a significant bottleneck to the successful development and commercialization of these promising next generation of vaccines. The following descriptions highlight the issues of the existing alternatives.

Viral DNA Delivery

This technology utilizes a virus as a carrier to deliver genetic material into target cells. The method is very efficient for delivering vaccine antigens and has the advantage of mimicking real viral infection so that the recipient will mount a broad immune response against the vaccine. The greatest limitation of the technology is problems with unwanted immune responses against the viral vector, limiting its use to patients who have not been previously exposed to the viral vector and making repeated administration difficult. In addition, complexity and safety concerns increase the cost of vaccines and complicate regulatory approval.

Ballistic DNA Delivery (Gene Gun)

This technology utilizes micron sized DNA-coated gold particles that are shot into the skin using compressed gas. The method has matured considerably over the last 15 years and has been shown to be an efficient method to deliver a number of vaccine antigens. Since the DNA is dry coated, excellent stability of the vaccine can be achieved. The method is limited to use in skin and only a few micrograms of genetic material can be delivered each time. This may limit the utility of the method for targets such as cancer where higher doses of vaccine antigens and stronger T-cell responses are needed.

Lipid DNA Delivery

A number of lipid formulations have been developed that increase the effect of DNA vaccines. These work by either increasing uptake of the DNA into cells or by acting as an adjuvant, alerting the immune system. While there has been steady progress in this field, lipid delivery tends to be less efficient than viral vectors and is hampered by concerns regarding toxicity and increased complexity.

"Naked" DNA Delivery

The simplest DNA delivery mode is the injection of "naked" plasmid DNA into target tissue, usually skeletal muscle. This method is safe and economical but inefficient in terms of cell transfection, the process of transferring DNA into a cell across the outer cell membrane. Unfortunately, it is the least effective way of delivering DNA since only an extremely small fraction (approximately one out of twenty million) of the DNA molecules are taken up by the cells. While the method may have provided some utility for the field of gene therapy, a number of clinical studies over the last decade have shown that the method is inadequate for delivering DNA vaccines into large animals and humans.

"Naked" DNA Delivery With Electroporation

When naked DNA injection is followed by electroporation of the target tissue, transfection is significantly greater with resultant gene expression generally enhanced from 100 to 1000-fold. This increase makes many DNA vaccine candidates potentially feasible without unduly compromising safety or cost.

In December 2004, the first patient was treated using Inovio's electroporation system to deliver a plasmid DNA-based immunotherapy and Inovio has initiated, together with partners, additional Phase I clinical trials using Inovio's electroporation technology to deliver DNA-based immunotherapies or DNA vaccines. To date Inovio scientists have not observed any serious adverse events that can be attributed to the use of electroporation in these clinical DNA studies.

Inovio believes that the greatest obstacle to making DNA vaccines and immunotherapy a reality, namely the safe, efficient, and economical delivery of DNA plasmid constructs into target cells, and also believes that electroporation may become the method of choice for DNA delivery into cells in many applications.

There are other companies with electroporation intellectual property and devices. Inovio believes it has significant competitive advantages over other companies focused on electroporation for multiple reasons:

Inovio has a long history and experience in developing the methods and devices that will optimize the use of electroporation in conjunction with DNA-based agents. This extensive experience has been validated with multiple sets of interim data from multiple clinical studies assessing DNA-based immunotherapies against cancers and infectious disease. Inovio, in conjunction with its partners and collaborators, has been the leader in establishing proof-of-principle of electroporation-delivered DNA vaccines and immunotherapies.

The company has a broad product line of electroporation instruments designed to enable DNA delivery in tumors, muscle, and skin.

Inovio has been very proactive in filing for patents, as well as acquiring and licensing additional patents, to expand and strengthen Inovio's international patent estate. Inovio has, as discussed below under Intellectual Property, the leading number of patents pertaining to electroporation. Inovio's patent estate has been rigorously assessed by leading vaccine companies Merck and Wyeth prior to them consummating substantial license agreements with Inovio.

While other companies have and continue to develop electroporation devices and possess certain patents relating to the use of electroporation, Inovio believes it has a strongly researched position and that its patent estate provides it with the potential to block competition in key areas of focus.

Medical Device Manufacturing

Inovio is a medical device manufacturer and, as such, operates in a regulated industry. Inovio must comply with a variety of manufacturing, product development and quality regulations in order to be able to distribute Inovio's products commercially around the world. In Europe, Inovio must comply with the MDD. Inovio has a Quality System certified by its international Notified Body to be in compliance with the international Quality System Standard, ISO13485, and meeting the Annex II Quality System requirements of the MDD. Inovio completed an Annex II Conformity Assessment procedure and achieved its CE Mark of the MedPulser® electroporation system in March 1999. Inovio completed an Annex II Conformity Assessment procedure and achieved its CE Mark of the Elgen electroporation system in November 2006.

In the U.S., Inovio is required to maintain facilities, equipment, processes and procedures that are in compliance with quality systems regulations. Inovio's systems have been constructed to be in compliance with these regulations and its ongoing operations are conducted within these systems. Commercially distributed devices within the U.S. must be developed under formal design controls and be submitted to the FDA for clearance or approval. As Inovio prepares for U.S. marketing, all development activity is performed according to formal procedures to ensure compliance with all design control regulations.

Inovio employs modern manufacturing methods and controls to optimize performance and control costs. Internal capabilities and core competencies are strategically determined to optimize Inovio's manufacturing efficiency. Inovio utilizes contract manufacturers for key operations, such as clean room assembly and sterilization, which are not economically conducted in-house. Inovio outsources significant sub-assemblies, such as populated printed circuit boards, for which capital requirements or manufacturing volumes do not justify vertical integration. As Inovio transitions from late-stage development activities into higher volume manufacturing activities, internal capabilities will be modified and added, as appropriate, to meet its changing priorities.

Currently, the durable electronic generator in the MedPulser® and Elgen system is assembled from outsourced populated printed circuit boards, and then tested, packaged and inventoried at

Inovio's manufacturing facility. The disposable applicators used with the MedPulser® system are assembled and sterilized in a clean room at outside contract manufacturers. Additional current and future manufacturing of applicators for clinical trials and commercial distribution is planned to be done using a combination of internal manufacturing and outside contract manufacture.

Intellectual Property

Inovio's success and ability to compete depends upon its intellectual property. Inovio maintains a broad-based patent portfolio (both original and in-licensed technologies) that as of December 5, 2008, includes over 62 issued U.S. patents and 181 issued foreign counterpart patents, all of which collectively include claims to methods and/or devices for clinical use in the electroporation medical arts. Specifically, patented subject matter, as well as subject matter pending in the U.S. and foreign patent offices, includes method and device claims for delivering by electroporation medically important substances to the interior of cells in various body tissues such as a patient's muscle, skin, and other organs.

Inovio's core technology is centered on five broad, medically relevant "indication" categories including oncology, gene therapy/delivery (including vaccination with expressible vectors), vascular administration (e.g. by catheter), transdermal administration (including delivery of substances for cancer, gene therapy, and cosmetic applications), and ex vivo administration (e.g. by electroporation of cells outside the body and introducing the created cells to the patient).

Supporting Inovio's primary business focus, its intellectual property in gene therapy and DNA delivery enjoys a broad scope of patent protection, such as found in U.S. patent numbers 5,273,525 and in-licensed patents 6,110,161, 6,261,281, 6,610,044, 6,958,060 and 6,939,862, which include claims reciting methods and apparatus for implanting macromolecules (e.g. DNA and pharmaceutical compounds) into selected tissues of a patient by electroporation. U.S. patent number 6,763,264, with claims reciting methods of delivering expression vectors and molecules, and U.S. patent number 6,697,669, with claims reciting methods of in vivo electroporation of skin and muscle, provide broad-based coverage to the company. Other of Inovio's patents protect its proprietary methodology of electroporation wherein the electroporation process is carried out using "opposed-paired" electric field pulsing. Such patents include, and are not limited to, U.S. patent numbers 6,241,701, 6,120,493, 6,233,482, and 5,702,359C1. It is important to understand that patents having claims directed to methods of delivering substances to tissues using electroporation and devices for such methods, are generally applicable to DNA delivery and oncological applications.

With respect to oncology, U.S. patent number 6,569,149 provides broad claim coverage directed to a method for the application of electric fields to a tissue of a patient having a "cell proliferation disorder" for the purpose of introducing molecules into cells of the tissue to treat the cell proliferation disorder. Such method comprises providing an array of multiple opposed pairs of electrodes connected to a generator, wherein at least two pairs of electrodes, after being placed in selected tissue along with the substance being electroporated, are activated simultaneously with electric pulses. Likewise, in-licensed patent 6,528,315 claims methods of electroporation of DNA to tumor cells in a broad manner.

Inovio has a number of issued U.S. and foreign patents claiming a widely used gene regulation technology called GeneSwitch® that permits control of gene expression from DNA sequences via a small molecule that can be administered orally. For example, U.S. patents 5,364,791 and 6,599,698 claim various aspects of this unique regulation system that may be used in gene therapy products. In addition to electroporation technology for gene delivery, the company also acquired a group of patents claiming the delivery of DNA using polymers (e.g., 6,040,295 and 6,514,947) and lipids (e.g., 6,387,395 and 6,235,310) that are useful in the development of certain DNA vaccines.

Inovio's patent portfolio is also active with respect to vascular, transdermal, and ex vivo applications of electroporation technology. For example, U.S. patent 5,704,908 includes claims directed to an electroporation balloon catheter. Additionally, U.S. patent 6,342,247 is directed to methods of increasing vasodilation, an important indication in maintaining blood flow in certain patients with vessel occlusion problems. U.S. patents 6,697,669, 6,654,636, 5,810,762, and 5,439,440 provide claims to transdermal application of electric fields to surface tissues, while U.S. patents 6,027,488, 6,746,441, 6,800,484, and 6,150,148 include claims to electroporation of cells in vitro. Such electroporated cells could be used either in laboratory settings or for introduction into patient blood stream or other tissues.

Of further importance to Inovio, the currently issued patents provide a strong base for the claimed subject matter for the various indications to at least the year 2017 and numerous claims will be in force to between 2018 and 2020.

Corporate History and Headquarters

Inovio was originally incorporated on June 29, 1983, under the laws of California as Biotechnologies & Experimental Research, Inc. On December 10, 1991, the entity changed its corporate name to BTX, Inc. and again on February 8, 1994 changed it to Genetronics, Inc. On April 14, 1994, the board of directors approved a share exchange agreement with Consolidated United Safety Technologies Inc. On September 2, 1997, the company listed on the Toronto Stock Exchange ("TSE") as Genetronics Biomedical Ltd, under the laws of British Columbia, Canada, which wholly-owned Genetronics, Inc. On June 15, 2001, the entity completed a change in jurisdiction of incorporation from British Columbia, Canada, to the state of Delaware. This change was accomplished through a continuation of Genetronics Biomedical Ltd. into Genetronics Biomedical Corporation, a Delaware corporation. On January 17, 2003, Genetronics voluntarily de-listed from the TSE, where Inovio's common stock had been listed since September 2, 1997. On March 31, 2005, the corporate name changed from Genetronics Biomedical Corporation. Inovio conducts its business through its U.S. wholly-owned subsidiary, Genetronics, Inc., a Norwegian wholly-owned subsidiary, Inovio AS, and a wholly-owned subsidiary in the Republic of Singapore, Inovio Asia Pte. Ltd., which may be a platform for future research and development efforts.

Inovio's principal executive offices are located at 11494 Sorrento Valley Road, San Diego, California 92121-1318, and the telephone number is (858) 597-6006.

Employees

As of April 14, 2009, Inovio employed 22 people on a full-time basis and 5 people under consulting and project employment agreements. Of the combined total, 15 were in product research, which includes research and development, quality assurance, clinical, engineering, and manufacturing, and 12 were in general and administrative, which includes corporate development, information technology, legal, investor relations, finance, and corporate administration. None of Inovio's employees are subject to collective bargaining agreements. Inovio considers its employee relations to be good.

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of financial condition and results of operations should be read in conjunction with the Inovio Consolidated Financial Statements and Notes thereto derived from the December 31, 2008 Annual Report on Form 10-K, which statements are included elsewhere in this joint proxy statement/prospectus.

This discussion and analysis contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with regards to Inovio's revenue, spending, cash flow, products, actions, plans, strategies and objectives. Forward-looking statements include, without

limitation, any statement that may predict, forecast, indicate or simply state future results, performance or achievements, and may contain the words "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will continue," "will result," "could," "should," "would," "may," "might," or any variations of such words with similar meanings. Any such statements are subject to risks and uncertainties that could cause Inovio's actual results to differ materially from those which are Inovio's management's current expectations or forecasts. Such information is subject to the risk that such expectations or forecasts, or the assumptions underlying such expectations or forecasts, become inaccurate. Such risks and uncertainties are disclosed from time to time in Inovio's reports and such risks and uncertainties are further discussed in this joint proxy statement/prospectus under "Risk Factors" beginning on page 26.

Critical Accounting Policies

The SEC defines critical accounting policies as those that are, in management's view, important to the portrayal of our financial condition and results of operations and require management's judgment. Our discussion and analysis of our financial condition and results of operations is based on our audited consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. We base our estimates on experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from those estimates. Our critical accounting policies include:

Revenue Recognition. Revenue is recognized in accordance with Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition in Financial Statements*, and EITF Issue 00-21, *Revenue Arrangements with Multiple Deliverables*.

License fees are comprised of initial fees and milestone payments derived from collaborative licensing arrangements. We continue to recognize non-refundable milestone payments upon the achievement of specified milestones upon which we have earned the milestone payment, provided the milestone payment is substantive in nature and the achievement of the milestone was not reasonably assured at the inception of the agreement. We defer payments for milestone events which are reasonably assured and recognize them ratably over the minimum remaining period of our performance obligations. Payments for milestones which are not reasonably assured are treated as the culmination of a separate earnings process and are recognized as revenue when the milestones are achieved.

We have adopted a strategy of co-developing or licensing our gene delivery technology for specific genes or specific medical indications. Accordingly, we have entered into collaborative research and development agreements and have received funding for pre-clinical research and clinical trials. Payments under these agreements, which are non-refundable, are recorded as revenue as the related research expenditures are incurred pursuant to the terms of the agreements and provided collectibility is reasonably assured.

We receive non-refundable grants under available government programs. Government grants towards current expenditures are recorded as revenue when there is reasonable assurance that we have complied with all conditions necessary to receive the grants, collectibility is reasonably assured, and as the expenditures are incurred.

Research and development expenses. Since our inception, virtually all of our activities have consisted of research and development efforts related to developing our electroporation technologies. Research and development expenses consist of expenses incurred in performing research and development activities including salaries and benefits, facilities and other overhead expenses, clinical trials, contract services and other outside expenses. Research and development expenses are charged to operations as they are incurred. We review and accrue clinical trials expense based on work performed,

which relies on estimates of total costs incurred based on patient enrollment, completion of studies and other events.

Valuation of Goodwill and Intangible Assets. Our business acquisitions typically result in goodwill and other intangible assets, and the recorded values of those assets may become impaired in the future. Acquired intangible assets are still being developed for the future economic viability contemplated at the time of acquisition. We are concurrently conducting Phase I and pre-clinical trials using the acquired intangibles, and we have entered into certain significant licensing agreements for use of these acquired intangibles.

We record patents at cost and amortize these costs using the straight-line method over the expected useful lives of the patents or 17 years, whichever is less. Patent cost consists of the consideration paid for patents and related legal costs. License costs are recorded based on the fair value of consideration paid and amortized using the straight-line method over the shorter of the expected useful life of the underlying patents or the term of the related license agreement. As of December 31, 2008, our goodwill and intangible assets resulting from acquisition costs of Inovio AS, and additional intangibles including patents and license costs, net of accumulated amortization, totaled \$9.8 million.

The determination of the value of such intangible assets requires management to make estimates and assumptions that affect our consolidated financial statements. We assess potential impairments to intangible assets when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recovered. Our judgments regarding the existence of impairment indicators and future cash flows related to intangible assets are based on operational performance of our acquired businesses, market conditions and other factors. If impairment is indicated, we reduce the carrying value of the intangible asset to fair value. While our current and historical operating and cash flow losses are potential indicators of impairment, we believe the future cash flows to be received from our intangible assets will exceed the intangible assets' carrying value, and accordingly, we have not recognized any impairment losses through December 31, 2008.

Although there are inherent uncertainties in this assessment process, the estimates and assumptions we use are consistent with our internal planning. If these estimates or their related assumptions change in the future, we may be required to record an impairment charge on all or a portion of our goodwill and intangible assets. Furthermore, we cannot predict the occurrence of future impairment-triggering events nor the impact such events might have on our reported asset values. Future events could cause us to conclude that impairment indicators exist and that goodwill or other intangible assets associated with our acquired businesses are impaired. Any resulting impairment loss could have an adverse impact on our results of operations.

Stock-based Compensation. Stock-based compensation cost is estimated at the grant date based on the fair-value of the award and is recognized as an expense ratably over the requisite service period of the award. Determining the appropriate fair-value model and calculating the fair value of stock-based awards at the grant date requires considerable judgment, including estimating stock price volatility, expected option life and forfeiture rates. We develop our estimates based on historical data. If factors change and we employ different assumptions in future periods, the compensation expense that we record may differ significantly from what we have recorded in the current period. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-Scholes pricing model to value stock option awards. We recognize compensation expense using the straight-line amortization method.

Auction Rate Securities and Auction Rate Securities Rights. We account for Auction Rate Securities ("ARS") under FAS 115, Accounting for Certain Investments in Debt and Equity Securities, and FAS 157, Fair Value Measurements. We account for ARS Rights in accordance with SFAS No. 159, The Fair Value

Option for Financial Assets and Financial Liabilities Including an amendment to FASB Statement No. 115. Our investments in ARS and our ARS Rights are recorded at their estimated fair value as there is currently no liquid market which indicates value. We have used a discounted cash flow model to determine the estimated fair value of our investment in ARS and our ARS Rights as of December 31, 2008. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, timing and amount of cash flows and expected holding period of the ARS and ARS Rights. Changes in the estimated fair value of the ARS and ARS Rights are reflected in the consolidated statement of operations as "Other income, net."

Registered Common Stock Warrants. We account for registered common stock warrants in accordance with EITF Issue 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock,* on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. We classify registered warrants on the consolidated balance sheet as a current liability which is revalued at each balance sheet date subsequent to the initial issuance in October 2006 and August 2007. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment, including estimating stock price volatility and expected warrant life. We develop our estimates based on historical data. A small change in the estimates used may have a relatively large change in the estimated valuation. We use the Black-Scholes pricing model to value the registered warrants. Changes in the fair market value of the warrants are reflected in the consolidated statement of operations as "Other income, net."

Recent Accounting Pronouncements

Information regarding recent accounting pronouncements is contained in Note 3 to the Consolidated Financial Statements, included elsewhere in this report.

Results of Operations

Comparison of Years Ended December 31, 2008 and 2007

The audited consolidated financial data for the years ended December 31, 2008 and December 31, 2007 is presented in the following table and the results of these two periods are used in the discussion thereafter.

	December 31, 2008	December 31, 2007	Increase/ (Decrease) \$	Increase/ (Decrease) %
Revenue:				
License fee and milestone payments	\$ 791,401	\$ 2,793,478	\$(2,002,077)	(72)%
Revenue under collaborative research and				
development arrangements	1,077,967	1,854,303	(776,336)	(42)
Grants and miscellaneous revenue	228,264	159,948	68,316	43
Total revenue	2,097,632	4,807,729	(2,710,097)	(56)
Operating expenses:				
Research and development	5,750,494	9,625,947	(3,875,453)	(40)
General and administrative	10,005,602	11,080,202	(1,074,600)	(10)
Total operating expenses	15,756,096	20,706,149	(4,950,053)	(24)
Loss from operations	(13,658,464)	(15,898,420)	(2,239,956)	(14)
Other income, net	49,006	3,421,580	(3,372,574)	(99)
Interest income, net	643,836	1,272,397	(628,561)	(49)
Net loss	(12,965,622)	(11,204,443)	1,761,179	16
Imputed and declared dividends on preferred stock		(23,335)	23,335	100
Net loss attributable to common stockholders	\$(12,965,622)	\$(11,227,778)	\$ 1,737,844	15%

Revenue

Our revenue consists of license fees, milestone payments, and amounts received from collaborative research and development arrangements and grants.

Our total revenue decreased \$2.7 million or 56% for the year ended December 31, 2008, as compared to fiscal 2007 due to decreases in milestone payments and revenue under collaborative research and development arrangements, offset partially by an increase in grants and other revenue.

The \$2.0 million decrease in license fees and milestone payments for the year ended December 31, 2008, as compared to fiscal 2007 was primarily due to the recognition of a \$2.0 million milestone payment during fiscal 2007, resulting from the achievement of a clinical milestone by Merck for the filing of an investigational new drug application for the second Merck product in a major market. Under our agreement with Merck, we may receive additional future milestone payments linked to the successful development of a product. Revenue from various other license agreements remained consistent during the year ended December 31, 2008 and 2007.

The \$776,000 decrease in revenue under collaborative research and development arrangements during the year ended December 31, 2008, as compared to the 2007 fiscal year, was due to an \$368,000 decrease in Wyeth billings based on our collaborative agreement related to the commercialization of the Elgen device, and \$408,000 in lower Merck collaborative research billings during 2008 as compared to 2007. Billings from research and development work performed pursuant to the Wyeth and Merck agreements are recorded as revenue as the related research expenditures are incurred. Revenues from

collaborative research and development arrangements are expected to decline in 2009, as Wyeth continues to evaluate internal strategic options prior to initiating further development of electroporation-based infectious disease programs. Under our research and collaboration agreement with Merck, we have provided the majority of the required device development for use in their clinical trials. Development activities for Merck will be limited until trial results are obtained.

The \$68,000 increase in grant and miscellaneous revenue was due to more revenue recognized from U.S. Army grants during fiscal 2008 as compared to fiscal 2007. On September 26, 2008, we received a new contract for \$933,000 from the Department of Defense (U.S. Army) to continue research and development of DNA-based vaccines delivered via our proprietary electroporation system. The contract, titled "Design and Engineering of the Elgen Gene Delivery System for Screening and Validation of Vaccine Candidates of Military Relevance," will run through May 2010. This project is focused on identifying DNA vaccine candidates with the potential to provide rapid, robust immunity to protect against bio-warfare and bioterror attacks.

During the years ended December 31, 2008 and 2007, we recognized revenue of \$135,000 and \$159,000, respectively, attributable to the operations of Inovio AS, which amounted to approximately 6% and 3% of our total revenue. Inovio AS' revenue primarily consists of amounts received from grants and licensing revenue.

Research and Development Expenses

The \$3.9 million decrease in research and development expenses for the year ended December 31, 2008, as compared to fiscal 2007, was primarily due to a decrease in clinical trial expenses associated with patient enrollment, clinical site costs, data collection and monitoring costs related to the discontinuation of the SECTA clinical trials. Additional decreases are associated with less consulting and advisory services received, offset by higher labor and other development costs associated with the expansion of our in-house engineering and research expertise. Research and development expenses attributable to Inovio AS were \$751,000 and \$697,000 for the years ended December 31, 2008 and 2007, respectively.

Our research and development activities reflect our efforts to advance our products through the various stages of product development. The expenditures that will be necessary to execute our development plans are subject to numerous uncertainties, which may affect our research and development expenditures and capital resources. Even if earlier results are positive, we may obtain different results in later stages of development, which could impact our development expenditures for a particular product. Although we spend a considerable amount of time planning our development activities, we may be required to alter our plan based on new circumstances or events. Any deviation from our plan may require us to incur additional expenditures or accelerate or delay the timing of our development spending.

General and Administrative Expenses

General and administrative expenses include business development expenses and the amortization of intangible assets. The \$1.1 million decrease in general and administrative expenses for the year ended December 31, 2008, as compared to fiscal 2007, was primarily due to a decrease in outside consulting and advisory services related to partnering our SECTA therapy program as well as a decrease in personnel costs and employee stock-based compensation expense, offset by increased legal fees related to the execution of the definitive merger agreement with VGX as well as other corporate matters. General and administrative costs attributable to Inovio AS were \$150,000 and \$84,000 for the years ended December 31, 2008 and 2007, respectively.

Stock-based Compensation.

Stock-based compensation cost is measured at the grant date, based on the fair value of the award reduced by estimated forfeitures, and is recognized as expense over the employee's requisite service period. Total compensation cost under SFAS No. 123(R) for our stock plans for the years ended December 31, 2008 and 2007 was \$1.0 million and \$1.6 million, of which \$286,000 and \$354,000 was included in research and development expenses and \$746,000 and \$1.2 million was included in general and administrative expenses, respectively. At December 31, 2008, there was \$752,000 of total unrecognized compensation cost, related to unvested stock options, which we expect to recognize over a weighted-average period of one year, as compared to \$1.3 million for the year ended December 31, 2007. Total stock-based compensation for options granted to non-employees for the years ended December 31, 2008 and 2007 was \$58,000 and \$119,000, respectively.

Other Income/(Expense)

We recorded other income (expense) for the years ended December 31, 2008 and 2007 of \$49,000 and \$3.4 million, respectively. The decrease in other income (expense) is primarily due to the revaluation of registered common stock warrants issued by us in October 2006 and August 2007. We are required to revalue the warrants at each balance sheet date to fair value. If unexercised, the warrants will expire in October 2011 and August 2012, respectively.

Interest Income/(Expense)

Interest income (expense) for the years ended December 31, 2008 and 2007 was \$644,000 and \$1.3 million, respectively. The decrease in interest and other income for fiscal 2008, as compared to fiscal 2007, was primarily due to a lower cash and investments balance and lower average interest rate.

Imputed and Declared Dividends on Preferred Stock

The holders of our Series C Preferred Stock were entitled to receive an annual dividend at a rate of 6%, in shares of common stock or cash, payable quarterly, through May 20, 2007. As part of this dividend, we paid cash of \$23,000 during fiscal 2007 to holders of our Series C Preferred Stock. No dividends were paid to holders of our Series C Preferred Stock during the year ended December 31, 2008.

Income Taxes

Since inception, we have incurred operating losses and accordingly have not recorded a provision for income taxes for any of the periods presented. As of December 31, 2008, we had net operating loss carry forwards for federal and state income tax purposes of approximately \$59.4 million and \$58.0 million, respectively. We also had federal and state research and development tax credits of approximately \$1.2 million and \$1.5 million, respectively. If not utilized, the net operating losses and credits will begin to expire in 2013. Utilization of net operating losses and credits are subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986, as amended.

Comparison of Years Ended December 31, 2007 and 2006

The audited consolidated financial data for the years ended December 31, 2007 and December 31, 2006 is presented in the following table and the results of these two periods are used in the discussion thereafter.

	December 31, 2007	December 31, 2006	Increase/ (Decrease) \$	Increase/ (Decrease) %
Revenue:				
License fee and milestone payments	\$ 2,793,478	\$ 1,337,105	\$ 1,456,373	109%
Revenue under collaborative research and				
development arrangements	1,854,303	962,207	892,096	93
Grants and miscellaneous revenue	159,948	1,168,866	(1,008,918)	(86)
Total revenue	4,807,729	3,468,178	1,339,551	39
Operating expenses:				
Research and development	9,625,947	8,509,785	1,116,162	13
General and administrative	11,080,202	8,304,587	2,775,615	33
Total operating expenses	20,706,149	16,814,372	3,891,777	23
Loss from operations	(15,898,420)	(13,346,194)	2,552,226	19
Other income, net	3,421,580	320,706	3,100,874	967
Interest income, net	1,272,397	681,546	590,851	87
Net loss	(11,204,443)	(12,343,942)	(1,139,499)	(9)
Imputed and declared dividends on preferred stock	(23,335)	(2,005,664)	(1,982,329)	(99)
Net loss attributable to common stockholders	\$(11,227,778)	\$(14,349,606)	\$(3,121,828)	(22)%

Revenue

Our revenue consists of license fees, milestone payments, and amounts received from collaborative research and development arrangements and grants.

Our total revenue increased \$1.3 million or 39% for the year ended December 31, 2007, as compared to fiscal 2006 due to significant increases in license fees, milestone payments and revenue under collaborative research and development arrangements, offset partially by a large decrease in grant revenue.

The \$1.5 million increase in license fees and milestone payments for the year ended December 31, 2007, as compared to fiscal 2006 was primarily due to the recognition of a \$2.0 million milestone payment during fiscal 2007, resulting from the achievement of a clinical milestone by Merck for the filing of an investigational new drug application for the second Merck product in a major market. Under our agreement with Merck, we may receive additional future milestone payments linked to the successful development of a product. We also recognized \$175,000 in higher Wyeth license fee revenue in fiscal 2007 as compared to fiscal 2006, and acquired license agreements to our GeneSwitch® technology resulting in increased revenue of \$130,000 during fiscal 2007. These increases were partially offset by no Valentis license fee revenue during fiscal 2006, and decreased revenue of \$344,000 from the Merck licensing agreement in 2007 as this agreement was fully amortized in May 2007.

The \$892,000 increase in revenue under collaborative research and development arrangements during the year ended December 31, 2007, as compared to the 2006 fiscal year, was due to an \$814,000

increase in Wyeth billings based on our collaborative agreement related to the commercialization of the Elgen device, and \$78,000 in higher Merck collaborative research billings during 2007 as compared to 2006. Billings from research and development work performed pursuant to the Wyeth and Merck agreements are recorded as revenue as the related research expenditures are incurred.

The \$1.0 million decrease in grant and miscellaneous revenue was due to minimal revenue recognized from U.S. Army grants during fiscal 2007 as compared to \$899,000 during fiscal 2006 and a reduction in revenue recognized by Inovio AS from our European Union grant due to the timing of work performed.

During the years ended December 31, 2007 and 2006, we recognized revenue of \$159,000 and \$1.1 million, respectively, attributable to the operations of Inovio AS, a Norwegian company that we acquired in January 2005, which amounted to approximately 3% and 33% of our total revenue. Inovio AS' revenue primarily consists of amounts received from grants and licensing revenue.

Research and Development Expenses

The \$1.1 million increase in research and development expenses for the year ended December 31, 2007, as compared to fiscal 2006, was primarily due to an increase in clinical trial expenses associated with patient enrollment, clinical site costs, data collection and monitoring costs, and increased costs related to the use of Clinical Research Organization ("CROs") and Clinical Research Associates ("CRAs") related to our SECTA therapy program. Additional increases are associated with the expansion of our in-house engineering and research expertise, increased consulting services, increased lab supplies related to our existing and next generation programs, increased outside lab testing performed, and expensed inventory costs. These increases were partially offset by a \$672,000 decrease in expenses attributable to Inovio AS totaling \$697,000 and \$1.4 million during the years ended December 31, 2007 and 2006, respectively.

Our research and development activities reflect our efforts to advance our products through the various stages of product development. The expenditures that will be necessary to execute our development plans are subject to numerous uncertainties, which may affect our research and development expenditures and capital resources. Even if earlier results are positive, we may obtain different results in later stages of development, which could impact our development expenditures for a particular product. Although we spend a considerable amount of time planning our development activities, we may be required to alter our plan based on new circumstances or events. Any deviation from our plan may require us to incur additional expenditures or accelerate or delay the timing of our development spending.

General and Administrative Expenses

General and administrative expenses include business development expenses and the amortization of intangible assets. The \$2.8 million increase in general and administrative expenses for the year ended December 31, 2007, as compared to fiscal 2006, was primarily due to an increase in outside consulting services related to partnering our SECTA therapy program, an increase in investor relations services associated with expanding our DNA and gene therapy program, an increase in personnel expenses associated with expanding our in-house expertise, increased legal fees associated with intellectual property and business development efforts, and increased legal, accounting and auditing fees primarily attributable to matters related to correspondence with the SEC. In addition, we recorded a reduction of goodwill in 2007 related to the realization of foreign net operating loss carryforwards. General and administrative costs attributable to Inovio AS were \$84,000 for the year ended December 31, 2006.

Stock-based Compensation.

Effective January 1, 2006, we adopted Statement of Financial Accounting Standards ("SFAS") No. 123(R), *Stock-based Payment*, and elected to adopt the modified prospective application method. SFAS No. 123(R) requires us to use a fair-value based method to account for stock-based compensation. Accordingly, stock-based compensation cost is measured at the grant date, based on the fair value of the award reduced by estimated forfeitures, and is recognized as expense over the employee's requisite service period. Total compensation cost under SFAS No. 123(R) for our stock plans for the years ended December 31, 2007 and 2006 was \$1.6 million and \$1.3 million, of which \$354,000 and \$423,000 was included in research and development expenses and \$1.2 million and \$921,000 was included in general and administrative expenses, respectively. At December 31, 2007, there was \$1.3 million of total unrecognized compensation cost, related to unvested stock options, which we expect to recognize over a weighted-average period of one year, as compared to \$947,000 for the year ended December 31, 2006. Total stock-based compensation for options granted to non-employees for the years ended December 31, 2007 and 2006 was \$119,000 and \$203,000, respectively.

Other Income/(Expense)

We recorded other income (expense) for the years ended December 31, 2007 and 2006 of \$3.4 million and \$321,000, respectively. The increase in other income (expense) is primarily due to the revaluation of registered common stock warrants issued by us in October 2006 and August 2007. We are required to revalue the warrants at each balance sheet date to fair value. If unexercised, the warrants will expire in October 2011 and August 2012, respectively.

Interest Income/(Expense)

Interest income (expense) for the years ended December 31, 2007 and 2006 was \$1.3 million and \$682,000, respectively. The increase in interest income for fiscal 2007, as compared to fiscal 2006, was primarily due to a larger cash and short-term investments balance and higher average interest rate.

Imputed and Declared Dividends on Preferred Stock

The former holders of our Series A and B Preferred Stock received an annual dividend at a rate of 6%, in shares of common stock or cash, payable quarterly through September 30, 2006. As a result, no dividends were paid to Series A or B Preferred Stock holders during the year ended December 31, 2007. We paid cash of \$345 and issued a total of 2,871 shares valued at \$8,000 to the former holders of our Series A Preferred Stock, and we paid \$15,000 in cash to the former holders of our Series B Preferred Stock during fiscal 2006.

The holders of our Series C Preferred Stock were entitled to receive an annual dividend at a rate of 6%, in shares of common stock or cash, payable quarterly, through May 20, 2007. As part of this dividend, we paid cash of \$23,000 during fiscal 2007 to holders of our Series C Preferred Stock. We paid cash \$117,000 during fiscal 2006 to holders of our Series C Preferred Stock and accrued \$15,000 for certain holders of our Series C Preferred Stock who participated in an equity financing we completed in October 2006.

During 2006, we recorded an imputed dividend charge of \$1.9 million during the three months ended December 31, 2006, related to the investors who converted \$1.2 million of their Series C Preferred Stock investment into 473,744 shares of our common stock as part of our private placement closed in October 2006. This imputed dividend charge was calculated using guidance contained in Emerging Issues Task Force ("EITF") Issue No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments*. As part of this private placement, these investors received 304,450 additional shares of our common stock, as compared to the number of shares of our common stock into which



their existing Series C Preferred Stock could have been converted under the original terms of the Series C Preferred Stock. Under EITF Issue No. 00-27, this incremental number of shares of our common stock was multiplied by the price of our common stock on the commitment date of the original Series C Preferred Stock issuance, or \$6.08 per share, to calculate the \$1.9 million imputed dividend charge associated with this beneficial conversion.

Income Taxes

Since inception, we have incurred operating losses and accordingly have not recorded a provision for income taxes for any of the periods presented. As of December 31, 2007, we had net operating loss carry forwards for federal and state income tax purposes of approximately \$55.9 million and \$50.8 million, respectively. We also had federal and state research and development tax credits of approximately \$714,000 and \$989,000, respectively. If not utilized, the net operating losses and credits will begin to expire in 2013. Utilization of net operating losses and credits are subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986, as amended

Liquidity and Capital Resources

Historically, our primary uses of cash have been to finance research and development activities including clinical trial activities in the oncology, DNA vaccines and other immunotherapy areas of our business. Since inception, we have satisfied our cash requirements principally from proceeds from the sale of equity securities.

Recent Sales of Equity Securities

In May 2007, we completed a registered equity financing wherein we issued and sold 4,595,094 shares of our common stock for \$3.52 per share, resulting in aggregate cash proceeds of \$16.2 million, prior to offering expenses of \$110,000.

Working Capital and Liquidity

As of December 31, 2008, we had working capital of \$554,000, as compared to \$25.6 million as of December 31, 2007. The decrease in working capital during the year ended December 31, 2008 was primarily due to expenditures related to our research and development activities, as well as various general and administrative expenses related to consultants, legal, accounting and audit, corporate development, and investor relations activities. In addition, a substantive reduction in working capital was due to the reclassification of the fair value of our auction rate securities, or ARS, from current to non-current investments in 2008, due to the illiquid state of these ARS. Management believes that Inovio's cash and cash equivalents at December 31, 2008 are sufficient to meet its planned working capital needs through December 31, 2009. To continue its product development Inovio plans to raise additional working capital through equity or debt financings.

Our ARS are AAA-rated municipal debt obligations with a long-term maturity and an interest rate that is reset in short-term intervals through auctions. Due to conditions in the global credit markets, in 2008, these securities, representing a par value of \$13.6 million, had insufficient demand resulting in multiple failed auctions. As a result, these affected securities are currently not liquid and the interest rates have been reset to predetermined higher rates.

In December 2008, we, via our wholly-owned subsidiary Genetronics, Inc., or "Genetronics", which holds the ARS, accepted an offer of ARS Rights from UBS. The ARS Rights permit us to require UBS to purchase our ARS at par value at any time during the period of June 30, 2010 through July 2, 2012. If we do not exercise our ARS Rights, the ARS will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction fails. If the ARS Rights are not exercised

before July 2, 2012 they will expire and UBS will have no further obligation to buy our ARS. UBS has the discretion to purchase or sell our ARS at any time without prior notice so long as we receive a payment at par upon any sale or disposition. UBS will only exercise its discretion to purchase or sell our ARS for the purpose of restructurings, dispositions or other solutions that will provide us with par value for our ARS. As a condition to accepting the offer of ARS Rights, we released UBS from all claims except claims for consequential damages relating to its marketing and sales of ARS. We also agreed not to serve as a class representative or receive benefits under any class action settlement or investor fund.

In conjunction with the acceptance of the ARS Rights, we also amended our existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with the ARS pledged as collateral. The loan will be treated as a "no net cost loan", as it will bear interest at a rate equal to the average rate of interest paid to Genetronics on the pledged ARS, and the net interest cost to Genetronics will be zero. The Company fully drew down on the line of credit in December 2008.

Typically the fair value of ARS approximates par value due to the frequent resets through the auction process. While we continue to earn interest on our ARS at the maximum contractual rates, these investments are not currently trading and therefore do not currently have a readily determinable market value. Accordingly, the estimated fair value of the ARS no longer approximates par value. We have used a discounted cash flow model to determine the estimated fair value of our investment in ARS and our ARS Rights as of December 31, 2008. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, timing and amount of cash flows and expected holding period of the ARS and ARS Rights.

We elected to measure the ARS Rights under the fair value option of SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment to FASB Statement No. 115*, to mitigate volatility in reported earnings due to their linkage to the ARS, and recognized a gain of approximately \$4.3 million and recorded a corresponding long-term investment. Reflecting our intent to exercise the ARS Rights during the period of June 30, 2010 through July 2, 2012, we transferred our ARS from investments available-for-sale to trading securities. As a result of this transfer and as we no longer intend to hold the ARS until the fair value recovers, we recognized an other-than-temporary impairment loss of approximately \$4.4 million, representing a reversal of the related temporary valuation allowance that was previously recorded in other comprehensive loss. We believe this loss is primarily attributable to the limited liquidity of these investments and have no reason to believe that any of the underlying issuers are presently at risk of default. The recording of the fair value of the ARS Rights and the recognition of the other-than-temporary impairment loss resulted in a net impact to the Consolidated Statement of Operations for the year ended December 31, 2008 of approximately \$99,000, which was recorded as other expense.

As of December 31, 2008, we had an accumulated deficit of \$152.8 million. We have operated at a loss since 1994, and we expect this to continue for some time. The amount of the accumulated deficit will continue to increase, as it will be expensive to continue research and development efforts. If these activities are successful and if we receive approval from the FDA to market equipment, then even more funding will be required to market and sell the equipment. The outcome of the above matters cannot be predicted at this time. We are evaluating potential partnerships as an additional way to fund operations. We will continue to rely on outside sources of financing to meet our capital needs beyond next year.

Our long-term capital requirements will depend on numerous factors including:

The ability to raise additional working capital through equity or debt financings;

The costs associated with raising capital or obtaining liquidity and completing transactions, such as the Merger with VGX Pharmaceuticals, Inc.;

The costs of manufacturing scale-up and the cost of commercialization activities and arrangements;

The progress and magnitude of the research and development programs, including preclinical and clinical trials;

The time involved in obtaining regulatory approvals;

The cost involved in filing and maintaining patent claims;

Competitor and market conditions;

The ability to establish and maintain collaborative arrangements; and

The ability to obtain grants to finance research and development projects.

The ability to generate substantial funding to continue research and development activities, preclinical and clinical studies and clinical trials and manufacturing, scale-up, and selling, general, and administrative activities is subject to a number of risks and uncertainties and will depend on numerous factors including:

The ability to raise funds in the future through public or private financings, collaborative arrangements, grant awards or from other sources;

Our potential to obtain equity investments, collaborative arrangements, license agreements or development or other funding programs in exchange for manufacturing, marketing, distribution or other rights to products developed by us; and

The ability to maintain existing collaborative arrangements.

The global financial markets have recently experienced significant limits on available credit for companies of all sizes, and extreme volatility in market prices limiting the ability of companies to raise capital at favorable prices, if at all. This lack of liquidity and the consistently changing market conditions are currently impacting our ARS as discussed above, as well as creating significant fluctuations in the market price of our common stock. We cannot project how long such conditions will last in the global financial markets, and we cannot guarantee that additional funding whether via incurrence of debt or equity sales will be available when needed or on favorable terms. If it is not, we will be required to scale back our research and development programs, preclinical studies and clinical trials, and selling, general, and administrative activities, or otherwise reduce or cease operations and our business and financial results and condition would be materially adversely affected.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenue, expenses, and results of operations, liquidity, capital expenditures or capital resources.

Contractual Obligations

On December 19, 2008, we amended our existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with our Auction Rate Securities pledged as collateral. We fully drew down on the line of credit on December 23, 2008. Advances under the Line of Credit bear interest at LIBOR plus 1.00% (the "Spread Over LIBOR"). UBS may change the Spread Over LIBOR at its discretion when the Collateral consisting of ARS may be sold, exchanged or otherwise conveyed by the Company for gross proceeds that are, in the aggregate, not less than the par value of such securities. The loan will be treated as a "no net cost loan", as it will bear at a rate equal to the average rate of interest paid to the Company on the pledged ARS, and the net interest cost to the Company will be zero.

As of December 31, 2008, we did not have any other material long-term debt or other known contractual obligations, except for the operating lease for our facility, which expires in February 2010, and operating leases for copiers, which expire in 2009 through 2011.

We are contractually obligated to make the following operating lease payments as of December 31, 2008:

					More	
		Less than			than	
	Total	1 year	1-3 years	3-5 years	5 years	
Operating lease obligations	\$683,617	\$539,825	\$143,792	\$	\$	

Executive Compensation

Summary Compensation Table

The following table sets forth compensation information for 2008 and 2007 for Inovio's president and chief executive officer, the chief financial officer and human resources manager, the two other executive officers serving at December 31, 2008, one former executive officer who served during 2008, and the managing director of Inovio AS (which Inovio collectively refers to as its "named executive officers"), whose salary and bonus exceeded \$100,000 for 2008.

Name and Principal Position	Year	Salary (1)	Bonus (2)	Stock Awards (3)	Option Awards (4)	All Other Compensation	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Dr. Avtar Dhillon, President and Chief Executive	2008	\$ 369,417		\$102,218	\$178,332	\$ 18,7250	(5) \$ 668,692
Officer	2007	\$ 357,503	\$116,375	\$ 69,188	\$391,394	\$ 5,342	\$ 939,802
Peter Kies, Chief Financial Officer and HR Manager	2008 2007	\$ 220,784 \$ 206,966	\$ 26,600		\$ 98,931 \$128,244		\$ 319,715 \$ 361,810
Michael Fons, Vice President, Corporate Development	2008 2007	\$ 197,061 \$ 188,180	\$ 16,625		\$ 59,833 \$ 81,877	\$ 3,220 \$ 3,324	\$ 260,114 \$ 290,006
Punit Dhillon, Vice President, Operations and Finance(6)	2008 2007	\$ 171,876 \$ 145,736	\$ 13,300		\$ 85,517 \$ 94,025	\$ 3,900 \$ 3,900	\$ 261,293 \$ 256,961
Dietmar Rabussay, Vice President, Research and Development(7)	2008 2007	\$ 69,506 \$ 185,391			\$ 15,488 \$ 63,927	\$ 114,723 \$ 5,200	\$ 199,717 \$ 254,518
Iacob Mathiesen, Managing Director, Inovio AS(8)	2008 2007	\$ 188,556 \$ 179,449		\$ 63,420 \$166,050	\$ 51,543 \$ 62,985		\$ 303,519 \$ 408,484

(1)

Salary includes contributions made by the employee to Inovio's 401(k) plan.

(2)

There were no bonuses paid for the year 2008. Bonus payments for 2007 were made in February 2008.

(3)

Represents the compensation costs of stock awards, calculated for financial reporting purposes for the year utilizing the provisions of Statement of Financial Accounting Standards ("SFAS") No. 123R, rather than an amount paid to or realized by the named executive officer. See Note 10, "Stockholder's Equity," to our Audited Consolidated Financial Statements for information concerning the SFAS 123R values, which are based on the fair value of our common stock on the date of grant. There can be no assurance that the SFAS 123R amounts will ever be realized. The stock award to Dr. Dhillon includes compensation expense related to a 2007 restricted stock award of 75,000 shares of which 18,750 shares vested immediately at a fair value of \$3.69 per share. The total value of the

award was \$276,750, and the remaining value vests annually in March over the next three years. The stock award to Dr. Dhillon also includes compensation expense related to a 2008 restricted stock award of 75,000 shares of which 18,750 shares vested immediately at a fair value of \$0.87 per share. The total value of the award was \$65,250, and the remaining value vests annually in February

over the next three years. The stock award to Mr. Mathiesen includes compensation expense related to a restricted stock award in 2007 of 90,000 shares of which 45,000 shares vested immediately at a fair value of \$3.69 per share. The total value of the award was \$332,100, and the remaining value will vest in December 2009.

(4)

Represents the compensation costs of stock options calculated for financial reporting purposes for the year utilizing the provisions of SFAS No. 123R, rather than an amount paid to or realized by the named executive officer. See Note 10, "Stockholder's Equity" to our Audited Consolidated Financial Statements for the assumptions made in determining SFAS 123R values. Ratable amounts expensed for grants that were made in prior years are included. There can be no assurance that the SFAS 123R amounts will ever by realized by the named executive officer.

(5)

Consists of \$6,058 of 401(k) match and \$12,667 of travel expenses for Dr. Dhillon's spouse reimbursed pursuant to our travel policy.

(6)

Officer was promoted from Executive Director, Finance and Operations in January 2008.

(7)

Officer resigned on May 2, 2008. Amounts included in all other compensation reflect severance payments paid on a bi-weekly basis through October 2008 as well as all unused accrued vacation and paid time off.

(8)

Managing Director of Inovio AS salary paid in Norwegian Kroners but translated to U.S. Dollars using the average exchange rate for 2008.

Grants of Plan Based Awards

The following table sets forth certain information with respect to stock and option awards and other plan-based awards granted to Inovio named executive officers during 2008. Amounts representing Estimated Future Payouts Under Non-Equity Incentive Awards (i.e. thresholds, targets and minimums), and Estimated Future Payouts Under Equity Incentive Plan Awards (i.e. thresholds, targets and minimums) have not been reported in the following table as they are not applicable to Inovio compensation program during 2008.

Name	Grant Date	All Other Stock Awards: Number of Shares of Stock (#)(1)	All Other Option Awards: Number of Securities Underlying Options (#)	I P of (Av	ercise or Base Price Option wards Share)	Grant Date Fair Value of Stock and Option Awards (\$)
(a)	(b)	(c)	(d)		(e)	(f)
Avtar Dhillon, President and Chief Executive Officer	2/1/2008 2/1/2008 12/9/2008	75,000	75,000 100,000	\$ \$	0.87 0.50	\$ 35,010 \$ 65,250 \$ 32,360
	12/9/2008		100,000	φ	0.50	\$ 52,500
Peter Kies, Chief Financial Officer and HR Manager	2/1/2008 7/9/2008 12/9/2008		30,000 60,000 40,000	\$ \$ \$	0.87 1.06 0.50	\$ 14,004 \$ 34,230 \$ 12,944
Michael Fons, Vice President, Corporate Development	2/1/2008 7/9/2008 12/9/2008		20,000 60,000 20,000	\$ \$ \$	0.87 1.06 0.50	\$ 34,230 \$ 9,336 \$ 6,472
Punit Dhillon, Vice President, Finance and Operations	2/1/2008 7/9/2008 12/9/2008		50,000 60,000 70,000	\$ \$ \$	0.87 1.06 0.50	\$ 23,340 \$ 34,230 \$ 22,652
Iacob Mathiesen, Managing Director, Inovio AS	7/9/2008		50,000	\$	1.06	\$ 28,525

(1)

The amount reflects the number of restricted stock awards granted on February 1, 2008 pursuant to the 2007 Omnibus Incentive Plan with a grant date fair value of \$0.87 per share.

Options Exercised

There were no options exercised by Inovio named executive officers during 2008.

Outstanding Equity Awards at Fiscal Year-End Table

The following tables set forth certain information with respect to outstanding equity awards to the named executive officers under Inovio equity incentive plans during 2008.

		OPTION A	WARDS	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
(a)	(b)	(c)	(d)	(e)
Avtar Dhillon President and CEO	$100,000 \\ 25,000 \\ 124,999 \\ 12,499 \\ 62,500 \\ 81,249 \\ 37,499 \\ 125,000 \\ 150,000 \\ 56,250 \\ 112,500 \\ 18,750 \\ 25,000 \\ 031,246 \\ 031,246 \\ 031,246 \\ 031,246 \\ 031,000 \\ 031,246 \\ 031,000 \\ 03$	18,750 112,500 56,250 75,000	$\begin{array}{c} 2.08 \\ 1.64 \\ 1.96 \\ 1.00 \\ 1.08 \\ 2.52 \\ 5.00 \\ 5.00 \\ 3.82 \\ 2.89 \\ 3.16 \\ 0.87 \\ 0.50 \end{array}$	10/09/2011 04/28/2012 06/27/2012 10/24/2012 01/09/2013 08/07/2013 11/06/2013 12/31/2013 01/14/2015 03/06/2016 03/07/2017 02/01/2018 12/09/2018
	931,246	262,500		
Peter Kies				
CFO and HR Manager	37,500 7,500 12,500 14,375 20,000 33,750 37,500 7,500 15,000 10,000	11,250 37,500 22,500 45,000 30,000 146,250	1.96 1.00 1.24 2.52 4.46 2.89 3.16 0.87 1.06 0.50	06/27/2012 10/24/2012 03/24/2013 08/07/2013 02/24/2015 03/06/2016 03/07/2017 02/01/2018 07/09/2018 12/09/2018
Michael Fons				
VP, Corporate Development	37,500 15,000 10,000 12,500 5,000 15,000 5,000 100,000	5,000 10,000 12,500 15,000 45,000 15,000 102,500	5.32 2.45 3.16 3.75 0.87 1.06 0.50	06/16/2014 03/22/2016 03/08/2017 05/03/2017 02/01/2018 07/09/2018 12/09/2018

		OPTION A	WARDS	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
(a)	(b)	(c)	(d)	(e)
Dietmar Rabussay(1)	3,750		16.52	02/06/2010
VP, Research and Development	500		6.00	08/24/2010
-	6,250		6.28	05/16/2011
	7,500		1.80	10/23/2011
	7,500		1.64	04/28/2012
	7,500		1.00	10/24/2012
	12,500		1.24	03/24/2013
	19,937		2.52	08/07/2013
	10,000		4.46	02/24/2015
	33,750	11,250	2.89	03/06/2016
	12,500	12,500	3.16	03/07/2017
	121,687	23,750		
Punit Dhillon				
	25,000		2.76	06/30/2013
VP, Finance and Operations	6,250		2.52	08/07/2013
	15,000		4.33	02/24/2015
	26,250	8,750	2.45	03/22/2016
	20,000	20,000	3.16	03/08/2017
	7,500	7,500	3.75	05/03/2017
	12,500	37,500	0.87	02/01/2018
	15,000	45,000	1.06	07/09/2018
	17,500	52,500	0.50	12/09/2018
	145,000	171,250		
	159			

	OPTION AWARDS					
	Number of Securities Underlying Unexercised Options	Number of Securities Underlying Unexercised	Option	Option		
Name	(#) Exercisable	Options (#) Unexercisable	Exercise Price (\$)	Expiration Date		
			(.,			
(a)	(b)	(c)	(d)	(e)		
Iacob Mathiesen	15,000	5,000	2.45	03/22/2016		
Managing Director, Inovio AS	10,000	10,000	3.16	03/08/2017		
	12,500	12,500	3.75	05/03/2017		
	12,500	37,500	1.06	07/09/2018		
	50,000	65,000				

(1)

Dietmar Rabussay resigned effective May 2, 2008 however remains with Inovio as a consultant. All options listed remain outstanding.

	STOCK AWARDS		
Name	Number of Unvested Shares (#)(1)	Fair Market Value (\$)	
(a)	(b)	(c)	
Avtar Dhillon	93,750	187,313	
President & CEO			
Iacob Mathiesen	45,000	166,050	
Managing Director, Inovio AS			
	138,750	353,363	

(1)

The amount reflects the number of unvested restricted stock awards outstanding at December 31, 2008.

Compensation Committee Interlocks and Insider Participation

In 2008, the Compensation Committee consisted of James L. Heppell (Chair), Simon Benito, Tazdin Esmail and Robert W. Rieder, each of whom is an independent director under the NYSE Amex listing standards. Other than James L. Heppell, who is a former officer of Inovio, no member of the Compensation Committee is a former or current officer or employee of Inovio.

During 2008, Avtar Dhillon, Inovio Chief Executive Officer, served as a director of BC Advantage (VCC) Funds, Inc. James L. Heppell, a member of Inovio Compensation Committee, serves as President and Fund Manager of BC Advantage (VCC) Funds, Inc.

No other persons who were members of the Compensation Committee during 2008 had any relationships requiring disclosure.

Compensation of Directors

During 2008, Inovio paid each non-employee director of Inovio (other than the Chairman of the Board) an annual retainer fee of \$19,000 and paid the Chairman of the Board an annual retainer fee of \$35,000. Inovio pays or reimburses all reasonable expenses associated with directors' attendance at and participation in board and committee meetings and other company business which a director attends. For 2008, Inovio also paid an additional \$9,000 to the Compensation Committee chairman as compensation for services as that committee's chairman, an additional \$14,000 to the Audit Committee chairman as compensation for services as that committee's chairman, and an additional \$5,000 to the Nomination and Corporate Governance Committee chairman as compensation for services as that

committee's chair. Inovio also pays each non-employee director \$1,500 for attendance at each board meeting conducted in person and \$750 for each board meeting conducted telephonically.

Inovio does not pay director fees to its directors who are also Inovio employees. Thus, Dr. Dhillon does not receive director fees.

Non-employee directors are eligible to receive, from time to time, grants of options to purchase shares of common stock under the Plan as determined by the full board of directors. During the year ended December 31, 2008, Inovio granted 10-year options to purchase a total of 225,000 shares of its common stock to its non-employee directors. Mssrs. Bandali, Benito, Esmail, Heppell, Rieder and Rietiker received 15,000 shares each, at an exercise price of \$0.89. Mr. Rietiker and Mr. Gan also received 30,000 shares each upon joining the Board of Directors in 2008, exercisable at \$1.05 and \$0.89, respectively. In August 2008, Mr. Heppell also received options to purchase 75,000 shares of common stock, exercisable at \$1.03 per share. In December 2008, Mr. Chong also received options to purchase 15,000 shares of common stock, exercisable at \$0.50 per share, which were disclaimed in conjunction with his resignation from the Board of Directors as reported on Form 8-K on February 6, 2009.

Director Compensation Table

The following table sets forth certain information with respect to director compensation during 2008. Amounts representing Stock Awards, Non-equity Incentive Plan Compensation, and All Other Compensation are not included in the following table as they are not applicable to Inovio compensation program during 2008.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(2)	Total (\$)
(a)	(b)	(c)	(d)
James Heppell	58,250	42,144	100,394
Simon Benito	48,000	26,379	74,379
Tazdin Esmail	39,000	26,379	65,379
Riaz Bandali	28,000	26,379	54,379
Robert Rieder	31,750	33,607	65,357
Stephen Rietiker	23,250	12,693	35,943
Patrick Gan	15,500	3,182	18,682
Chin Cheong Chong(1)			

(1)

In December 2008, Mr. Chong also received options to purchase 15,000 shares of its common stock, exercisable at \$0.50 which were disclaimed in conjunction with the resignation from the Board of Directors as reported on Form 8-K on February 6, 2009.

(2)

Represents the compensation costs of stock options calculated for financial reporting purposes for the year utilizing the provisions of SFAS No. 123R, rather than an amount paid to or realized by the director. See Note 10, "Stockholders' Equity" to our Audited Consolidated Financial Statements for the assumptions made in determining SFAS 123R values. Ratable amounts expensed for grants that were made in prior years are included. There can be no assurance that the SFAS 123R amounts will ever by realized by the director.

VGX Pharmaceuticals, Inc.

Overview

VGX, a Delaware corporation founded in December 2000 by Dr. J. Joseph Kim and Professor David B. Weiner, is a biopharmaceutical company engaged in the discovery and development of novel vaccines and therapies for major infectious diseases and cancers. VGX has product candidates for the treatment of infectious diseases including HIV, as well as cancer and inflammatory diseases. The lead therapeutic programs in infectious diseases and oncology are well complemented by a research pipeline of next-generation DNA vaccines. VGX's proprietary position, coupled with a patented DNA delivery system (CELLECTRA® electroporation device), and access to cGMP plasmid manufacturing capabilities form VGX's DNA vaccines and therapies platform.

VGX's clinical development programs include PENNVAX -B, a DNA vaccine for the prevention of HIV in Phase I clinical trials; VGX-1027, a small molecule drug for inflammatory diseases in Phase I clinical trials; VGX-3100, a DNA therapeutic vaccine for cervical cancer in Phase I clinical trials; and the CELLECTRA® electroporator, a DNA delivery device in Phase I clinical trials. In addition, VGX has filed INDs for VGX-3200, a novel DNA therapy that utilizes GHRH for the treatment of cancer cachexia and anemia and for VGX-3400, a DNA preventative vaccine for avian influenza. VGX has established a vertically-integrated DNA Vaccines and Therapies Platform with extensive capabilities including SynCon DNA-based product candidates, the CELLECTRA® delivery device, and access to efficient cGMP plasmid manufacturing. Vertical control over key aspects of product development has enabled VGX to consistently develop multiple product candidates, from bench-to-IND filing, within one year. The product candidates and technology programs are protected by VGX's extensive global intellectual property portfolio.

VGX's business strategy to realize value for the company and its stockholders is as follows:

VGX has identified and licensed-in key technologies from world-class institutions for the treatment of infectious diseases, cancer, and inflammatory diseases. It has collaborated with various governmental agencies and organizations such as the National Institute of Allergy and Infectious Diseases (NIAID), HIV Vaccine Trials Network (HVTN), Adult Clinical Trials Group (ACTG), and the Defense Threat Reduction Agency (DTRA). These collaborations provide a third-party validation of VGX's technology as well as a means to subsidize the further development of its product pipeline in a non-dilutive manner. VGX has also secured license agreements with its affiliate, VGX International, a publicly traded company in Korea, in which the affiliate shares the development costs for some of its drug candidates.

VGX is pursuing the development of a small molecule drug for inflammatory diseases, and building a DNA vaccines platform for the prevention and treatment of various infectious diseases and cancers. The DNA vaccines platform possessed by VGX dramatically shortens the time needed to take a potential drug candidate from bench to clinical trials as little as a year in some cases. The efficacy of the platform was demonstrated with the recent IND opening of VGX's DNA vaccine for cervical cancer, VGX-3100, which was successfully shepherded from the research lab to preclinical toxicity studies, to an opening of an IND in approximately a year. VGX is currently leveraging its DNA vaccines platform to begin clinical trials for two other DNA vaccines candidates.

VGX's technology is protected by an extensive patent portfolio that covers VGX's products, including VGX DNA-based Vaccines and Therapies such as PENNVAX DNA-based preventive and therapeutic vaccine for HIV, VGX-3100 DNA-based therapeutic vaccine for Cervical Cancer, VGX-3200 DNA-based therapy for treating for Cancer Cachexia, VGX-3400 DNA-based vaccine for treating Avian Flu, VGX-150 DNA-based therapy for treating Melanoma; Small Molecule Drugs, including VGX-1027 for the treatment of inflammatory diseases rheumatoid arthritis (RA) and type 1 diabetes (T1D); and Protein-based Drugs including VGX-100 for treating Lymphoma/Gastric Cancer.

In addition, there is also patent coverage over VGX's DNA vaccine platform, which includes electroporation devices, such as CELLECTRA® electroporators, and proprietary biomolecules, including a variety of DNA vectors and functional nucleotide elements, such as novel promoters. VGX's patent portfolio encompasses technologies that range from electroporation devices and their methods of use, proprietary polynucleotide and protein sequences, and a variety of proprietary vaccines and small molecules.

VGX was incorporated in Delaware in December 2000 under the name Viral Genomics, Inc. In 2001, VGX changed its name to VGX Pharmaceuticals, Inc. In October 2005, VGX purchased a controlling interest in VGX International, Inc., a pharmaceutical and manufacturing company that is publicly traded on the Korean Stock Exchange.

In February 2007, VGX acquired the assets of ADViSYS, Inc., a Houston, Texas-based company for its DNA plasmid manufacturing, electroporation delivery, and growth hormone releasing hormone (GHRH) technologies. In May 2007, VGX formed a subsidiary for the animal product applications of its GHRH technology, VGX Animal Health, and remains the majority stockholder of that company. VGX Animal Health's lead candidate, LifeTide SW5 received regulatory approval in Australia in January 2008 and became the world's first approved DNA therapy for food animals.

In June 2008, VGX announced a strategic reorganization designed to focus its resources on developing content for DNA vaccines and therapeutics and its electroporation delivery device by selling its manufacturing operations to VGXI, Inc., a wholly-owned U.S. Subsidiary of VGX International. VGXI is a cGMP contract manufacturer of DNA plasmids utilizing 500 liter and 100 liter fermentors in the U.S. and has plans underway for a 3000 liter scale facility in Korea.

VGX anticipates that over the next several years a number of key demographic and technological factors should accelerate growth in the market for vaccines and medical therapies to prevent and treat infectious diseases, aging associated conditions and cancer, particularly in VGX's product categories. These factors include the following:

Rise in emerging infectious diseases and the threat of pandemics. The attention received by the pandemic potential of avian influenza has mobilized cross-border agencies including governments, world health organizations and private and public corporations to develop effective vaccination and therapeutics strategies. VGX's candidate vaccines for avian influenza, chikungunya and dengue are intended to serve this need.

Increased consumer awareness. In areas such as cervical cancer, increased consumer awareness related to human papillomavirus (HPV) infection, the primary cause of cervical cancer, has led to renewed efforts for developing effective therapies. The current vaccines for cervical cancer prevention (Gardasil and Cervarix), while being effective measures for prevention in the unexposed population, are ineffective in people infected with HPV.

Large unmet need. In areas such as human immunodeficiency virus (HIV) and hepatitis C virus (HCV) (prevention and therapy) there is a large unmet need with no vaccine options on the market. With the exit of several players in the recent years from the HIV vaccine development area, if successful, VGX believes it is positioned to obtain a significant market position.

Increased regulatory activity. The anti-inflammatory market represents a large market with several small molecule and antibody based therapeutics already available to patients. However, several of the disease-modifying anti-rheumatic drugs (DMARDS) have recently come under regulatory scrutiny resulting in changes to labeling due to the serious side effects of increased susceptibility to opportunistic infections in patients receiving these drugs. An orally bio-available small-molecule therapeutic that can be effective and less immunosuppressive can emerge as a viable alternative to the market leaders.

Potential Products, Technologies and Services

Research and development expense to further the development of VGX's potential products and technologies were \$13.1 million and \$10.8 million for the fiscal years ended December 31, 2008 and 2007, respectively. For the period from December 12, 2000 (inception) through December 31, 2008, total research and development expenses totaled \$39,185,000.

The following discussion describes VGX's products currently in development, the anticipated market for such products as well as the competitive environment in these markets. VGX is currently exploring strategic opportunities with each of these potential products and technologies, including the license or sale of such potential products and technologies.

Proprietary Product Candidates

PENNVAX -B

Market Opportunity for Treatment of HIV

Since its discovery in 1981, acquired immunodeficiency syndrome (AIDS) has killed more than 25 million people. In 2005, the total number of HIV-infected people worldwide reached an estimated 38.6 million, with 4.1 million newly infected individuals. In 2005, the disease claimed approximately 3.1 million lives. UNAIDS estimates that 60,000 individuals were newly infected with HIV across the U.S. and Western Europe in 2005, bringing the number of HIV-infected people to approximately 1.75 million. Over half of these individuals live in the U.S.

In 2005, the HIV therapeutic drug (antiretrovirals) market accounted for 1.8% of global pharmaceutical sales and 17% of total anti-infective sales. Although this is relatively small compared to other therapeutic areas, the HIV market has enjoyed strong growth. It generated \$7.4 billion of sales in 2005 and experienced a Compound Annual Growth Rate (CAGR) of 13.3% from 2001-2005, making it one of the fastest growing infectious disease markets.

Effective vaccines have been actively pursued for over 20 years, without much success. The HIV represents one of the most confounding targets in medicine. The virus' high mutagenicity has made effective vaccine development challenging. Its outer envelope, swathed in sugar molecules, is difficult to attack, and HIV strikes the very cells that the immune system launches to thwart such an infection. Although several antiretrovirals are available to treat the patients once they are infected, vaccines are necessary to stop the spread of disease and perhaps reduce the need for antiretroviral treatment.

Traditional vaccines that work by exposing people to a weakened or killed microbe or proteins have failed in human testing. Noting that many long-term survivors have high counts of killer CD8+ T cells, the HIV vaccines field has turned to stimulating the immune system to generate those cells. A recent failure of HIV vaccines, which adopted the use of adenovirus or a common human cold virus that had been altered to prevent viral replication, to deliver HIV proteins as vaccines, was not effective. A different approach is needed to develop an effective vaccine for HIV.

Clinical Trial Status

VGX has initiated two separate Phase I clinical trials in 2007; one for prevention of infection and the other for therapeutic vaccination for individuals already affected with HIV. Both trials are conducted in clinical centers in the U.S. in collaboration with the University of Pennsylvania and the HIV Vaccines Trials Network (HVTN), which is the largest HIV vaccine testing organization in the world and is funded by the U.S. National Institutes of Health (NIH).

Competitive Landscape

After many years of rapid development and introduction of new antiretroviral drugs for treatment of HIV infection, the introduction of new drugs to the market for treatment of HIV infection appears to be waning. Available drugs, despite several limitations, have set a high standard that must be met in terms of efficacy. However, there is still a significant need for better HIV therapies and patents are expiring on early HIV drugs. For example, zidovudine, didanosine and stavudine are available as a generic drug, and other early HIV drugs will soon face such generic competition. To maintain HIV-related revenues, as well as meet the needs of HIV-infected patients, pharmaceutical companies must develop new drugs with improved profiles, especially in terms of toxicity and increased barriers to development of viral resistance. As a result, the medical and commercial needs are fueling continued interest in the development of new nucleosides (NRTIs), non-NRTIs, and protease inhibitors (PI) for treatment of HIV infection.

The latest HIV vaccine approach to fail was Merck & Co.'s recombinant Adenovirus Serotype 5 (Ad5) vector, a weakened form of the cold virus to carry genes from HIV. A large Phase II trial, sponsored by Merck and the federally funded HIV Vaccine Trials Network (HVTN), was prematurely halted in 2007 after the vaccine failed to block or slow down infections. A recent collaborative research study conducted among the teams from University of Pennsylvania, VGX, and Merck directly compared VGX's PENNVAX DNA vaccine delivered with CELLECTRA® device with Merck's recombinant Ad5 vector in an SIV model in non-human primates. The study results showed significant enhancements in the magnitude, frequency, proliferative capacity, and polyfunctionality of the induced immune responses following DNA plasmid-electroporation vaccination compared to the Ad5 vector.

Commercialization Plan

Because HIV vaccine development is a high risk, and expensive proposition, the current model for development is through the formation of large networks of public and private partners. A number of government and global non-profit organizations have taken a leadership position (IAVI, Gates Foundation, NIAID/DAIDS, USMHRP and others) to support this public health crisis because private investors are reluctant to invest in these ventures. VGX plans to develop its portfolio of HIV vaccine candidates through such partnerships.

The VGX HIV franchise consists of candidate vaccines for HIV prevention as well as therapy or treatment. Furthermore, the vaccines are differentiated according to the targeted region of the world with the greatest prevalence of a certain subtype of HIV. Thus, PENNVAX -B is VGX's vaccine for North America and Western Europe and PENNVAX -G is its candidate product for the rest of the world. PENNVAX -B is designed to target HIV Clade B (most commonly found in the U.S., North America, Australia and the European Union (EU). PENNVAX -G is designed to target HIV Clades A, C and D which are more commonly found in Asia, Africa, Russia and South America.

VGX's PENNVAX -B vaccine (without electroporation delivery) is currently in a Phase I clinical trial sponsored by the National Institute of Allergy and Infectious Diseases' (NIAID) Division of AIDS (DAIDS) and being conducted by the HVTN to evaluate the vaccine's safety and immunogenicity in healthy volunteers. The HVTN recently completed enrollment of this 120-patient study. In 2007, VGX, The University of Pennsylvania and the HVTN agreed to collaborate on the development of PENNVAX -B delivered via electroporation using the CELLECTRA® delivery device in healthy, uninfected individuals. The consortium is presently preparing documents to support an Investigational New Drug (IND) filing with the FDA and the initiation of this Phase I study is targeted for the third quarter of 2009.

A second IND is now open allowing testing of PENNVAX -B in a therapeutic setting. This study is conducted in collaboration with the University of Pennsylvania and will target HIV positive individuals. If the Phase I studies are successful in demonstrating enhanced immunological responses to



the HIV antigens, then VGX will partner with the HVTN or another governmental organization to further develop the HIV candidate vaccines through the Phase II and Phase III clinical studies. It is anticipated that given the critical need for preventive and therapeutic vaccines for HIV, the ultimate commercialization will be through a big pharmaceutical company partner, for the North American and EU markets, and a world health agency for the developing world markets.

Therapeutic HPV-16, 18 plasmid vaccine-VGX-3100

Market Opportunity for Treatment of Cervical Cancer

Worldwide it is estimated that there are 473,000 cases of cervical cancer, and 253,500 deaths annually. In 2008 an estimated 3,870 women in the US will die of cervical cancer, and around 11,000 new cases are expected to be diagnosed. Cervical cancer is caused by various types of human papillomavirus (HPV). Many people who may have HPV may not show any signs or symptoms, and, therefore, they can pass the virus to others without even knowing it. Prophylactic vaccines aimed at inducing natural immunity against HPV infection in naive individuals have been approved and are effective against HPV infection, but once a person has an established infection, the vaccines are ineffective for preventing development of cervical cancer. The need for an effective therapeutic vaccine which could treat HPV infected cervical tumor cells is great, replacing surgical procedures in young women that can affect their reproductive potential. It is estimated that approximately \$1.7 billion are spent in the United States each year on treatment of cervical cancer.

Clinical Trial Status

An IND for VGX-3100 is open and patient enrollment is ongoing in the Phase I study. This study examines three dose levels of the vaccine. Phase II-III studies will examine the effect of the vaccine in curing patients of intraepithelial cervical neoplasias caused by HPV.

Competitive Landscape

Although prophylactic vaccines for HPV, including Merck's Gardasil® and GSK's Cervarix , have been recently approved in the U.S. and the EU, respectively, no therapeutic vaccine for HPV is available. Furthermore, studies have shown that these approved prophylactic vaccines do not have any therapeutic effects in women who are already infected with HPV. A number of companies are developing therapeutic vaccines for cervical cancer targeting the different subtypes of HPV. Transgene (Strasbourg, France) is likely the most advanced. Their product TG4001, based on MVA-HPV-IL2 is in Phase II studies in partnership with Roche in a deal valued at over 190 million Euros with upfront and near term milestone payments over 23 million Euros. The transgene product only targets HPV16. The VGX product is designed to treat cervical cancers arising from both HPV 16 and HPV 18. Together these two sub-types account for over 70% of the global cases of cervical cancer. MGI Pharma (ZYC 101a) and Stressgen Biopharmaceuticals Corp (HspE7) are two other companies with candidate vaccines in Phase II. Another company, Advaxis, has a HPV16 targeted candidate vaccine in Phase I studies based on a Listeria vector.

Commercialization Plan

VGX-3100 has been manufactured under cGMP by VGXI, Inc. and has been formulated for the Phase I clinical trials. VGX anticipates partnering with a large vaccine company at the Phase II stage for further development and commercialization.

Human Growth Hormone Releasing Hormone (GHRH) -VGX-3200

Market Opportunity for Treatment of Cancer-related Cachexia

Cachexia, an illness affecting up to 5 million people in the U.S. alone, and its associated disorders are common complications of cancer, aging, AIDS, chronic obstructive pulmonary disease (from smoking), chronic kidney and heart failure. Cachexia is one of the most devastating symptoms of cancer and typically results in drastic (greater than 10% of total body weight) weight loss. This complication, which is suffered by up to 75% of cancer patients, can often be fatal before death due to the actual disease. GHRH has been shown in animal models and in dog cancer studies to decrease muscle wasting, correct anemia and dramatically improve the quality of life of treated patients.

GHRH protein administered by daily injection has shown benefit in AIDS patients with metabolic disorders (lipodystrophy) associated with treatment with antiretrovirals and infection with HIV. Phase III studies with this compound are ongoing but the local reactions and the need for daily injections will limit the use of this product.

Clinical Trial Status

Phase I trials are planned in patients with cancer-related cachexia and in AIDS patients with lipodystrophy.

Competitive Landscape

Currently, only a progesterone analogue (Megace® ES) is licensed for treatment for cachexia. The package insert claims include modest weight gain (64% gaining five or more pounds over 12 weeks) and increased appetite. There was no effect on anemia.

Commercialization Plan

Treatment for cachexia, anemia and HIV related lipodystrophy are the first targets for VGX-3200. Additionally, VGX is developing the GHRH technology for a number of other indications including age-related disorders.

Avian Influenza (H5N1) Plasmid Vaccine -VGX-3400

Market Opportunity for Treatment of Avian Influenza

Influenza is one of the most communicable diseases and it typically affects children and the elderly most severely, resulting in hospitalization and deaths. Complications from influenza cause more than 200,000 hospitalizations and lead to approximately 36,000 deaths each year in the U.S. alone, according to the Centers for Disease Control. Worldwide, every year is typically subject to two influenza sessions (during the winter in each hemisphere), resulting in between three and five million cases of severe illness, and up to 500,000 deaths. A pandemic occurs every ten to twenty years, which infects a large proportion of the world's population, and can kill tens of millions of people as the "Spanish Flu" did in just two years (50-100 million deaths during 1918-1919).

New influenza viruses are constantly produced by mutation or by reassortment, and can develop resistance to the standard antiviral drugs. 245 humans have died from the H5N1 strain in twelve countries according to World Health Organization (WHO) data as of September 2008. It has been spreading from Asia despite thoughts that it was under control immediately after outbreaks there in 2004. In 2005, there were reports of H5N1 in wild birds in Europe. In 2006, there were reports of avian influenza A H5N1 strain in wild birds and poultry in Africa and the Near East. Through 2006, over 140 million birds have been killed and over \$10 billion have been spent to try to contain H5N1 avian influenza.

Clinical Trial Status

In pre-clinical studies, vaccination with VGX-3400 generated protective levels of hemagglutination inhibition (HAI) titers in 100% of the immunized animals in five separate animal models mice, ferrets, rabbits, pigs and rhesus monkeys. Vaccination with VGX-3400 also protected 100% of the animals from an unmatched, pathogenic H5N1 virus challenge in mouse and ferret models. VGX-3400 also induced significant levels of antigen-specific CD8+ killer T cell responses. The planned Phase I trial will evaluate three levels of the vaccine for safety and immunogenicity. One dose will be chosen for expanded safety and immunogenicity (Phase II/III) studies. No efficacy studies are required for licensure of this vaccine.

Competitive Landscape

Although a number of companies have well developed avian influenza programs and the lead vaccine candidates have entered into national stockpiles (U.S, and EU), there exists a need for new antigen-sparing, rapidly adaptable and easily scalable technologies to prepare for the as yet unknown target presented by the next form of avian influenza. VGX's SynCon platform provides protection from known avian influenza viruses (in animal studies) and has the ability to be tailored to target new and emergent ones.

Commercialization Plan

VGX-3400 has been manufactured under cGMP by VGXI, Inc. and has been formulated for Phase I clinical trials.

CELLECTRA® delivery device

Market Opportunity for DNA plasmid Delivery Devices

DNA vaccines can be developed in a relatively quick and cost-efficient manner. In addition, they provide one of the best ways to induce cellular immune responses. Unlike other delivery methods, electroporation has been shown to enhance potential immune response. This augmentation improves development and expedites clinical trials, providing additional cost effectiveness.

Clinical Trial Status

VGX has developed two applications in the CELLECTRA® device family. The first covers the intra-muscular (IM) delivery of DNA and the second covers the intra-dermal/subcutaneous delivery (ID) of DNA. Both devices have been validated, manufactured under cGMP and are ready for use in human clinical trials. In 2007, VGX filed a device master file (MAF) with the FDA covering the use of the CELLECTRA®-IM EP device in human clinical trials. The device is intended to be used in combination with a DNA plasmid product. VGX has also filed an MAF with the FDA covering the use of the CELLECTRA®-ID EP device in 2009.

Competitive Landscape

Besides Inovio, Ichor and Cytopulse are other companies with an electroporation device presently in human clinical trials. Other players developing electroporation based devices include FIT Biotech, IGEA and Bio-Rad. In contrast to these devices and techniques, the technology incorporated in the CELLECTRA® device family is unique, being based on constant current and software driven pulses that are automatically adapted for each individual patient, versatile and applicable to both DNA vaccines and therapeutics delivered either IM or ID.

Commercialization Plan

VGX's innovative DNA delivery technology allows efficient delivery of DNA plasmids to cover a broad range of applications including gene therapy and vaccines. VGX intends to develop the CELLECTRA® device in combination with its own internally developed products as well as through partnering with external partners via appropriate licensing arrangements. It is anticipated that the device will be used in combination with VGX-3100, VGX-3200, VGX-3400 and the family of PENNVAX vaccines. VGX is also in early stage licensing discussions with other biotechnology companies for the use of the device in combination with their proprietary vaccine candidates. VGX has existing supported research agreements and CRADAs with academic institutions and research organizations. Commercial terms have not been discussed with these entities.

VGX-1027

Market Opportunity for Treatment of Rheumatoid Arthritis and Type 1 Diabetes

In the U.S. alone, 1.3 million people suffer from rheumatoid arthritis (RA) according to the National Institute of Arthritis and Musculoskeletal Skin Diseases (NIAMS). Overall, the prevalence in North America and the EU is expected to increase until at least 2010, due to the aging population. With significant unmet clinical needs and the progressive introduction of higher value and effective biopharmaceuticals, the RA market is expected to more than double in value to \$27 billion by 2015.

As of 2007, 23.6 million Americans 7.8 percent of the population have diabetes, of which an estimated 5.7 million people are undiagnosed. Type 1 Diabetes (T1D), which can be fatal if untreated, usually strikes children and young adults, although it can strike at any age. In adults, T1D accounts for 5 to 10 percent (0.9 million -1.8 million people) of all diagnosed cases of diabetes in the U.S. alone. Risk factors for T1D may be autoimmune, genetic, or environmental. No known way to prevent type 1 diabetes exists.

Clinical Trial Status

Phase I studies are underway and indicate that the compound is orally bioavailable and well tolerated to date. After completion of Phase I studies, Phase II/III studies will be conducted in patients with RA to evaluate its effects on pain relief and joint destruction.

Clinical studies of VGX-1027 in patients with T1D are planned after completion of the ongoing Phase I studies for RA. Under the terms of the license agreement between VGX and VGX International, VGX International was granted worldwide rights to develop and market VGX-1027 for T1D. As such, VGX International will lead the Phase II and Phase III clinical trial efforts for T1D. VGX, in return, will receive various milestone payments and a royalty payment based on percentage of net sales.

Competitive Landscape

Treatments for RA include primarily non-steroidal anti-inflammatory drugs (NSAID) for pain and inflammation relief, and diseasemodifying anti-rheumatic drugs (DMARDs) for slowing RA's progress. A trend toward the use of DMARDs earlier in the disease demonstrates a reduction in RA's severity, so physicians are prescribing them more often. Advances have been made in biologic DMARDs, which are more effective, but also are more expensive. Studies indicate that as disease severity increases, patients take multiple drugs, though this has also been linked with compliance issues, especially with the elderly. Blockbuster therapeutic agents on the market include Enbrel® (Global Sales of \$4.4 Billion in 2006, by Amgen), Remicade® (\$3.6 Billion, Johnson & Johnson), and Humira® (\$1.9 Billion, Abbott). However, all of these agents require IV or IM delivery. VGX-1027 offers a distinct advantage over such products because it can be taken as a once or twice-a-day pill.

There are very few treatment options available currently for T1D patients other than daily insulin injections. Therefore, there is an unmet demand for a once-a-day, bioavailable small-molecule drug that can be administered orally.

Commercialization Plan

VGX has completed manufacturing of clinical supplies under cGMP to support the Phase I studies. The Phase I single ascending dose (SAD) and multiple ascending dose (MAD) studies have been completed and VGX-1027 has demonstrated oral bioavailability and a satisfactory safety profile in the human studies to-date. VGX intends to develop VGX-1027 through the Phase I (SAD and MAD) and possibly Phase IIa studies prior to licensing to a relevant pharmaceutical partner to continue further development. Small molecule therapeutics for inflammatory diseases continue to be an active area of interest from a licensing point of view with several recently announced deals.

LifeTide SW5

Market Opportunity for Growth Hormone Release Hormone in Food Animals

LifeTide SW5 was shown to decrease perinatal morbidity and mortality in offspring of pigs housed in farm conditions, and in large licensing studies shown to exert its effects for at least three consecutive pregnancies of the treated female pig. Other similar GHRH-expressing plasmids have been used in dairy cows, beef, horses and young pigs. Animals in normal or heat stress conditions showed decreased morbidity, and optimized production parameters milk production and fertility are positively impacted, while laminitis or hoof problems are resolved.

Clinical Trial Status

LifeTide SW5 was approved for use in pigs by the Australian Pesticides and Veterinary Medicines Authority (APVMA) on January 5, 2008. Optimizations made to the LifeTide SW5 plasmid meant to reduce the plasmid dose (from 5 mg to 1 mg) are currently tested. Preliminary data from these studies show similar outcome in groups treated with LifeTide SW5 or the newer construct. At the end of these trials, data will be submitted for review to APVMA and used for future applications for approval.

Competitive Landscape

VGX does not believe there are any other comparable products in the food animal market for the moment. The recombinant growth hormone protein preparations from Monsanto are currently the closest competitor Posilac® indicated to increase milk production in dairy cows (used in approximately 30% of all dairy in the US), and porcine somatotropin used in the finishing phase in pigs in Australia. These products have the disadvantage of requiring frequent administrations (once every 14 days in dairy cows; every day for the last two weeks before slaughter in pigs) and often resulting in adverse effects in treated animals.

Commercialization Plan

On September 10, 2008, VGX Animal Health, Inc., or VGXAH, a majority-owned subsidiary of VGX, signed a Marketing & Distribution Agreement with Country Vet Wholesaling Pty Ltd, an Australian proprietary company, for the sale of LifeTide SW5. In addition, VGXAH has submitted an application for marketing approval in New Zealand, and plans to seek marketing approvals in several other countries in South East Asia, including the Philippines and Indonesia. VGX has also initiated studies to support regulatory approval of this technology in other major markets, including the U.S. and China.



Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of VGX's financial condition and results of operations should be read in conjunction with VGX's Audited Consolidated Financial Statements and Notes thereto included elsewhere in this joint proxy statement/prospectus. This discussion and analysis contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements with regards to VGX's revenue, spending, cash flow, products, actions, plans, strategies and objectives. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate or simply state future results, performance or achievements, and may contain the words "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will be," "will continue," "will result," "could," "should," "would," "may," "might," or any variations of such words with similar meanings. Any such statements are subject to risks and uncertainties that could cause our actual results to differ materially from those which are VGX's management's current expectations or forecasts, become inaccurate. Such risks and uncertainties are further discussed in this joint proxy statement/prospectus under "Risk Factors" beginning on page 26.

Critical Accounting Policies

The SEC defines critical accounting policies as those that are, in management's view, important to the portrayal of VGX's financial condition and results of operations and require management's judgment. VGX's discussion and analysis of its financial condition and results of operations is based on its unaudited consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires VGX to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. VGX bases its estimates on experience and on various assumptions that VGX believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from those estimates. VGX's critical accounting policies include:

Revenue Recognition. Revenue is recognized in accordance with SAB No. 104, Revenue Recognition in Financial Statements and EITF Issue 00-21, Revenue Arrangements with Multiple Deliverables. VGX has been awarded contracts from the government as well as grants from certain third-party organizations to help fund research for the technologies and drugs that VGX is attempting to bring to full commercial use. Once research and development expenditures qualifying under the grant are incurred, grant reports are periodically completed and submitted to the granting agency for review. If approved, the granting agency will then remit payment to VGX. Such amounts are recorded as revenue upon receipt.

License fees are comprised of initial fees and milestone payments derived from collaborative licensing arrangements. VGX recognizes non-refundable milestone payments upon the achievement of specified milestones upon which VGX has earned the milestone payment, provided the milestone payment is substantive in nature and the achievement of the milestone was not reasonably assured at the inception of the agreement. VGX defers payments for milestone events which are reasonably assured and recognize them ratably over the minimum remaining period of its performance obligations. Payments for milestones which are not reasonably assured are treated as the culmination of a separate earnings process and are recognized as revenue when the milestones are achieved.

With regards to revenue recognition related to product sales, VGX recognizes revenue in accordance with SAB No. 104 and records revenue when it has satisfied all the requirements under SAB No. 104.

With regard to contract manufacturing services, VGX recognizes revenue from the DNA plasmids it produces for its customers, to their specifications, only upon shipment from its premises, at which



time title and all benefits and risks of ownership pass to the customer. The value of the inventory includes the cost of raw materials, direct labor and facility overhead. Overhead costs include indirect manufacturing costs such as utilities and depreciation that cannot be directly linked to the production of specific products.

Deferred revenue represents billings for products and services which will be recognized when the products are shipped or the services provided. VGX manufactures DNA plasmids for its customers, to their specifications, in compliance with the terms and conditions outlined in a contract or master services agreement. The agreements typically consist of a series of payments, to be made to VGX at specified points during the production process, which typically spans several months. As a result, payments are made to VGX for these contracted services in advance of, and during, the production process, and are recorded as deferred revenue on the balance sheet until the product is shipped to the customer, at which time revenue is recognized. During 2007, several progress payments were made to VGX from its customers; however, at the request of the customer, VGX stored the inventory in its facility, thus resulting in a significant amount of deferred revenue at December 31, 2007. Since these services were sold as part of the asset purchase agreement executed in 2008, the deferred revenue on the consolidated balance sheet at the time of the sale was considered in the calculation of the gain on the sale of these assets.

Cost of Sales. Cost of product sales includes costs to manufacture and purchase inventory sold to customers, along with shipping, handling and distribution expenses incurred in delivering these goods to customers. Also included in product sales are unabsorbed labor and overhead costs incurred at the DNA plasmid manufacturing facility not directly related to the production of inventory held for sale to customers.

Research and Development Expenses. Since VGX's inception, virtually all of its activities have consisted of research and development efforts related to developing its DNA vaccines and electroporation technologies and its small molecule drug programs. VGX expenses all such expenditures in the period incurred. VGX's expenses related to clinical trials are based on services received and efforts expended pursuant to contracts with multiple research institutions and clinical research organizations that conduct and manage clinical trials on its behalf. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows. Generally, these agreements set forth the scope of work to be performed at a fixed fee or unit price. Payments under the contracts depend on factors such as the successful enrollment of patients or the completion of clinical trial milestones. Expenses related to clinical trials generally are accrued based on contracted amounts applied to the level of patient enrollment and activity according to the protocol. If timelines or contracts are modified based upon changes in the clinical trial protocol or scope of work to be performed, VGX modifies its estimates accordingly on a prospective basis.

Valuation of Goodwill and Intangible Assets. VGX's business acquisitions typically result in goodwill and other intangible assets, and the recorded values of those assets may become impaired in the future. Acquired intangible assets are still being developed for the future economic viability contemplated at the time of acquisition. VGX is concurrently conducting Phase I and pre-clinical trials using the acquired intangibles, and VGX has entered into certain significant licensing agreements for use of these acquired intangibles.

As of December 31, 2008, VGX's goodwill and intangible assets resulting from acquisition costs of ADViSYS, Inc., net of accumulated amortization, totaled \$4.0 million. The determination of the value of such intangible assets requires management to make estimates and assumptions that affect VGX's consolidated financial statements. VGX assesses potential impairments to intangible assets when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recovered. VGX's judgments regarding the existence of impairment indicators and future cash

flows related to intangible assets are based on operational performance of VGX's acquired businesses, market conditions and other factors. If impairment is indicated, VGX reduces the carrying value of the intangible asset to fair value. As of December 31, 2008, VGX has recognized impairment costs associated with the customer lists and a portion of the assembled workforce acquired from ADViSYS, Inc. when the manufacturing operations based in The Woodlands, TX were sold to a related party.

Although there are inherent uncertainties in this assessment process, the estimates and assumptions VGX uses are consistent with VGX's internal planning. If these estimates or their related assumptions change in the future, VGX may be required to record an impairment charge on all or a portion of VGX's goodwill and intangible assets. Furthermore, VGX cannot predict the occurrence of future impairment-triggering events nor the impact such events might have on VGX's reported asset values. Future events could cause VGX to conclude that impairment indicators exist and that goodwill or other intangible assets associated with VGX's acquired businesses are impaired. Any resulting impairment loss could have an adverse impact on VGX's consolidated results of operations.

VGX expenses patent and related legal costs as well as trademark and license costs as they are incurred.

Stock-Based Compensation. Stock-based compensation cost is estimated at the grant date based on the fair-value of the award and is recognized as an expense ratably over the requisite service period of the award. Determining the appropriate fair-value model and calculating the fair value of stock-based awards at the grant date requires considerable judgment, including estimating stock price volatility, expected option life and forfeiture rates. VGX develops its estimates based on historical data. If factors change and VGX employs different assumptions in future periods, the compensation expense that is to be recorded may differ significantly from what has been recorded in the current period. A small change in the estimates used may have a relatively large change in the estimated valuation. VGX uses the Black-Scholes pricing model to value stock option awards. VGX recognizes compensation expense using the straight-line amortization method.

Recent Accounting Pronouncements

In May 2008, the Financial Accounting Standards Board ("FASB") issued Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement) ("FSP APB 14-1"). This Staff Position clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants. Additionally, this Staff Position specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early adoption is not permitted. VGX does not expect the adoption of this accounting guidance to have a material impact on the consolidated results of operations or financial position.

In May 2008, the Financial Accounting Standards Board issued SFAS No. 162, The Hierarchy of Generally Accepted Accounting Principles ("SFAS No. 162"). SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity with U.S. GAAP. VGX is currently evaluating the impact that SFAS No. 162 will have on its consolidated financial statements.

Effective January 1, 2008, VGX has adopted the provisions of Financial Accounting Standards Board Statement No. 157, Fair Value Measurements ("SFAS No. 157") to measure assets and liabilities. SFAS No. 157 establishes a common definition for fair value to be applied to U.S. GAAP requiring use

of fair value, establishes a framework for measuring fair value, and expands disclosure about such fair value measurements. SFAS No. 157 is effective for financial assets and financial liabilities for fiscal years beginning after November 15, 2007. Issued in February 2008, FSP 157-1, Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13, removed leasing transactions accounted for under Statement 13 and related guidance from the scope of SFAS No. 157. FSP 157-2 Partial Deferral of the Effective Date of Statement 157 (FSP 157-2), deferred the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities to fiscal years beginning after November 15, 2008. The partial implementation of SFAS No. 157 for financial assets and financial liabilities, effective January 1, 2008, did not have a material impact on VGX's consolidated financial statements. VGX is currently assessing the impact of SFAS No. 157 for non-financial assets and non-financial liabilities on its consolidated financial statements.

VGX management anticipates that, based on the composition of its existing assets and liabilities, the valuations used to estimate the fair value will rely on observable and unobservable inputs. Observable inputs are those that reflect a public market, whereas unobservable inputs are those that reflect management's assumptions about the assumptions market participants would use in pricing the underlying asset or liability. VGX management does not believe that SFAS No. 157 will have a material impact on the amounts reported in the financial statements; however, additional disclosures about the inputs used to develop the measurements of fair value and the effects of certain measurements reported in the consolidated statements of operations for a fiscal period will be required.

Effective January 1, 2008, VGX adopted Financial Accounting Standards Board Statement No. 159, The Fair Value Option for Financial Assets and Financial Liabilities ("SFAS No. 159"). SFAS No. 159 provides companies with an option to report selected financial assets and liabilities at fair value. The Statement also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of a company's choice to use fair value on its earnings. Adoption of SFAS No. 159 did not have an impact on VGX's consolidated results of operations and financial position.

In December 2007, the Financial Accounting Standards Board issued Statement No. 141 (revised 2007), Business Combinations ("SFAS No. 141(R)"), which is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. SFAS No. 141(R) establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any non-controlling interest in the acquiree, and the goodwill acquired in the business combination. SFAS No. 141(R) also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. FAS 141(R) will be applied prospectively. VGX does not expect the adoption of SFAS 141(R) to have a material impact on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Non-controlling Interests in Consolidated Financial Statements (an amendment of Accounting Research Bulletin No. 51) ("SFAS No. 160"). SFAS No. 160 requires that non-controlling (minority) interests be reported as a component of equity, that net income attributable to the parent and to the non-controlling interest be separately identified in the income statement, that changes in a parent's ownership interest while the parent retains its controlling interest be accounted for as equity transactions, and that any retained non-controlling equity investment upon the deconsolidation of a subsidiary be initially measured at fair value. This statement is effective for fiscal years beginning after December 31, 2008, and shall be applied prospectively. However, the presentation and disclosure requirements of SFAS No. 160 are required to be applied retrospectively for all periods presented. The retrospective presentation and disclosure requirements of this statement will be applied to any prior periods presented in financial statements for the fiscal year

ending December 31, 2009, and later periods during which VGX had a consolidated subsidiary with a non-controlling interest.

In November 2007, the FASB ratified EITF Issue No. 07-1, Accounting for Collaborative Agreements Related to the Development and Commercialization of Intellectual Property. EITF Issue No. 07-1 defines collaborative agreements as a contractual arrangement in which the parties are active participants to the arrangement and are exposed to the significant risks and rewards that are dependent on the ultimate commercial success of the endeavor. Additionally, it requires that revenue generated and costs incurred on sales to third parties as it relates to a collaborative agreement be recognized as gross or net based on EITF Issue No. 99-19, Reporting Revenue Gross as a Principal versus Net as an Agent . It also requires payments between participants to be accounted for in accordance with already existing generally accepted accounting principles, unless none exist, in which case a reasonable, rational, consistent method should be used. EITF Issue No. 07-1 is effective for fiscal years beginning after December 15, 2008 for all collaborative arrangements existing as of that date, with retrospective application to all periods. VGX management is currently evaluating the impact of this standard and does not anticipate the adoption of EITF Issue No. 07-1 to have a material impact on VGX's consolidated financial statements.

In July 2006, the FASB issued Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" ("FIN 48"). FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, "Accounting for Income Taxes" ("SFAS No. 109"). Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 will be applied to all tax positions accounted for under SFAS No. 109 upon initial adoption.

VGX adopted FIN 48 effective January 1, 2008 with no impact on its consolidated financial statements. VGX recognizes interest and penalties, if any, related to uncertain tax positions in income tax expense. Upon adoption of FIN 48, VGX had no interest or penalties accrued related to uncertain tax positions, due to the net operating loss carryforwards that VGX has available.

Results of Operations for the Year Ended December 31, 2008 Compared to the Year Ended December 31, 2007

The audited consolidated financial data for the years ended December 31, 2008 and December 31, 2007 and the period from December 12, 2000 (Inception) to December 31, 2008 is presented in the following table and the results of these periods are used in the discussion thereafter.

				Period From December 12, 2000
	December 31, 2008	December 31, 2007	Increase/ (Decrease) \$	(Inception) to December 31, 2008
Revenue:				
Revenue from Product Sales	\$ 606,211	\$ 723,411	\$ (117,200)	\$ 1,329,622
Government Contract Revenue	1,990,411		1,990,411	1,990,411
Government Grant Revenue	86,120	668,955	(582,835)	1,827,528
License Fee Revenue				75,000
Revenue from Related Parties	376,072		376,072	376,072
Other Operating Revenue, net	68,425	36,448	31,977	104,873
Total Revenue	3,127,239	1,428,814	1,698,425	5,703,506
Operating Expenses				
Cost of Product Sales	2,237,238	2,204,254	32,984	4,441,492
Research & Development	13,125,479	10,781,960	2,343,519	39,184,588
General & Administrative	7,808,636	5,082,119	2,726,517	32,969,708
TOTAL Operating Expenses	23,171,353	18,068,333	5,103,020	76,595,788
Loss from Operations	(20,044,114)	(16,639,519)	3,404,595	(70,892,282)
Other Income (Expense):	(20,011,111)	(10,009,019)	3,404,292	(10,0)2,202
Gain on Sale of Manufacturing				
Assets to Related Party, net of tax	6,653,153		6,653,153	6,653,153
Losses from Equity Investment in	0,055,155		0,055,155	0,055,155
Affiliated Entity	(1,632,812)	(990,338)	642,474	(3,648,681
Interest Income	423,312	919,026	(495,714)	2,289,676
Interest Expense	(712,242)	(1,128,713)	(416,471)	(3,043,402)
Other Income	218,557	(1,120,713)	218,557	218,557
Minority Interest	267,634	43,503	224,131	311,137
interest	207,001	15,505		511,157
Total Other Income (Expense)	5,217,602	(1,156,522)	6,374,124	2,780,440
Net Loss	\$ (14,826,512)	\$(17,796,041)	\$(2,969,529)	\$ (68,111,842)

Revenue. VGX had total revenue of \$3,127,000 and \$1,429,000 for the years ended December 31, 2008 and 2007, respectively, and \$5,704,000 for the period from December 12, 2000 (inception) through December 31, 2008. It primarily consists of revenue from the DNA contract manufacturing facility acquired from ADViSYS, Inc. in February 2007, sales of Animal Health's LifeTide SW5 product in Australia, government contract and grant revenue, R&D license and cost sharing fees, rental and fees from sublease and consulting agreements with a related party, and other sources including rental of VGX's electroporation devices, sales of associated arrays, and sales of animals used in research activities.

Revenue from product sales to customers of the DNA manufacturing facility for the years ended December 31, 2008 and 2007 totaled \$566,000 and \$723,000, respectively. This revenue reflects shipments to a customer in the United Kingdom, in response to their supply needs. These manufacturing operations and assets were sold to a related party in June 2008. Revenue from DNA

contract manufacturing operations from December 12, 2000 (inception) through December 31, 2008 was \$1,290,000.

Also included in revenue from product sales for the year ended December 31, 2008 and the period from December 12, 2000 (inception) to December 31, 2008, is \$40,000 from sales of Animal Health's LifeTide SW5 product in Australia. As marketing approval for this product was received in January 2008, there were no sales recorded in prior periods.

Revenue from the contract with the Defense Threat Reduction Agency (DTRA) to develop VGX's constant current electroporation technology for intradermal (ID) delivery of DNA vaccines and therapeutics was \$1,990,000 for the year ended December 31, 2008 as well as for the period from December 12, 2000 (inception) to December 31, 2008. Although the work related to this contract began upon the award in August of 2007, revenues were recorded only after the completion of the DCAA audit establishing VGX as an approved vendor, and once the vouchers for the incurred expenses were approved and the reimbursements were received. As such the first revenues related to the DTRA contract were recognized in 2008.

From May 2003 to April 2008, VGX was granted a sub-award, in conjunction with the University of Pennsylvania, to conduct research activities on a smallpox vaccine for approximately \$80,000 per annum. During the year ended December 31, 2008 and 2007, revenue from this grant of \$86,000 and \$43,000, respectively, was recorded. As noted this sub-award for the development of smallpox vaccines ended on April 30, 2008; it is not expected to be renewed. The remaining \$626,000 in grant revenues recognized in the year ended December 31, 2007 consisted of an NIH grant for the Preclinical Test of Biodefense Drug for SEB Toxin Exposure. The reduction in this revenue in 2008 is indicative of the terms of the award, with the majority of activities being conducted in previous years. For the period from December 12, 2000 (inception) to December 31, 2008, revenue from government grants totaled \$1,828,000.

Revenue from license fees received by VGX from third parties from December 12, 2000 (inception) through December 31, 2008 totaled \$75,000.

For the year ended December 31, 2008, VGX recognized revenue from related parties of \$376,000 which consisted of licensing and cost sharing fees of \$200,000, rent from a sublease agreement on The Woodlands manufacturing and office facility of \$119,000, and consulting fees for DNA plasmid manufacturing support of \$57,000. No related party revenue was recognized for any prior periods.

Other operating revenue for the year ended December 31, 2008 reflects \$41,000 in revenue from the sale of research animals no longer needed for studies, \$23,000 from shipping costs paid to VGX from a manufacturing customer at the completion of the production campaign, and \$5,000 from sales of electroporation arrays. Other operating revenue for the year ended December 31, 2007 was \$37,000, which represents rental of electroporation devices, sales of associated arrays and research consulting fees. For the period from December 12, 2000 (inception) through December 31, 2008, other operating revenue totaled \$105,000.

Cost of Product Sales Expenses. Cost of product sales for the years ended December 31, 2008 and 2007 were \$2,237,000 and \$2,204,000, respectively, and \$4,441,000 for the period from December 12, 2000 (inception) to December 31, 2008. Costs of products manufactured for DNA plasmid customers totaled \$331,000 and \$626,000 in 2008 and 2007, respectively, and expenses associated with the first shipment of Animal Health's LifeTide SW5 product for sale in Australia, totaled \$108,000 in 2008. Collaborative efforts between manufacturing and research are currently underway to decrease the production cost of the LifeTide SW5 in order to improve its gross margin. Also included in cost of product sales for 2008 and 2007 is \$1,798,000 and \$1,578,000, respectively, of unabsorbed labor and overhead resulting from underutilization of the manufacturing facility.



Research and Development Expenses. Research and development expenses, which include clinical trial costs and pre-clinical research activities, for the years ended December 31, 2008 and 2007, were \$13.1 million and \$10.8 million, respectively. The increase in research and development expenses for the year ended December 31, 2008, as compared to the year ended December 31, 2007, was primarily related to the milestone payment incurred in conjunction with the acquisition of ADViSYS, and increased spending for preclinical and research projects, including the DTRA and NIAID contracts. For the period from December 12, 2000 (inception) through December 31, 2008, total research and development expenses totaled \$39,185,000.

General and Administrative Expenses. General and administrative expenses, which include marketing expenses, business development expenses and the amortization of intangible assets, for the years ended December 31, 2008 and 2007 were \$7.8 million and \$5.1 million, respectively. The increase in general and administrative expenses for the year ended December 31, 2008 as compared to 2007 was primarily related to an increase in stock-based compensation as a result of the option re-pricing that took place in September 2008, as well as increased intangible asset amortization for two additional months in 2008 (in 2007, the intangible assets were amortized 10 months out of the year since the acquisition of ADViSYS took place at the end of February, 2007), production of marketing materials and product samples and supplies associated with Animal Health's LifeTide SW5 product approved for sale in Australia in January 2008, and increased spending for outside consulting services and legal and accounting fees related to the execution of the definitive merger agreement with INOVIO. These increases are partially offset by a reduction in stock-based compensation for a former related party employee whose options vested completely in June of 2007. For the period from December 12, 2000 (inception) to December 31, 2008, general and administrative expenses totaled \$32,970,000.

Stock-Based Compensation. Stock-based compensation cost is measured at the grant date, based on the fair value of the award reduced by estimated forfeitures, and is recognized as expense over the employee's requisite service period. Total compensation cost under SFAS No. 123(R) for VGX's stock plans for the year ended December 31, 2008 was \$8,624,000, of which \$2,158,000 was included in research and development expenses and \$6,466,000 was included in general and administrative expenses. Total compensation cost under SFAS No. 123(R) for VGX's stock plans for the year ended December 31, 2007 was \$5,473,000, of which \$1,150,000 was included in research and development expenses and \$4,323,000 was included in general and administrative expenses. The increase in stock-based compensation expenses for research and development in the year ended December 31, 2008 as compared to 2007 is attributable to the issuance of shares upon the attainment of a key milestone. The increase in stock-based compensation expenses for general and administrative in the year ended December 31, 2008 as compared to 2007 reflects the option re-pricing that took place in September 2008. For the period from December 12, 2000 (inception) through December 31, 2008, total stock-based compensation recorded by VGX is \$37,830,000.

Gain on Sale of Manufacturing Assets. On June 10, 2008, an Asset Purchase Agreement was executed whereby all of the manufacturing assets of VGX were sold to a related party. VGX had not previously contemplated the sale of it manufacturing assets, as it was considered to be a part of its overall strategy of becoming a key player in the DNA Vaccines industry. The proceeds from the sale of the assets were to be used to fund VGX's clinical trials as well as redeem convertible debt. While having an internal DNA plasmid manufacturing operation allowed VGX the flexibility and control over the manufacturing of its DNA plasmids, VGX management believed that any potential manufacturing risk could be mitigated through the use of alternate sourcing and supply agreements. In arriving at the selling price, the VGX management, considered in part a report by an independent third party valuation firm who used various valuation methodologies including DCF, Revenue Multiples, and Comp Analysis to determine the value of the manufacturing assets. As such, the board of VGX approved the asset sale and the deal was consummated on June 10, 2008.

For the year ended December 31, 2008 and the period from December 12, 2000 (inception) through December 31, 2008, VGX recognized a one-time gain on the sale of its manufacturing assets of \$6,653,000, net of tax of \$69,500. The recorded gain was net of VGX's 30.37% stake in VGX International of \$2,902,000.

Losses from Equity Investment in Affiliated Entity. VGX recorded expense for the years ended December 31, 2008 and 2007 of \$1,633,000 and \$990,000, respectively, which reflects VGX's ownership share of the losses of VGX International, Inc., which is accounted for by the equity method in VGX's financial statements. The increase in losses from 2007 to 2008 is attributable to the increased R&D spending by VGX International related to the clinical trial support of VGX-1027. For the period from December 12, 2000 (inception) through December 31, 2008, VGX's portion of losses in VGX International reflected in the consolidated statements of operations is \$3,649,000.

Interest Income. Interest income for the years ended December 31, 2008 and 2007 was \$423,000 and \$919,000, respectively. The decrease in interest income for the year ended December 31, 2008, as compared to 2007, was primarily due to lower cash and investment balances and a lower average interest rate. Interest income from December 12, 2000 (inception) through December 31, 2008 totaled \$2,290,000.

Interest Expense. VGX recorded interest expense for the years ended December 31, 2008 and 2007 of \$712,000 and \$1,129,000, respectively. Included in this expense is interest accrued on loans from investors of \$583,000 and \$909,000 for the years ended December 31, 2008 and 2007, respectively. The reduction in interest expense is reflective of loans that have been repaid in 2007 and 2008. Also reflected in interest expense is amortization of debt issuance costs of \$129,000 and \$126,000 for the years ended December 31, 2008 and 2007, respectively. These costs were being amortized over the term of the borrowings, and were fully amortized when the liability related to these costs was satisfied with the issuance of 71,000 stock options in September 2008. For the period from December 12, 2000 (inception) through December 31, 2008, interest expense totaled \$3,043,000, which consists of \$2,563,000 of interest on loans to investors, \$386,000 of debt issuance cost amortization, and \$94,000 of foreign currency losses related to repayment of certain loans issued in foreign currency during 2007.

Other Income, net. For the year ended December 31, 2008 and the period from December 12, 2000 (inception) through December 31, 2008, VGX reflected \$227,000 in other income, representing the gain realized on the settlement of the liability related to debt issuance costs, which is indicative of a reduction in the stock price from the time the liability was incurred until September 2008, when it was satisfied with the issuance of 71,000 stock options to the investor who was instrumental in assisting VGX with raising funds for the company. This income is partially offset by exchange losses realized on the collection of accounts receivable for product sold by Animal Health in Australia of \$8,000 for the year ended December 31, 2008 and the period from December 12, 2000 (inception) through December 31, 2008.

Minority Interest. For the years ended December 31, 2008 and 2007, VGX reflected \$267,000 and \$44,000, respectively, in minority interest, reflecting the portion of Animal Health's losses attributable to third party stockholders. For the period from December 12, 2000 (inception) through December 31, 2008, VGX reflected \$311,000 of minority interest in its consolidated statements of operations.

Income Taxes. Since inception, VGX has incurred operating losses and accordingly has not recorded a provision for income taxes for any of the periods presented. As of December 31, 2008, VGX had net operating loss carry forwards for federal and state income tax purposes of approximately \$36.3 million and \$30.1 million, respectively, which will expire in 2021 through 2028 if not utilized. Utilization of net operating losses is subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986, as amended.

Liquidity and Capital Resources

Historically, VGX's primary uses of cash have been to finance research and development activities including clinical trial activities in its small molecule drug programs as well in the DNA vaccines and other immunotherapy areas of its business. Since inception, VGX has satisfied its cash requirements principally from proceeds of convertible notes and common stock offerings to investors. In 2008, VGX repaid \$6,810,000 in notes along with interest of approximately \$686,000 to investors. As of December 31, 2008, there were \$6,540,000 in notes and convertible notes outstanding. VGX is currently expected to repay \$2,140,000 in notes along with accrued interest of approximately \$326,000 in 2009. The \$3,000,000 tranche due from the related party for the manufacturing asset sale is to be used for the repayment of notes. The remaining \$4.4 million in convertible notes are to be repaid in 2010, unless they are converted into common stock per existing conversion terms.

In 2008, VGX earned \$200,000 in revenue from a related-party upon the execution of two license agreements, which is to be collected in 2009.

VGX has multiple license agreements with various entities which have had, and may have material impact on cash outlay in the future. In 2007, VGX paid a total of \$125,000 to two institutions related to signing of two separate license agreement. In 2008 VGX paid a total of \$175,000 to two institutions related to license agreements. The payment for \$125,000 was triggered upon the filing of the IND for the HPV clinical trial, while the remaining \$50,000 was for the annual maintenance fee related to an existing license agreement and for the execution of an amendment to an existing license agreement.

There are also several future milestone payments by VGX to various licensors which may be relevant to cash in the short and mid-term. These include a \$50,000 payment upon the completion of patient enrollment for a Phase II trial of VGX-1027, a \$250,000 payment upon the enrollment of first subject in a Phase II trial of VGX-3100, and a \$25,000 annual maintenance fee related to an existing license agreement. VGX has also committed to an annual payment of \$443,000 in support of a Sponsored Research Agreements with a University; the commitment is expected to decrease to \$236,000 per annum starting 2011.

In June 2008, VGX sold its DNA plasmid contract manufacturing operations and assets to a related party. From the period from inception (December 12, 2000) through December 31, 2008, cash provided by these contract manufacturing operations amounted to \$1.2 million. This was the result of the \$6.7 million gain on the sale of the manufacturing assets which took place in June 2008, offset by cash used in the manufacturing operations of \$5.5 million. Following the sale of the manufacturing assets, VGX believes that it will be in a better position to focus on its strategic objectives and devote its resources exclusively to research and clinical development of novel product candidates.

VGX has over the years demonstrated its ability to attain government/non-governmental organization (NGO) grants and contracts in support of its research activities. Since its inception, VGX recognized \$3.8 million in revenues from government contracts and grants. In 2008, VGX was awarded a \$23.5 million NIH contract to develop a DNA-based preventive HIV Vaccine delivered via electroporation. The term of the contract is five-years, renewable annually, with two option years that can extend the term of the contract to seven years. The contract is expected to subsidize VGX's critical research efforts and help alleviate cash requirements. However, there is no guarantee that the contract will be renewed every year until its scheduled termination date. Although VGX plans to actively continue pursuing government/NGO grant and contract opportunities to subsidize its research efforts, there is no guarantee that it will be able to continue its success in the future.

As of December 31, 2008, VGX had working capital of \$3.3 million, as compared to \$1.7 million as of December 31, 2007. The increase in working capital during the year ended December 31, 2008 was primarily due to extending terms of existing debt and reclassifying these notes to long-term, along with the proceeds from the sale of the manufacturing assets through an asset purchase agreement with

a related party in June 2008, and the attendant removal of liabilities such as deferred revenue that was associated with the manufacturing business. Key factors that consumed working capital were the repayment of notes and accrued interest to investors, and expenditures for research and development activities, maintenance of VGX's patent portfolio, and general and administrative expenses related to consulting, legal, accounting, audit and other professional services in conjunction with the definitive merger agreement executed with INOVIO.

As of December 31, 2008, VGX had an accumulated deficit of \$68.1 million. VGX has operated at a loss since December 12, 2000 (inception), and expects this to continue for some time. The amount of the accumulated deficit will continue to increase, as it will be expensive to continue clinical, research and development efforts. If these activities are successful and if VGX receives approval from the FDA to market products and / or equipment, then even more funding will be required to market and sell the products and equipment. The outcome of the above matters cannot be predicted at this time. VGX will evaluate potential partnerships as an additional way to fund operations, and will continue to rely on outside sources of financing to meet capital needs beyond next year.

VGX's long-term capital requirements will depend on numerous factors including:

The progress and magnitude of the research and development programs, including preclinical and clinical trials;

The time involved in obtaining regulatory approvals;

The cost involved in filing and maintaining patent claims;

Competitor and market conditions;

The ability to establish and maintain collaborative arrangements;

The ability to obtain grants to finance research and development projects; and

The cost of manufacturing scale-up and the cost of commercialization activities and arrangements.

The ability to generate substantial funding to continue research and development activities, preclinical and clinical studies and clinical trials and manufacturing, scale-up, and selling, general, and administrative activities is subject to a number of risks and uncertainties and will depend on numerous factors including:

The ability to raise funds in the future through private financings, collaborative arrangements, grant awards or from other sources;

VGX's potential to obtain equity investments, collaborative arrangements, license agreements or development or other funding programs in exchange for manufacturing, marketing, distribution or other rights to products developed by VGX; and

The ability to maintain existing collaborative arrangements.

VGX cannot guarantee that additional funding will be available when needed or on favorable terms. If it is not, VGX will be required to scale back research and development programs, preclinical studies and clinical trials, and selling, general, and administrative activities, or otherwise reduce or cease operations and VGX's business and financial results and condition would be materially adversely affected.

Executive Compensation

The following table sets forth compensation information for 2008 and 2007 for VGX's president and chief executive officer, the chief financial officer, and other key executives of VGX who will become executive officers of the combined company.

Summary Compensation Table

Name and Principal Position(1)	Year	Salary (\$)	Bonus (\$)(2)	Option Awards (\$)(3)	All Other Compensation (\$)(4)	Total (\$)
J. Joseph Kim	2008	248.537	(\$)(2)	3,502,752	1.060	3,752,349
		- /		5,502,752	1,000	· · · ·
CEO and President	2007	240,000	40,000	1,766,456	4,260	2,050,716
Kevin W. Rassas	2008	145,700		190,492		336,192
Sr. VP of Bus Development	2007	131,667	10,000	186,177	1,467	329,311
Gene J. Kim	2008	165,800		1,976,560		2,142,360
CFO	2007	151,603	15,000	1,090,721	1,967	1,259,290
Niranjan Y. Sardesai	2008	149,179		196,965		346,144
Sr. VP of Research	2007	131,060	14,000	76,775	1,633	223,468
C. Jo White	2008	221,361	43,260	188,745		453,366
СМО	2007	210,000	42,000	209,782	2,767	464,459

(1)

The information set forth in this table relates to the executive officer's position at VGX during the 2008 and 2007 fiscal years

(2)

Includes bonus earned in 2008 but which were paid in 2009 and earned in 2007 but which were paid in 2008, respectively.

(3)

The amounts in the Option Awards column reflect the estimated dollar amounts to be recognized for financial purposes for the fiscal years ended December 31, 2008 and 2007 in accordance with FAS 123(R), for awards pursuant to the VGX 2001 Equity Incentive Plan, and thus includes amounts attributable to awards granted before 2008 and 2007.

(4)

For 2008, consists of life insurance premium payment for which the beneficiary is not VGX. For 2007, consists of matching contribution to VGX 401(k) plan and life insurance premium payment in which the beneficiary is not VGX. VGX ended its policy of matching contribution to the VGX 401(k) plan in the second quarter of 2007.

Employment Agreements

VGX utilizes employment agreements for all executive officers, generally when it is necessary to secure the services of a newly hired executive. VGX currently has employment agreements with:

J. Joseph Kim, Ph.D., VGX's President and Chief Executive Officer, effective as of March 31, 2008;

Gene J. Kim, VGX's Chief Financial Officer, effective October 1, 2005, amended as of August 20, 2008;

Kevin W. Rassas, VGX's Senior Vice President, Business Development, effective as of December 17, 2005, amended as of August 20, 2008;

C. Jo. White, Chief Medical Officer, effective as of August 1, 2005, amended as of August 20, 2008; and

Niranjan Y. Sardesai, Ph.D., Senior Vice President, Research and Development, effective as of November 1, 2007, amended as of August 20, 2008 and October 1, 2008.

J. Joseph Kim, Ph.D., Employment Agreement. Under an executive employment agreement, J. Joseph Kim, Ph.D. serves as VGX's President and CEO. Under the terms of the agreement, Dr. Kim is entitled to receive an annual salary of \$254,616. He is also eligible to receive an incentive cash bonus up to the amount, based upon the criteria, as may be determined by the board and targeted at 30% or more of the base salary. In addition to the salary and cash bonus, he is also entitled to participate in such employee benefit plans or programs of VGX, and shall be entitled to such other fringe benefits, as are from time to time adopted by the VGX board of directors.

Under VGX's employment agreement with Dr. Kim, if VGX terminates his employment at any time without cause, as defined in the employment agreement, he is entitled to receive severance compensation in the form of monthly payments of his then-current base salary and of the pro rata bonus amount for a period of 24 months following the effective date of such termination. The pro rata bonus amount shall mean one-twelfth of the greater of (A) the most recent annual cash bonus paid prior to his termination, or (B) the average of the three most recent annual cash bonuses paid prior to his termination. VGX will also continue to pay his COBRA premiums for 18 months thereafter.

VGX has change-in-control agreements in place for the chief executive officer. The rationale for the agreement is that in the event of a change in control of VGX, this individual is most likely to lose his job as a result of redundancy in executive position. If Dr. Kim is terminated as a result of change-in-control, Dr. Kim is entitled to receive payments due him under the conditions of termination without cause as outlined above and a lump sum cash severance payment equal to his then-current monthly base salary and the pro rata bonus amount multiplied by 24 but discounted to present value based on applicable federal rate under the Code.

Gene J. Kim Employment Agreement. Under an executive employment agreement, Gene J. Kim serves as VGX's Chief Financial Officer. Under the terms of the agreement, Mr. Kim is entitled to receive an annual salary of \$175,512. He is also eligible to receive an incentive cash bonus up to the amount, based upon the criteria, as may be determined by the board and targeted at 20% or more of the base salary. In addition to the salary and cash bonus, he is also entitled to participate in such employee benefit plans or programs of VGX, and shall be entitled to such other fringe benefits, as are from time to time adopted by the VGX board of directors.

Under VGX's employment agreement with Mr. Kim, if VGX terminates his employment at any time without cause, as defined in the employment agreement, he is entitled to receive severance compensation in the form of monthly payments of his then-current base salary and of the pro rata bonus amount for a period of 12 months following the effective date of such termination. The pro rata bonus amount shall mean one-twelfth of the greater of (A) the most recent annual cash bonus paid prior to his termination, or (B) the average of the three most recent annual cash bonuses paid prior to his termination. VGX will also continue to pay his COBRA premiums for six months thereafter.

Kevin W. Rassas Employment Agreement. Under an executive employment agreement, Kevin W. Rassas serves as VGX's Senior Vice President of Business Development. Under the terms of the agreement, Mr. Rassas is entitled to receive an annual salary of \$152,961. He is also eligible to receive an incentive cash bonus up to the amount, based upon the criteria, as may be determined by the board and targeted at 30% or more of the base salary. In addition to the salary and cash bonus, he is also entitled to participate in such employee benefit plans or programs of VGX, and shall be entitled to such other fringe benefits, as are from time to time adopted by VGX board of directors.

Under VGX's employment agreement with Mr. Rassas, if VGX terminates his employment at any time without cause, as defined in the employment agreement, he is entitled to receive severance compensation in the form of monthly payments of his then-current base salary and of the pro rata



bonus amount for a period of six months following the effective date of such termination. The pro rata bonus amount shall mean one-twelfth of the greater of (A) the most recent annual cash bonus paid prior to his termination, or (B) the average of the three most recent annual cash bonuses paid prior to his termination. VGX will also continue to pay his COBRA premiums for six months thereafter.

C. Jo White, M.D. Employment Agreement. Under an executive employment agreement, C. Jo White serves as VGX's Chief Medical Officer. Under the terms of the agreement, Dr. White is entitled to receive an annual salary of \$222,789. She is also guaranteed to receive a minimum cash bonus of 20% of her annual salary. In addition to the salary and cash bonus, she is also entitled to participate in such employee benefit plans or programs of VGX, and shall be entitled to such other fringe benefits, as are from time to time adopted by the VGX board of directors.

Under VGX's employment agreement with Dr. White, if VGX terminates her employment at any time without cause, as defined in the employment agreement, she is entitled to receive severance compensation in the form of monthly payments of her then-current base salary and of the pro rata bonus amount for a period of six months following the effective date of such termination. The pro rata bonus amount shall mean one-twelfth of the greater of (A) the most recent annual cash bonus paid prior to her termination, or (B) the average of the three most recent annual cash bonuses paid prior to her termination. VGX will also continue to pay her COBRA premiums for six months thereafter.

Niranjan Sardesai, Ph.D. Employment Agreement. Under an executive employment agreement, Niranjan Sardesai, Ph.D. serves as VGX's Senior Vice President of Research and Development. Under the terms of the agreement, Dr. Sardesai is entitled to receive an annual salary of \$171,275 per annum. He is also eligible to receive an incentive cash bonus up to the amount, based upon the criteria, as may be determined by the board and targeted at twenty percent (20%) or more of the base salary. In addition to the salary and cash bonus, he is also entitled to participate in such employee benefit plans or programs of VGX, and shall be entitled to such other fringe benefits, as are from time to time adopted by the VGX board of directors.

Under VGX's employment agreement with Dr. Sardesai, if VGX terminates his employment at any time without cause, as defined in the employment agreement, he is entitled to receive severance compensation in the form of monthly payments of his then-current base salary and of the pro rata bonus amount for a period of six months following the effective date of such termination. The pro rata bonus amount shall mean one-twelfth of the greater of (A) the most recent annual cash bonus paid prior to his termination, or (B) the average of the three most recent annual cash bonuses paid prior to his termination. VGX will also continue to pay his COBRA premiums for six months thereafter.

Elements of Post-Termination Compensation

Change-in-Control Agreements. VGX has change-in-control agreements in place for the chief executive officer. The rationale for the agreement is that in the event of a change in control of VGX, this individual is most likely to lose his job as a result of redundancy in executive position. Information regarding applicable payments under the change of control for the named executive officer is provided in executive officer's employment agreement.

Severance. As part of VGX's executive officers employment agreements, any executive currently working for VGX at the executive officer level whose employment is terminated involuntarily is eligible for severance benefits, provided each of their employment agreement requirements are met. The severance pay and benefits that are payable are stated in each executive's employment agreement.

Internal Revenue Code Section 409A

Code Section 409A relates to accounting treatment for deferred compensation. VGX is aware that it had granted options and warrants which did not comply with the provisions of Section 409A of the



Code. In September 2008, the VGX board of directors approved two methods to bring these non-compliant stock options and warrants into compliance with section 409A of the Code. Each holder of non-compliant options and warrants was given the choice of either agreeing to reset the exercise price at a value that was no less than the fair market value of VGX common stock on the date of repricing, or making a forward election in which the holder was given the option to choose a date after December 31, 2008 on or after which to exercise the stock option and warrant. The new grant prices were determined and were the responsibility of VGX Board of Directors and management, which considered in part preliminary work performed by an independent valuation firm.

Impact of FAS 123R

FAS 123R requires companies to record option grants as expenses at the time of grant. Option expense is one factor that VGX considers in the design of VGX's long-term compensation programs. Other factors include:

the link to performance that each type of equity award provides;

the degree of upside leverage and downside risk inherent in each type of award;

the impact on dilution and overhang that the different equity awards have; and

the role that each type of equity award has in the attraction, retention, and motivation of VGX's executive and key employee talent.

VGX monitors its FAS 123R expense to ensure that it is reasonable, although expense is not the most important factor in making decisions about VGX's long-term incentive plans.

Option Repricing

In September 2008, the VGX board of directors approved a re-pricing of certain high priced options issued to employee and consultants to lower the grant price in order to improve employee morale. The options were re-priced to new grant prices which ranged from \$1.00 to \$2.25. The new grant prices were determined and were the responsibility of the VGX Board of Directors and management, which considered in part preliminary work performed by an independent valuation firm. The grant price prior to the re-pricing was \$5.00. The repricing of the options was done in accordance with FAS 123R. Using the Black-Scholes Option Pricing Model, the fair values of the modified options at the modification date were calculated. This was then compared against the fair values of the original options. If the vesting schedule of the options were accelerated, the additional compensations expenses were recognized immediately as opposed to over the length of the vesting schedule. The re-pricing will create an additional non-cash compensation charge of \$2,968,745, \$324,123, and \$52,734 in 2008, 2009, and 2010, respectively.

There was an additional re-pricing of options that were not compliant with Section 409A. In this case, the grant prices of the options were adjusted upwards from \$.025 to \$.50 to \$1.00 to \$1.25. As the fair values of the modified options at the modification date was lower than the fair values of the original options at the modification date, no additional compensations expenses were recognized; this is consistent with the fact that the grantees were giving up lower-priced options for the higher-priced ones.

Options Exercised

There were no options exercised by VGX named executive officers during 2008.

Outstanding Equity Awards as of December 31, 2008

The following tables set forth certain information with respect to outstanding equity awards to the named executive officers under VGX equity incentive plans during 2008.

	Number of Securities Underlying	OPTION A' Number of Securities Underlying		
Name	Unexercised Options (#) Exercisable	Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
(a)	(b)	(c)	(d)	(e)
J. Joseph Kim	1,000,000		1.25	05/01/2016
President and CEO	400,000	200,000	1.25	1/18/2017
	83,333	166,667	1.25	09/28/2017
		200,000	1.25	09/12/2018
	1,483,333	566,667		
Gene J. Kim				
	150,000		1.25	10/1/2015
CFO	500,000		1.25	5/1/2016
	233,333	116,667	1.25	1/18/2018
	66,667	133,333	1.25	9/28/2017
		200,000	1.25	9/12/2018
	950,000	450,000		
Kevin Rassas				
	200,000		0.05	12/16/2013
Sr. VP, Business Development	400,000		0.20	12/1/2014
	120,000		0.30	12/17/2015
	20,000	10,000	2.25	10/2/2016
	33,333	16,667	2.25	1/18/2017
	5,000	10,000	2.25	11/1/2017
		20,000	1.5	9/12/2018
	778,333	56,667		
Niranjan Sardesai	o - o o o	10 005		0.000
	95,000	40,000	1.50	8/28/2016
Sr. VP, Research and Development	16,667	8,333	1.50	1/5/2017
	10,000	5,000	1.50	1/18/2017
	45,000	30,000	1.50	11/1/2017
		50,000	1.50	9/12/2018
	166,667	133,333		
	186			

ODTION AWADDS

	OPTION AWARDS			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
(a)	(b)	(c)	(d)	(e)
C. Jo White Chief Medical Officer	100,000 100,000 100,000 300,000 33,333	16,667 55,000	0.03 1.25 0.20 1.25 1.25 1.25	10/01/2012 10/01/2012 12/01/2014 09/01/2015 01/18/2017 09/12/2018
	633,333	71,667		
	Number of Securities Underlying	WARRANT A Number of Securities Underlying	AWARDS	

Name		Underlying Unexercised Warrants (#) Exercisable	Underlying Unexercised Warrants (#) Unexercisable	Warrant Exercise Price (\$)	Warrant Expiration Date
	(a)	(b)	(c)	(d)	(e)
J. Joseph Kim		1,250,000		1.25	8/1/2015

1,250,000

Compensation of Directors

VGX pays each non-employee director of VGX (other than the chairman of the board) an annual retainer fee of \$30,000. VGX pays or reimburses all reasonable expenses associated with directors' attendance at and participation in board and VGX stockholder's meetings and other company business to which a director attends.

VGX does not pay director fees to its directors who are also VGX employees. Therefore, Dr. Kim does not receive director fees.

Non-employee directors are eligible to receive, from time to time, grants of options to purchase shares of common stock under the VGX equity incentive plan as determined by the full VGX board of directors. During 2008, VGX granted ten-year options to purchase a total of 10,000 shares of its common stock to each of its non-employee directors at an exercise price of \$1.50.

Director Compensation Table

	Fees		
	Earned		
	or	Option	
	Paid in	Awards	
Name(1)	Cash(\$)	(\$)	Total (\$)
Morton Collins, Ph.D.(2)	15,000	2,249	17,249
Keith Wells, Ph.D.(3)	15,000	2,249	17,249
Eric Shuey(4)	15,000	2,249	17,249

(1)

The information set forth in this table relates to the individuals who served on VGX's board of directors during the 2008 fiscal year. All board members are paid a stipend of \$2,500 per month. In 2008, all board members were granted options for 10,000 shares of

common stock.

(2) Dr. Collins will serve on the board of directors of the post-Merger company.

(3)

Dr. Wells will serve on VGX's board of directors until the closing of the Merger.

(4)

Mr. Shuey resigned from the board of directors in September 2008.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Security Ownership of Certain Beneficial Owners and Management of Inovio Prior to the Transaction

The following table sets forth information as of April 14, 2009, with respect to the beneficial ownership of Inovio's common stock by (i) each person known to Inovio to be the beneficial owners of more than 5% of its common stock, (ii) each of Inovio's directors and nominees for director, (iii) each of Inovio's executive officers, and (iv) all of Inovio's directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a stockholder and the percentage of ownership of that stockholder, shares of common stock underlying shares of convertible preferred stock, options or warrants held by that stockholder that are convertible or exercisable, as the case may be, within 60 days of April 14, 2009 are included. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. Each stockholder's percentage of ownership in the following table is based upon 44,060,550 shares of Inovio common stock outstanding as of April 14, 2009.

Beneficial Owner of Shares of Common Stock(1)(2)	Amount and Nature of Beneficial Ownership of Shares of Common Stock	Percent of Class of Shares of Common Stock
5% Stockholders:(3)		
None		
Directors and Executive Officers:		
Avtar Dhillon(4)	1,183,107	2.62%
James L. Heppell(5)	226,519	*
Riaz Bandali(6)	86,655	*
Simon X. Benito(7)	99,983	*
Tazdin Esmail(8)	150,723	*
Robert W. Rieder(9)	35,833	*
Stephen Rietiker(10)	330,000	*
Patrick Gan(11)	10,833	*
Tee Khiang Ng(12)	4,268,815	9.42%
Peter Kies(13)	235,201	*
Michael Fons(14)	121,275	*
Punit Dhillon(15)	181,214	*
All directors and executive officers as a group (12 persons)	6,930,158	15.39%

Less than 1%

(1)

This table is based upon information supplied by officers, directors and principal stockholders. Except as shown otherwise in the table, the address of each stockholder listed is in care of Inovio at 11494 Sorrento Valley Rd., San Diego, California 92121-1318.

(2)

Except as otherwise indicated in the footnotes of this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

(3)

To Inovio's knowledge, as of April 14, 2009, no individual or group beneficiary held 5% or more of its common stock.

^{*}

- (4) Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 1,024,996 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
- (5) Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 212,809 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

(6)

(7)

(9)

(10)

(11)

- Includes 2,941 shares underlying Series C preferred stock and 1,029 shares underlying warrants that are convertible or exercisable, respectively, within 60 days of April 14, 2009, and 82,500 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
- Includes 1,544 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 91,250 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
- (8) Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 141,250 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
 - Includes 35,833 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
 - Includes 30,000 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
 - Includes 10,833 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

(12)

Includes 1,666 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009, and 1,893,004 shares of common stock and 1,260,222 warrants to purchase common stock over which Mr. Ng exercises voting and investment control as a shareholder and/or director of the funds which hold such shares of record.

(13)

Includes 514 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 233,125 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

(14)

Includes 121,250 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

(15)

Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 180,000 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

Security Ownership of Certain Beneficial Owners and Management of VGX Prior to the Transaction

The following table sets forth certain information regarding beneficial ownership of the shares in VGX's share capital as of April 14, 2009 by: (i) each stockholder who is known by VGX to own beneficially more than five percent of the capital stock of VGX; (ii) each executive officer named below; (iii) each director of VGX; and (iv) all of VGX's current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a stockholder and the percentage of ownership of that stockholder, shares of common stock underlying options, warrants or convertible debt (excluding any shares issuable upon conversion of accrued interest on such convertible debt) held by that stockholder

that are exercisable or convertible, as the case may be, within 60 days of April 14, 2009 are included. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. Each stockholder's percentage of ownership in the following table is based upon 42,287,704 shares of VGX common stock outstanding as of April 14, 2009.

	Beneficial Ownership		
	Amount and Nature of		
	Beneficial		
	Ownership of Shares of Common	Percent of Class of Shares	
Name of Beneficial Owner(1)	Stock	of Common Stock	
5% Stockholders			
University of Pennsylvania	3,603,604	8.5%	
David Weiner	3,550,000	8.4%	
Ernest Shin(2)	4,592,850	10.2%	
Bryan Chung(3)	2,310,375	5.5%	
Directors and Executive Officers			
J. Joseph Kim(4)	14,793,333	32.9%	
Gene J. Kim(5)	950,000	2.2%	
C. Jo White(6)	633,333	1.5%	
Kevin Rassas(7)	898,333	2.1%	
Niranjan Sardesai(8)	166,667	*	
Morton Collins(9)	230,000	*	
All directors and executive officers as a group			
(6 persons)	17,671,667	39.6%	

Less than one % of shares outstanding.

(1)

(2)

This table is based upon information supplied by officers, directors and principal stockholders. Unless otherwise indicated, the address of each beneficial holder listed is 450 Sentry Parkway, Blue Bell, Pennsylvania 19422. Except as otherwise indicated in the footnotes of this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

	Includes 2,625,000 shares underlying warrants that are exercisable within 60 days of April 14, 2009.
(3)	Includes 52,000 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(4)	Includes 1,250,000 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 1,483,333 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(5)	Includes 950,000 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(6)	Includes 633,333 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(7)	Includes 778,333 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(8)	Includes 166,667 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

^{*}

Includes 10,000 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.

Security Ownership of Certain Beneficial Owners and Management of Inovio Following the Completion of the Transaction

The following table sets forth certain information regarding the amount and percentage of the beneficial ownership of the Inovio's common stock, giving effect to the transaction presuming a Merger Exchange Ratio of 0.9866163, by: (i) each stockholder who VGX and Inovio believe will own beneficially more than five percent of Inovio's common stock upon completion of the Merger, based on ownership of capital stock of Inovio and/or VGX as of April 14, 2009, presuming approval of the Acquisition Agreement and Merger; (ii) each director anticipated to be appointed to Inovio's board of directors and each employee anticipated to be appointed or continue as an executive officer of Inovio at the Effective Time; and (iii) all of the anticipated directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a stockholder and the percentage of ownership of that stockholder, shares of common stock underlying options, warrants, convertible preferred stock or convertible debt (excluding any shares issuable upon conversion of accrued interest on such convertible debt) held by that stockholder that are exercisable or convertible, as the case may be, within 60 days of April 14, 2009 are included, including giving effect to any acceleration of vesting, and resulting increase in beneficial ownership, that may occur for holders of Inovio options at the Effective Time of the Merger. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. Each stockholder's percentage of ownership in the following table is based upon the projected 85,988,118 shares of Inovio common stock anticipated to be outstanding upon completion of the Merger presuming no exercises or conversion of outstanding options, warrants or convertible debt prior to the closing. The figures below are not definitive and may change based on actual differences in the Merger Exchange Ratio as calculated at closing, the additional vesting of securities prior to closing and changes in the number of shares of Inovio common stock actually outstanding immediately post-Merger.

	Beneficial Ownership Amount and Nature		
Name of Beneficial Owner(1)	of Beneficial Ownership of Shares of Common Stock	Percent of Class of Shares of Common Stock	
5% Stockholders	Stock	of Common Stock	
Ernest Shin(2)	4,531,381	5.12%	
Directors and Executive Officers	, ,		
J. Joseph Kim(3)	14,595,344	16.46%	
Avtar Dhillon(4)	1,408,107	1.61%	
Simon X. Benito(5)	99,983	*	
Tee Khiang Ng(6)	4,297,149	4.92%	
Morton Collins(7)	226,922	*	
Peter Kies(8)	343,951	*	
C. Jo White(9)	624,857	*	
Niranjan Sardesai(10)	164,437	*	
Kevin Rassas(11)	886,310	*	
Gene Kim(12)	937,286	1.08%	
Punit Dhillon(13)	317,464	*	
Iacob Mathiesen(14)	205,000	*	
Michael Fons(15)	202,525	*	
All directors and executive officers as a			
group (13 persons)	24,309,335	25.66%	

Less than one % of shares outstanding.

(1)	This table is based upon information supplied by officers, directors and principal stockholders. The address of each beneficial holder listed is the same as designated in the current beneficial ownership tables presented above. Except as otherwise indicated in these footnotes and pursuant to community property laws, to the extent applicable, the persons named in the table have sole voting and investment power with respect to all shares of common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.
(2)	Includes 2,589,868 shares underlying warrants that are exercisable within 60 days of April 14, 2009.
(3)	Includes 1,233,271 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 1,463,481 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(4)	Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, 1,193,746 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing, and 56,250 shares of restricted stock which shall become fully vested upon closing.
(5)	Includes 1,544 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 91,250 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing.
(6)	Includes 30,000 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing, and 1,893,004 shares of common stock and 1,260,222 warrants to purchase common stock over which Mr. Ng exercises voting and investment control as a shareholder and/or director of the funds which hold such shares of record.
(7)	Includes 9,867 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(8)	Includes 514 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 341,875 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing.
(9)	Includes 624,857 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(10)	Includes 164,437 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(11)	Includes 767,916 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(12)	Includes 937,286 shares of common stock issuable pursuant to options exercisable within 60 days of April 14, 2009.
(13)	Includes 1,029 shares underlying warrants that are exercisable within 60 days of April 14, 2009, and 316,250 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing.
(14)	Includes 115,000 shares of common stock underlying options which shall become fully vested and exercisable upon closing and 45,000 shares of restricted common stock that shall become fully vested upon closing.
(15)	Includes 202,500 shares of common stock issuable pursuant to options which shall become fully vested and exercisable upon closing.

QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

Interest Rate Risk

Market risk represents the risk of loss that may impact Inovio's, VGX's, or if the Merger is completed, the combined group's, consolidated financial position, results of operations or cash flows due to adverse changes in financial and commodity market prices and rates. Inovio is exposed to market risk primarily in the area of changes in United States interest rates and conditions in the credit markets, and the recent and consistent fluctuations in interest rates and availability of funding in the credit markets primarily impacts the performance of Inovio's investments. Inovio does not have any material foreign currency or other derivative financial instruments. Under Inovio's current policies, Inovio does not use interest rate derivative instruments to manage exposure to interest rate changes. Inovio attempts to increase the safety and preservation of its invested principal funds by limiting default risk, market risk and reinvestment risk. Inovio mitigates default risk by investing in investment grade securities.

VGX currently does not have any substantial interest rate risk. VGX does not hold or issue financial instruments for trading or speculative purposes. VGX's unrestricted cash is invested in money market accounts and are held for working capital purposes. Due to the short-term nature of these investments, VGX believes that it does not have any material exposure to changes in the fair value of its investment portfolio as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income.

Fair Value Measurements

All of Inovio's investment securities are classified as trading securities and are reported on the consolidated balance sheet at market value. Inovio's investment securities consist of high-grade (AAA rated) auction rate securities ("ARS") issued primarily by municipalities, with a par value of approximately \$13.6 million. The negative conditions in the global credit markets have prevented some investors from liquidating their holdings, including their holdings of ARS. In early March 2008, Inovio was informed that there was insufficient demand at auction for all six of Inovio's high-grade ARS. As a result, these affected securities are currently not liquid, and Inovio could be required to hold them until they are redeemed by the issuer or to maturity. In the event Inovio needs to access the funds that are in an illiquid state, Inovio will not be able to do so without a loss of principal, until a future auction on these investments is successful, the securities are redeemed by the issuer or they mature.

In December 2008, Inovio, via its wholly-owned subsidiary Genetronics, Inc., or "Genetronics", which holds the ARS, accepted an offer of ARS rights from Inovio's investment advisor, UBS Financial Services, Inc., a subsidiary of UBS AG, or UBS. The ARS rights permit Inovio to require UBS to purchase Inovio's ARS at par value at any time during the period of June 30, 2010 through July 2, 2012. If Inovio does not exercise its ARS rights, the ARS will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction fails. If the ARS Rights are not exercised before July 2, 2012 they will expire and UBS will have no further obligation to buy Inovio's ARS. UBS has the discretion to purchase or sell Inovio's ARS at any time without prior notice so long as Inovio receives a payment at par upon any sale or disposition. UBS will only exercise its discretion to purchase or sell Inovio's ARS. As a condition to accepting the offer of ARS rights, Inovio released UBS from all claims except claims for consequential damages relating to its marketing and sales of ARS. Inovio also agreed not to serve as a class representative or receive benefits under any class action settlement or investor fund.

In conjunction with the acceptance of the ARS rights, Inovio also amended its existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with the ARS pledged as collateral. The loan will be treated as a "no net cost loan", as it will bear interest at a rate



equal to the average rate of interest paid to Inovio on the pledged ARS, and Inovio's net interest cost will be zero. Inovio fully drew down on the line of credit in December 2008.

In the event Inovio needs to access the funds that are in an illiquid state, Inovio will not be able to do so without the possible loss of principal, until a future auction for these investments is successful or they are redeemed by the issuer or they mature.

Foreign Currency Risk

Inovio has operated primarily in the United States and most transactions during the year ended December 31, 2008, have been made in U.S. dollars. Accordingly, Inovio does not have any material exposure to foreign currency rate fluctuations, nor does it have any foreign currency hedging instruments in place.

Inovio has conducted clinical trials in Europe in conjunction with several clinical research organizations, where Inovio has clinical sites being monitored by clinical research associates. While invoices relating to these clinical trials are generally denominated in U.S. dollars, Inovio's financial results could be affected by factors such as inflation in foreign currencies, in relation to the U.S. dollar, in markets where these vendors have assisted Inovio in conducting these clinical trials. Certain transactions related to Inovio and its subsidiaries Inovio AS and Inovio Asia Pte. Ltd. ("IAPL"), are denominated primarily in foreign currencies, including Euros, British Pounds, Canadian Dollars, Norwegian Kroner, Swedish Krona, and Singapore Dollars. As a result, Inovio's financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets where Inovio conducts business, including the impact of the existing crisis in the global financial markets in such countries and the impact on both the U.S. dollar and the noted foreign currencies.

Inovio does not use derivative financial instruments for speculative purposes. Inovio does not engage in exchange rate hedging or hold or issue foreign exchange contracts for trading purposes. Currently, Inovio does not expect the impact of fluctuations in the relative fair value of other currencies to be material in 2008.

VGX does have a foreign exchange rate risk with regards to its investment in its affiliate, VGX International, of which it holds 25% of outstanding shares as of February 2009. VGX International is a publicly-traded company on the Korean Stock Exchange. VGX recognizes its investment in VGX International using the equity method of reporting for the treatment of investments. Therefore, any losses or gains of VGX International, whose functional currency is Korean Wons, is translated into U.S. Dollars and recognized in the financials of VGX. In the event of sale of shares of VGX International, VGX would be subject to both equity price risk as well as foreign exchange rate risk. There are no current plans to reduce VGX's stake in VGX International.

VGX also owns 88.1% of outstanding shares in VGX Animal Health, which sells its LifeTide SW5 GHRH DNA therapy to the porcine market in Australia, and is thus subject to the commodity price risk of the porcine market. The ability to meet the revenue projections of LifeTide SW5 is highly correlated with the health of the swine industry in Australia.

CAPITAL STRUCTURE OF INOVIO

Capital Stock

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The authorized capital stock of Inovio consists of 300,000,000 shares of Inovio common stock, par value \$0.001 per share and 10,000,000 shares of Inovio preferred stock, par value \$0.001 per share. As of the record date:

] shares of Inovio common stock were issued and [] shares were outstanding;

[] shares of Inovio preferred stock were issued, of which [] shares of Inovio Series C Cumulative Convertible Preferred Stock were outstanding;

[] shares of Inovio common stock were reserved for issuance upon exercise of outstanding options granted pursuant to the Inovio's equity incentive plans; and

] shares of Inovio common stock were reserved for issuance upon exercise of outstanding Inovio warrants.

No shares of Inovio common stock are owned or held by any subsidiary of Inovio. All of the outstanding shares of capital stock of Inovio are, and all shares of capital stock of Inovio which may be issued pursuant to the Inovio options or the Inovio warrants will be, when issued, duly authorized and validly issued, fully paid and nonassessable and not subject to any preemptive rights. No outstanding shares of Inovio common stock are subject to a repurchase option or risk of forfeiture in favor of Inovio. Inovio has no obligation to issue any shares of the Inovio preferred stock and the Inovio preferred stock is not subject to any demand rights.

Stock Options

Except for the Inovio's previously reported equity incentive plans, as filed with the SEC and listed on the exhibit index to the registration statement of which this joint proxy statement/prospectus is a part, Inovio does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity or equity-based compensation for any person. As of April 14, 2009, Inovio has a current reserve of 174,375 shares of Inovio common stock for future issuances of awards under its 2007 Omnibus Incentive Plan, and as of the record date [____] shares are subject to outstanding Inovio options.

Warrants

As of the record date, Inovio has a reserve of [] shares of common stock for issuance upon exercise of the Inovio warrants outstanding.

COMPARISON OF RIGHTS OF HOLDERS OF INOVIO COMMON STOCK AND VGX COMMON STOCK

Inovio is incorporated in the State of Delaware and the rights of Inovio stockholders are currently governed by the DGCL, by Inovio's certificate of incorporation (including the Certificates of Designations, Rights and Preferences for Inovio's preferred stock) and Inovio's bylaws. VGX is incorporated in the State of Delaware and the rights of VGX stockholders are currently governed by the DGCL, by VGX's certificate of incorporation and VGX's bylaws. After the completion of the Merger, stockholders of VGX will become stockholders of Inovio, and will become subject to Inovio's certificate of incorporation and bylaws.

The following is a summary of the material differences between the rights of Inovio common stockholders and the rights of VGX common stockholders. While Inovio and VGX believe that this summary covers the material differences between the two, this summary may not contain all of the information that is important to you. This summary is not intended to be a complete discussion of the respective rights of Inovio common stockholders and VGX common stockholders and it is qualified in its entirety by reference to Delaware law and the various documents of Inovio and VGX referenced in this summary. This summary should be carefully read, along with this entire joint proxy statement/prospectus and the other documents referenced in this joint proxy statement/prospectus, for a more complete understanding of the differences between being a stockholder of VGX. Inovio has filed with the SEC certain documents referred to this summary and will send copies of these documents to you upon your request. See the section entitled "*Where You Can Find More Information About Inovio*" on page 220.

	Inovio	VGX
Capitalization	The authorized capital stock of	The authorized capital stock of
	Inovio consists of:	VGX consists of: (i) 100,000,000
	(i) 300,000,000 shares of	shares of common stock, par
	common stock, par value \$0.001	value \$0.0001 per share and
	per share and (ii) 10,000,000	(ii) 1,000,000 shares of preferred
	shares of preferred stock, par	stock, par value \$0.0001 per
	value \$0.001 per share.	share.
	As of the record	As of the record
	date, 2009	date, 2009,
	(i) [] shares of	(i) [] shares of
	common stock were issued and	common stock were issued and
	outstanding; (ii)	outstanding; (ii)
	[] shares of	[] shares of
	preferred stock were issued and	preferred stock were issued and
	outstanding, of which	outstanding; (iii)
	[] were Series C	[] shares of
	Cumulative Convertible	common stock were reserved for
	Preferred Stock; (iii)	issuance upon exercise of
	[] shares of	outstanding options granted
	common stock were reserved for	pursuant to the VGX option plan;
	issuance upon exercise of	(iv) [] shares of
	outstanding options granted	common stock were reserved for
	pursuant to the Inovio incentive	issuance upon exercise of
	plans; and (iv) []	outstanding VGX warrants; and
	shares of common stock were	(v) [] shares of
	reserved for issuance upon	common stock were reserved for
	exercise of outstanding Inovio	issuance upon conversion of
	warrants.	outstanding notes evidencing the
		VGX convertible debt.
Number of Directors	The Inovio certificate of	The VGX bylaws provide that
	incorporation and bylaws	the board of directors shall
	provide that the number of	initially consist of three
	directors shall initially be set at	members, and VGX currently
	eight, and Inovio currently has	has three directors.
	nine directors.	107
		197

	Inovio	VGX
Election and Term of Directors	The Inovio certificate of incorporation and bylaws provide that the directors shall be elected at each annual meeting of the stockholders and shall hold office until the expiration of the term for which he or she was elected and until his or her respective successor is elected, except in the case of the death, resignation or removal of any director.	The VGX bylaws provide that the stockholders shall elect directors at the annual meeting of stockholders and a director shall hold office until the expiration of the term for which he or she was selected and until a successor shall have been elected and qualified or until his or her earlier death, resignation or removal.
Removal of Directors	The Inovio certificate of incorporation provides that, subject to the rights of the holders of any series of preferred stock then outstanding, any director, or the entire board of directors, may be removed from office at any time, with or without cause, but only by the affirmative vote of the holders of at least a majority of the voting power of all of the then outstanding shares of capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.	The VGX bylaws provide that any director or the entire board of directors may, unless otherwise provided by law, be removed with or without cause by the holders of shares entitled to cast a majority of the votes which all stockholders are entitled to cast at an election of directors.
Vacancies on the Board of Directors	The Inovio certificate of incorporation provides that subject to the rights of the holders of any series of preferred stock then outstanding, newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the board of directors resulting from death, resignation or other cause (other than removal from office by a vote of the stockholders) may be filled only by a majority vote of the directors then in office, though less than a quorum, and directors so chosen shall hold office for a term expiring at the next annual meeting of stockholders at which the term of office expires, and until their respective successors are elected, except in the case of the death, resignation, or removal of any director. No decrease in the number of directors shall shorten the term of any incumbent director. Further, subject to the rights of the holders of any series of preferred stock then outstanding, a	The VGX bylaws provide that vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having a right to vote as a single class may be filled by a majority of the directors then in office, through less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until their successors are elected and qualified or until their earlier death, resignation or removal. If there are no directors in office, then an election of directors may be held in the manner provided by statute. Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the amended and restated certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining

vacancy resulting from the removal of a director by the stockholders may be filled at a special meeting of the stockholders held for that	director so elected.
stockholders held for that purpose.	
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Amendment to Certificate of Incorporation

Inovio

The Inovio certificate of incorporation provides that Inovio may amend or repeal any provision contained in its certificate of incorporation; provided, however, that, notwithstanding any other provision of its certificate of incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any vote of the holders of any class or series of the stock of Inovio required by law or by its certificate of incorporation, the affirmative vote of the holders of at least a majority of the voting power of all of the then outstanding shares of the capital stock of Inovio entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal certain articles of Inovio's certificate of incorporation regarding board procedures and indemnification. The Inovio certificate of

VGX

The VGX certificate of incorporation provides that VGX has the right at any time, and from time to time, to amend, alter, change or repeal any provision contained in its certificate of incorporation.

Amendment to Bylaws

incorporation provides that the Inovio board of directors is expressly empowered to adopt, amend or repeal Inovio's bylaws. The stockholders shall also have power to adopt, amend or repeal Inovio's bylaws. Any adoption, amendment or repeal of Inovio's bylaws by the stockholders shall require, in addition to any vote of the holders of any class or series of stock of Inovio required by law or by the certificate of incorporation, the affirmative vote of the holders of at least a majority of the voting power of all of the then outstanding shares of Inovio's capital stock entitled to vote generally in the election of directors, voting together as a single class.

The VGX bylaws provide that such bylaws may be altered, amended or repealed or new bylaws may be adopted either (1) by vote of the stockholders at a duly organized annual or special meeting of stockholders, or (2) by vote of a majority of the board of directors at any regular or special meeting of directors.

General Meeting of Stockholders	Inovio's bylaws provide that the annual meeting of stockholders for the election of directors and for the transaction of such other business as may properly be brought before the meeting shall be held on a date to be fixed by the board of directors or the president and chief executive officer at the time and place to be fixed by the board of directors or the notice of the meeting.	VGX VGX's bylaws provide that the board of directors may fix and designate the date and time of the annual meeting of the stockholders, but if no such date and time is fixed and designated by the board, the meeting for any calendar year shall be held on the first day of March in such year, if not a legal holiday under the laws of Delaware, and, if a legal holiday, then on the next succeeding business day, not a Saturday, at 9:00 a.m., and at said meeting the stockholders then entitled to vote shall elect directors and shall transact such other business as may properly be brought before the meeting.
Special Meeting of Stockholders	Inovio's bylaws provide that special meetings of stockholders may be called at any time by the board of directors.	The VGX bylaws provide that special meetings of the stockholders of the corporation may be called at any time by the chairman of the board, a majority of the board of directors, the president, or at the request, in writing, of stockholders entitled to cast at least a majority of the votes that all stockholders are entitled to cast at the particular meeting.
Notice of Stockholder Meetings	Inovio's bylaws provide that written notice of each annual or special meeting of stockholders shall be given not less than 10 nor more than 60 days before the date on which the meeting is to be held. The notice required shall be given to each stockholder entitled to vote at such annual or special meeting and shall state the place, date and hour and purpose or purposes of the meeting.	The VGX bylaws provide that written notice of the place, date and hour of every meeting of the stockholders, whether annual or special, shall be given to each stockholder of record entitled to vote at a the meeting not less than 10 nor more than 60 days before the date of the meeting. Every notice of a special meeting shall state the purpose or purposes thereof.
Stockholder Nominations and Proposals	Inovio's bylaws provide that at an annual meeting of stockholders, only such business shall be conducted as shall have been properly brought before the meeting. For business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the secretary of Inovio, the period for which will depend on the nature of the proposal and whether such proposal is subject to SEC Rule 14a-8.	VGX has no comparable provision in its organizational documents and thus any stockholder proposals would be governed by the DGCL.

Nomination of Director Candidates	Inovio The Inovio bylaws provide that subject to the rights of holders of any class or series of preferred stock then outstanding, nominations for the election of directors may be made by the board of directors or a proxy committee appointed by the board of directors or by any stockholder entitled to vote in the election of directors generally.	VGX VGX has no comparable provision in its organizational documents and thus any director nominations or appointments would be governed by the DGCL.
Proxy	Inovio's bylaws provide that each stockholder of record entitled to vote at a meeting of stockholders may authorize any other person or persons to vote or act for him by written proxy executed by the stockholder. No stockholder may authorize more than one proxy for his shares.	The VGX bylaws provide that a stockholder may execute a writing authorizing another person or persons to act for the stockholder as proxy. The VGX bylaws also provide that no proxy shall be voted or acted upon after 3 years from its date, unless the proxy provides for a longer period. Furthermore, a duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only so long as, it is coupled with an interest sufficient in law to support an irrevocable power.
Voting Rights	Inovio's bylaws provide that each stockholder shall have one vote for each share of stock entitled to vote held of record by such stockholder and a proportionate vote for each fractional share so held, unless otherwise provided by law. Inovio's preferred stockholders generally vote with Inovio's common stockholders on an as-converted basis.	VGX's certificate of incorporation and bylaws provide that each stockholder shall be entitled to one vote, in person or by proxy, for each share of capital stock having voting power held by such stockholder. Further, VGX's certificate of incorporation provides that the holders of common stock shall vote together as a single class on all matters submitted to stockholders for a vote and VGX

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directors.

stockholders shall not have the right to cumulate their votes for the election of the corporation's

Inovio Stockholder Action at a Meeting Inovio's bylaws provide that when a quorum is present at any meeting, any election shall be determined by a plurality of the votes cast by the stockholders entitled to vote at the election, and all other matters shall be determined by a majority of the votes cast affirmatively or negatively on the matter (or if there are two or more classes of stock entitled to vote as separate classes, then in the case of each such class, a majority of each such class present or represented and voting affirmatively or negatively on the matter) shall decide such matter, except when a different vote is required by express provision of law, the certificate of incorporation or the bylaws. Stockholder Action by Written Inovio's certificate of incorporation provides that any Consent action required or permitted to be taken by the stockholders of Inovio must be effected at a duly called annual or special meeting of stockholders of Inovio and may not be effected by any consent in writing by such stockholders.

Dividends

Inovio has no comparable provision in its organizational documents and thus any dividends would be governed by Sections 170 through 174 of the DGCL.

VGX

The VGX bylaws provide that directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

In all matters other than the election of directors, the affirmative vote of the majority in voting power of shares present in person or represented by proxy at the meeting and entitled to vote thereon shall be the act of the stockholders, unless the question is one upon which, by express provision of the applicable statute, the amended and restated certificate of incorporation or the VGX bylaws, a different vote is required in which case such express provision shall govern and control the decision of the question.

The VGX bylaws provide that any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

The VGX certificate of incorporation provides that subject to provisions of law, the certificate of incorporation and any certificate of designation with respect to any preferred stock, the holders of common stock shall be entitled to receive dividends out of funds legally available therefor at such times and in such amounts as the board of directors may determine in its sole discretion.

Liquidation	Inovio Liquidation of Inovio would be governed by the provisions of the Certificates of Designations, Rights and Preferences for any Inovio preferred stock outstanding, with Inovio common stock participating in distributions upon satisfaction of the liquidation preferences of the outstanding Inovio preferred stock.	VGX The VGX certificate of incorporation provides that upon any liquidation, dissolution or winding up of the corporation, whether voluntary or involuntary, after the payment or provision for payment of all debts and liabilities of the corporation and all preferential amounts to which the holders of the preferred stock are entitled with respect to the distribution of assets in liquidation, the holders of common stock shall be entitled to share ratably in the remaining assets of the corporation available for distribution.
Right of Inspection	Inovio has no comparable provision in its organizational documents and thus any rights of inspection would be governed by Section 220 of the DGCL which provides that any stockholder, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose, and to make copies and extracts from Inovio's stock ledger, a list of its stockholders, and its other books and records.	VGX's bylaws provide that every stockholder shall, upon written demand under oath stating the purpose thereof, have a right to examine, in person or by agent or attorney, during the usual hours for business, for any proper purpose, the stock ledger, list of stockholders, books or records of account, and records of the proceedings of the stockholders and directors of the corporation, and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder.
Liability of Director and Officer	Inovio's certificate of incorporation provides that a director of Inovio shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involved intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.	The VGX certificate of incorporation provides that the directors of the corporation shall be entitled to the benefits of all limitations on the liability of directors generally that are now or hereafter become available under the DGCL. Without limiting the generality of the foregoing, no director of the corporation shall be liable to VGX or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an

which the director derived an improper personal benefit.

Inovio

Indemnification of Directors and Officers Inovio's bylaws provide that each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative ("proceeding"), by reason of the fact that he or she or a person of whom he or she is the legal representative, is or was a director or officer of Inovio or is or was serving at the request of the corporation as a director or officer of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or employee or in any other capacity while serving as a director, officer or employee, shall be indemnified and held harmless by Inovio to the fullest extent authorized by Delaware Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the corporation to provide broader indemnification rights than said law permitted the corporation to provide prior to such amendment) against all expenses, liability and loss reasonably incurred or suffered by such person in connection therewith and such indemnification shall continue as to a person who has ceased to be a director, officer or employee and shall inure to the benefit of his or her heirs, executors and administrators; provided,

however, that, except as provided in Section 7.2 of Article 7 of Inovio's bylaws, Inovio shall indemnify any such person seeking indemnity in connection with an action, suit or proceeding (or part thereof) initiated by such person only if (a) such indemnification is expressly required to be made by law, (b) the action, suit or proceeding (or part thereof) was authorized

VGX VGX's certificate of

incorporation provides that VGX shall indemnify any person who was or is an authorized representative of the corporation, and who was or is a party, or is threatened to be made a party to any third party proceeding, by reason of the fact that such person was or is an authorized representative of the corporation, against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such third party proceeding if such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal third party proceeding, had no reasonable cause to believe such conduct was unlawful. The termination of any third party proceeding by judgment, order, settlement, conviction or upon a plea of nolo contender or its equivalent, shall not of itself create a presumption that the authorized representative did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to, the best interests of the corporation, and, with respect to any criminal third party proceeding, had reasonable cause to believe that such conduct was unlawful. Further, VGX shall indemnify

any person who was or is an authorized representative of the corporation, and who was or is a party, or is threatened to be made a party to any corporate proceeding, by reason of the fact that such person was or is an authorized representative of the corporation, against expenses actually and reasonably incurred by such person in connection with the defense or settlement of such corporate proceedings if such person acted in good faith and in a manner reasonably believed to be in, or not opposed to, the best interests of the corporation and except that no

by the board of directors of Inovio, (c) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL, or (d) the action, suit or proceeding (or

indemnification shall be made in respect of any claim issue or matter as to which such person shall have been adjudged to be

Inovio

part thereof) is brought to establish or enforce a right to indemnification under an indemnity agreement or any other statute or law or otherwise as required under Section 145 of the DGCL. Such right shall be a contract right and shall include the right to be paid by Inovio expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, unless the DGCL then so prohibits, the payment of such expenses incurred by a director or officer of Inovio in his or her capacity as a director or officer (and not in any other capacity in which service was or is tendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of such proceeding, shall be made only upon delivery to Inovio of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it should be determined ultimately that such director or officer is not entitled to be indemnified.

VGX

liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such corporate proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such authorized representative is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

To the extent that a present or former authorized representative of the corporation has been successful on the merits or otherwise in defense of any third party or corporate proceeding or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses actually and reasonably incurred by such person in connection therewith.

SPECIAL MEETING OF INOVIO STOCKHOLDERS

Questions and Answers About The Inovio Special Meeting

When and where is the Inovio special meeting?

The Inovio special meeting will be held on [], 2009 at [], local time, at Inovio's principal executive offices, located at 11494 Sorrento Valley Road, San Diego, California 92121. Inovio is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because Inovio's board of directors is soliciting their proxy to vote at the Inovio special meeting.

What are Inovio stockholders voting on at the Inovio special meeting?

There are two matters scheduled for a vote at the Inovio special meeting:

1. To consider and vote upon a proposal to approve a business combination pursuant to the Acquisition Agreement, whereby Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth elsewhere in this joint proxy statement/prospectus. The Merger would result in holders of VGX common stock owning approximately 48.52% of Inovio's outstanding capital stock immediately after the closing and holders of VGX securities owning approximately 51.82% of Inovio on a fully-diluted basis immediately after the closing.

2. To approve amendment and restatement of the Inovio 2000 Plan to clarify the acceleration of vesting of options to purchase shares of Inovio common stock issued and outstanding thereunder and to remove the termination of unexercised options issued and outstanding thereunder at the Effective Time of the Merger.

Who can vote at the Inovio special meeting?

Only Inovio's stockholders of record at the close of business on [], 2009, the "record date," will be entitled to vote at the Inovio special meeting. On the record date, there were [] shares of Inovio common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Inovio Stockholders' Name

If on the record date, the shares of an Inovio stockholder were registered directly in such stockholder's name with Inovio's transfer agent, Computershare Trust Company, then such Inovio stockholder is a "stockholder of record." As a stockholder of record, the Inovio stockholder may vote in person at the meeting or vote by proxy. Whether or not an Inovio stockholder of record plans to attend the meeting, Inovio urges such stockholders to fill out and return the enclosed proxy card to ensure his or her or its vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on the record date, the shares of an Inovio stockholder were held, not in such stockholder's name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then such Inovio stockholder is the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to such stockholder by that organization. The organization holding such Inovio stockholder's account is considered to be the stockholder of record for purposes of voting at the special meeting. As a beneficial owner, the Inovio stockholder has the right to direct such stockholder's broker or other agent on how to vote the shares in such stockholder's account. These Inovio stockholders are also invited to attend the special meeting. However, since such Inovio stockholders are

not the stockholder of record, they may not vote their shares in person at the meeting unless they request and obtain a valid proxy from their broker or other agent.

How do Inovio stockholders vote?

Inovio stockholders may vote "For" or "Against" each proposal or abstain from voting. The procedures for voting are as follows:

Stockholder of Record: Shares Registered in Inovio Stockholder' Name

If an Inovio stockholder is a stockholder of record, such stockholder may vote in person at the Inovio special meeting or vote by proxy using the enclosed proxy card. Whether or not such Inovio stockholder plans to attend the meeting, Inovio urges such stockholder to vote by proxy to ensure such stockholder's vote is counted. An Inovio stockholder may still attend the meeting and vote in person if such Stockholder has already voted by proxy.

To vote in person, as Inovio stockholder must come to the special meeting and Inovio will give each stockholder a ballot when he, she or its authorized representative arrives.

To vote using the proxy card, an Inovio stockholder must complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If an Inovio stockholder returns such stockholder's signed proxy card to Inovio before the special meeting, or brings his or her proxy card to the meeting, Inovio will vote such stockholder's shares as he, she or it directs.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If an Inovio stockholder is a beneficial owner of shares registered in the name of a broker, bank or other agent, such stockholder should have received a proxy card and voting instructions with these proxy materials from that organization rather than from Inovio. An Inovio stockholder shall simply complete and mail the proxy card to ensure that such stockholder's vote is counted.

To vote in person at the Inovio special meeting, an Inovio stockholder must obtain a valid proxy from such stockholder's broker, bank or other agent. An Inovio stockholder shall follow the instructions from such stockholder's broker or bank included with these proxy materials, or contact such stockholder's broker or bank to request a proxy form.

How many votes does an Inovio stockholder have?

On each matter to be voted upon, an Inovio stockholder has one vote for each share of common stock and 1,470 votes for each share of Series C preferred stock he, she or it owns as of the record date.

What if an Inovio stockholder returns a proxy card but does not make specific choices?

If an Inovio stockholder returns a signed and dated proxy card without marking any voting selections, such stockholder's shares will be voted "For" all proposals presented for voting as described in this joint proxy statement/prospectus, including the issuance of Inovio securities in the Merger and the amendment to the Inovio 2000 Plan. If any other matter is properly presented at the meeting, such Inovio stockholder's proxy (one of the individuals named on such stockholder's proxy card) will vote such stockholder's shares using his or her best judgment.

Who is paying for this proxy solicitation?

Inovio will pay for the entire cost of soliciting proxies from its stockholders. In addition to these mailed proxy materials, Inovio's directors and employees may also solicit proxies in person, by



telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. Inovio will also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if an Inovio stockholder receives more than one proxy card?

If an Inovio stockholder receives more than one proxy card, such stockholder's shares are registered in more than one name or are registered in different accounts. Such Inovio stockholder must complete, sign and return each proxy card to ensure that all of the shares are voted.

Can an Inovio stockholder change the Inovio stockholder's vote after submitting the proxy?

Yes. An Inovio stockholder can revoke such stockholder's proxy at any time before the final vote at the meeting. An Inovio stockholder who is the record holder of the Inovio shares may revoke such stockholder's proxy by any one of three ways:

submitting another properly completed proxy card with a later date;

sending a written notice that such stockholder is revoking the proxy to Inovio's Secretary at 11494 Sorrento Valley Road, San Diego, California 92121; or

attending the special meeting and voting in person. Simply attending the meeting will not, by itself, revoke an Inovio stockholder's proxy.

If an Inovio stockholder's shares are held by a broker or bank as a nominee or agent, such stockholder should follow the instructions provided by the Inovio stockholder's broker or bank.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "For" and "Against" votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal and will have the same effect as "Against" votes.

If an Inovio stockholder does not give instructions to such stockholder's broker, the broker can vote such shares with respect to discretionary items, but not with respect to non-discretionary items. On non-discretionary items for which an Inovio stockholder does not give such stockholder's broker instructions, the shares will be treated as "broker non-votes." All of the proposals to be presented at the Inovio special meeting may be considered non-discretionary items, and thus Inovio encourages its stockholders holding shares in street name to instruct their brokers on how to vote. The effect of a broker non-vote will depend on the number and method of calculation of votes needed to approve each proposal.

How many votes are needed to approve each proposal?

To be approved, Proposal 1, the Merger, pursuant to the terms of the Acquisition Agreement, including the issuance of Inovio securities, must receive a "For" vote from holders of a majority of the shares of Inovio common stock entitled to vote and present at the Inovio special meeting, either in person or by proxy duly authorized. Abstentions will have the same effect as a vote "Against" the proposal; although present for a quorum, broker non-votes are not deemed entitled to vote and will have no effect. As of the record date, there were [] shares of Inovio common stock outstanding and [] shares of Inovio Series C preferred stock outstanding. Inovio cannot predict how many shares of Inovio capital stock entitled to vote will do so, and thus cannot specify a minimum numbers of votes "For" the Merger, including adoption of the Acquisition Agreement and the resulting issuance of Inovio securities, necessary to approve the proposal.

To be approved, Proposal 2, the amendment and restatement of the Inovio 2000 Plan to clarify the acceleration of vesting of Inovio options issued and outstanding thereunder at the Effective Time and to remove the termination of unexercised Inovio options issued and outstanding thereunder at the Effective Time, must receive a "For" vote from holders of a majority of the shares of Inovio common stock entitled to vote and present at the Inovio special meeting, either in person or by proxy duly authorized. If an Inovio stockholder "Abstains" from voting, it will have the same effect as an "Against" vote; although present for a quorum, broker non-votes are not deemed entitled to vote and thus will have no effect. As of the record date, there were [______] shares of Inovio common stock outstanding and [__] shares of Series C preferred stock outstanding. Inovio cannot predict how many shares of Inovio capital stock entitled to vote will do so, and thus cannot specify a minimum numbers of votes "For" the amendment and restatement of Inovio's 2000 Plan regarding the vesting of Inovio options issued and outstanding and to remove the termination of unexercised Inovio options issued and outstanding under the Inovio 2000 Plan, to approve the proposal.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if the holders of at least one-third of the the outstanding shares of Inovio capital stock entitled to vote are present at the Inovio special meeting, either in person or by proxy duly authorized. On the record date, there were [_____] shares of Inovio common stock outstanding and entitled to vote; plus [__] outstanding shares of Series C preferred stock entitled to vote with the common stock as a combined class, on an as-converted basis. Thus, [_____] shares of Inovio capital stock must be represented by stockholders present at the meeting either in person or by proxy to have a quorum.

The shares an Inovio stockholder holds will be counted towards the quorum only if he, she or it submits a valid proxy (or one is submitted on such stockholder's behalf by such stockholder's broker, bank or other nominee) or if the stockholder votes at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the meeting may be adjourned either by the chairman of the meeting or by vote of the holders of a majority of the shares represented at the meeting.

As an Inovio stockholder, what happens if I do not vote on any of the proposals?

If you are an Inovio stockholder and you do not submit a proxy card, directly or through your broker, or vote at the Inovio special meeting, it will make it difficult for Inovio to establish a quorum necessary to transact business at the Inovio special meeting. If you are an Inovio stockholder and you submit a proxy card and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum but will not be voted on any of the proposals relating to the Merger. If a quorum is established, but you do not vote in person or by proxy, or if a broker fails to vote your shares, such failure may interfere with Inovio's ability to close the proposed Merger as Inovio may not receive the votes required to approve the proposals described in this joint proxy statement/prospectus.

Is the approval or implementation of any proposal conditioned on the approval of another proposal?

Yes. The closing of the Merger which is the subject of Proposal 1 is conditioned on the approval of Proposal 2. Additionally, if Proposal 1 is not approved by the Inovio stockholders, but Proposal 2 is, the Inovio board in its discretion can determine whether to take action to consummate the changes anticipated by Proposal 2.

How can Inovio stockholders find out the results of the voting at the Inovio special meeting?

Preliminary voting results will be announced at the Inovio special meeting. Final voting results will be published in the earlier of a Current Report on Form 8-K announcing the closing of the Merger, if the proposals are approved by the Inovio stockholders and the VGX stockholders provide necessary approvals at the VGX special meeting, or Inovio's periodic report for the reporting period during which the Inovio special meeting occurs.

Will the Inovio special meeting be adjourned for the purpose of soliciting additional proxies?

Inovio does not currently intend to seek an adjournment of the Inovio special meeting. However, adjournments may be made for the purpose of, among other things, soliciting additional proxies. Under Inovio's bylaws, the Inovio special meeting may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares represented thereat. When the Inovio special meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place are announced at the meeting at which the adjournment is taken. At the adjourned meeting, Inovio may transact any business which might have been transacted at the original meeting.

Proposal 1 Approval of Merger and Acquisition Agreement, Including Issuance of Inovio Securities

Overview

As discussed elsewhere in this joint proxy statement/prospectus, the holders of Inovio common stock are being asked to approve a business combination with VGX, pursuant the Acquisition Agreement between Inovio, Submerger and VGX, whereby VGX will merge with and into Submerger, Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and Inovio will assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth elsewhere in this joint proxy statement/prospectus. Holders of Inovio common stock should read carefully this joint proxy statement/prospectus, including the Annexes, in its entirety for more detailed information concerning the Acquisition Agreement and the Merger. In particular, holders of Inovio common stock are directed to:

The discussion of the Merger, beginning on page 61 of this joint proxy statement/prospectus, including the explanation of the effect of the Merger on the outstanding Inovio securities beginning on page 99 under the heading "*Effect of Merger on Inovio Securities*" and beginning on page 72 under the heading "*Resulting Ownership of Inovio; Change of Control*";

The discussion of the terms and conditions of the Acquisition Agreement beginning on page 98 of this joint proxy statement/prospectus; and

The copy of the Acquisition Agreement which is included as Annex A to this joint proxy statement/prospectus.

Effective Time

As discussed elsewhere in this joint proxy statement/prospectus, receipt of the requisite approvals from the Inovio and VGX stockholders for the Merger is only one condition of many to the consummation of the Merger. If approved, Inovio and VGX hope to complete the Merger shortly after obtaining the requisite stockholder approvals at the Inovio special meeting and the VGX special meeting, and believe the closing will occur prior to June 30, 2009. However, Inovio and VGX cannot predict the exact timing of the completion of the Merger because the Merger is subject to several conditions. There may be a substantial period of time between the Inovio and VGX special meetings and the completion of the Merger, and Inovio and VGX may not complete the Merger by June 30, 2009. For a detailed description of the conditions to the transaction, see the section entitled

"Conditions to the Transaction" on page 112. The Merger will not be effective, including the issuance of the Inovio securities as consideration for the Merger, until such time as Submerger and VGX file the necessary certificate of merger with the Secretary of State of Delaware.

Vote Required

To be approved, the Merger, including adoption of the Acquisition Agreement and the issuance of Inovio securities pursuant thereto, must receive a "For" vote from holders of a majority of the shares of Inovio common stock (including the outstanding shares of Series C preferred stock voting on an as-converted basis) entitled to vote and present at the Inovio special meeting, either in person or by proxy duly authorized. Abstentions will have the same effect as a vote "Against" the proposal; although present for a quorum, broker non-votes are not deemed entitled to vote and will have no effect. As of the record date, there were [_____] shares of Inovio common stock outstanding and [__] shares of Inovio Series C preferred stock outstanding. Inovio cannot predict how many shares of Inovio capital stock entitled to vote on this proposal will do so, and thus cannot specify a minimum numbers of votes "For" the Merger, including adoption of the Acquisition Agreement and the resulting issuance of Inovio securities, necessary to approve the proposal.

THE INOVIO BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE MERGER, INCLUDING ADOPTION OF THE ACQUISITION AGREEMENT AND ISSUANCE OF INOVIO SECURITIES PURSUANT THERETO PROPOSAL 1

Proposal 2 Approval of Amendment to the Inovio 2000 Plan

Overview

Inovio initially adopted and obtained stockholder approval of its 2000 Stock Option Plan in 2000, pursuant to which 1,850,000 shares of common stock were reserved for issuance to executive officers, directors, employees and consultants of Inovio. Subsequent to amendments adopted by the board of directors and approved by stockholders in 2002, 2004 and 2005, increasing the maximum number of common shares reserved for issuance pursuant to such Plan, Inovio's board of directors adopted the current Amended Inovio 2000 Stock Option Plan, or the Inovio 2000 Plan, on March 6, 2006, which the stockholders of Inovio subsequently approved on May 5, 2006, increasing the number of shares available to be issued under the Inovio 2000 Plan to 4,750,000. At March 31, 2009, options covering an aggregate of 5,454,461 shares, less exercised and canceled shares, of Inovio common stock had been granted under the Inovio 2000 Plan, and only 279,312 shares of Inovio common stock (plus any shares that might in the future be returned to the Inovio 2000 Plan as a result of cancellations or expiration of options) remained available for future grants under the Inovio 2000 Plan. Inovio does not intend to make any further grants under this Plan.

On July 2, 2008, the board of directors approved an amendment and restatement of the Inovio 2000 Plan, subject to stockholder approval, to clarify the acceleration of vesting of Inovio options issued and outstanding thereunder at the Effective Time of the Merger and to remove termination of unexercised Inovio options issued and outstanding thereunder at the Effective Time of the Merger, if the Merger is completed. If Proposal 2 receives Inovio stockholder approval, but Proposal 1 is not approved or the transaction otherwise fails to close, the Inovio board of directors reserves the right to determine in its discretion whether to take action to consummate the changes anticipated by Proposal 2.

Overview of Proposed Amended and Restated Inovio 2000 Plan

The essential features of the proposed Amended and Restated Inovio 2000 Plan (for purposes of this Overview, the "Plan") are outlined below; however the following summary of the Plan is qualified

in its entirety by the specific language of the Plan, provided as Annex D hereto and incorporated by reference in its entirety.

General. The Plan provides for the grant of Incentive Stock Options ("ISOs") and Nonstatutory Stock Options ("NSOs"). As of December 31, 2008, Inovio had outstanding options under the prior Inovio 2000 Plan to purchase an aggregate of 3,136,152 shares of Inovio common stock at per share exercise prices ranging from \$1.00 to \$6.76.

Shares subject to the Plan. A maximum of 4,750,000 shares of the authorized but unissued or reacquired common stock of Inovio may be issued pursuant to the Plan. In the event of any stock dividend, stock split, reverse stock split, recapitalization, combination, reclassification, or similar change in the capital structure of Inovio, appropriate adjustments will be made to the shares subject to the Plan, and to outstanding options. To the extent any outstanding option under the Plan expires or terminates prior to exercise in full or if Inovio repurchases shares issued upon exercise of an option, the shares of common stock for which that option is not exercised or the repurchased shares are returned to the Plan and will again be available for issuance under the Plan.

Administration. The Compensation Committee of Inovio's board of directors administers the Plan. All option grants are approved by the Compensation Committee, except that Inovio's Chief Executive Officer and/or Chairman of the board of directors may approve option grants to persons below the level of Vice President of Inovio to a maximum individual grant of 50,000 options. With respect to the participation of individuals whose transactions in Inovio's equity securities are subject to Section 16 of the Exchange Act, the Plan must be administered in compliance with the requirements, if any, of Rule 16b-3 under the Exchange Act. Subject to the provisions of the Plan, the Compensation Committee determines the persons to whom options are to be granted, the number of shares to be covered by each option, whether an option is to be an ISO or a NSO, the terms of vesting and exercisability of each option, including the effect thereon of an optionee's termination of service, the type of consideration to be paid to Inovio upon exercise of an option, the duration of each option, and all other terms and conditions of the options. Inovio does not intend to make any further grants pursuant to the Plan, and makes it current compensatory grants pursuant to the Inovio 2007 Omnibus Incentive Plan instead.

Eligibility. Generally, all employees, directors and consultants of Inovio or of any present or future parent or subsidiary corporations of Inovio are eligible to participate in the Plan. In addition, the Plan also permits the grant of options to prospective employees, consultants and directors in connection with written offers of employment or engagement. Any person eligible under the Plan may be granted a NSO. However, only employees may be granted ISOs.

Terms and conditions of options. Each option granted under the Plan is evidenced by a written agreement between Inovio and the optionee specifying the number of shares subject to the option and the other terms and conditions of the option, consistent with the requirements of the Plan. The exercise price per share must equal at least the fair market value of a share of Inovio's common stock on the date of grant of the stock option. The exercise price of any ISO granted to a person who at the time of grant owns stock possessing more than 10% of the total combined voting power of all classes of stock of Inovio or any parent or subsidiary corporation of Inovio, referred to as a 10% Stockholder, must be at least 110% of the fair market value of a share of Inovio's common stock on the date of grant.

Generally, the exercise price may be paid in cash, by check, or in cash equivalent, by tender of shares of Inovio's common stock owned by the optionee having a fair market value not less than the exercise price, by the assignment of the proceeds of a sale or a loan with respect to some or all of the shares of common stock being acquired upon the exercise of the option, by means of a promissory note, by any lawful method approved by the board or by any combination of these. The Compensation

Committee may nevertheless restrict the forms of payment permitted in connection with any option grant.

The Compensation Committee will specify when options granted under the Plan will become exercisable and vested. Shares subject to options generally vest and become exercisable in installments, subject to the optionee's continued employment or service or achievement of specified milestones.

Change of Control; Reorganization. Upon a change of control, as defined in the Plan, all options outstanding under the Plan on the date of such change in control shall become immediately and fully vested and exercisable, except to the extent that an option grant triggers a change of control resulting from an increase in such optionee's beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of Inovio securities. In the event of a reorganization, as defined in the Plan, in which Inovio is not the surviving or acquiring corporation, or in which Inovio is or becomes a wholly-owned subsidiary of another corporation after the effective date of the reorganization, outstanding options shall be subject to the agreement governing the reorganization, which may provide, without limitation, for the assumption of each option granted under this Plan or its parent or subsidiary, for the substitution by surviving corporation or its parent or subsidiary of its own options, for accelerated vesting and accelerated expiration, or for settlement in cash or cash equivalents. An event of reorganization may also constitute a change of control.

Termination or amendment. Unless sooner terminated, no ISOs may be granted under the Plan after July 30, 2010. The board may terminate or amend the Plan at any time, but, no amendment may adversely affect an outstanding option without the consent of the optionee, unless the amendment is required to preserve the option's status as an ISO or is necessary to comply with any applicable law.

Federal Income Tax Consequences of the Proposed Amended and Restated Inovio 2000 Plan.

The following summary is intended only as a general guide as to the U.S. federal income tax consequences under current law of participation in the Plan and does not attempt to describe all possible federal or other tax consequences of such participation or tax consequences based on particular circumstances.

ISOs. An optionee recognizes no taxable income for regular income tax purposes as the result of the grant or exercise of an ISO qualifying under Section 422 of the Code. Optionees who do not dispose of their shares for two years following the date the option was granted or within one year following the exercise of the option will normally recognize a long-term capital gain or loss equal to the difference, if any, between the sale price and the purchase price of the shares. If an optionee satisfies such holding periods upon a sale of the shares, Inovio will not be entitled to any deduction for federal income tax purposes. If an optionee disposes of shares within two years after the date of grant or within one year from the date of exercise, referred to as a disqualifying disposition, the difference between the fair market value of the shares on the exercise date, and the option exercise price, not to exceed the gain realized on the sale if the disposition is a transaction with respect to which a loss, if sustained, would be recognized, will be taxed as ordinary income at the time of disposition. Any gain in excess of that amount will be a capital gain. If a loss is recognized, there will be no ordinary income, and such loss will be a capital loss. A capital gain or loss will be long-term if the optionee's holding period is more than 12 months. Generally, for federal income tax purposes, Inovio should be able to deduct any ordinary income recognized by the optionee upon the disqualifying disposition of the shares, except to the extent the deduction is limited by applicable provisions of the Code or the regulations thereunder.

The difference between the option exercise price and the fair market value of the shares on the exercise date of an ISO is an adjustment in computing the optionee's alternative minimum taxable income and may be subject to an alternative minimum tax which is paid if the tax exceeds the regular

tax for the year. Special rules may apply with respect to certain subsequent sales of the shares in a disqualifying disposition, certain basis adjustments for purposes of computing the alternative minimum taxable income on a subsequent sale of the shares and certain tax credits that may arise with respect to optionees subject to the alternative minimum tax.

NSOs. Options not designated or qualifying as ISOs will be NSOs. NSOs have no special tax status. An optionee generally recognizes no taxable income as the result of the grant of such an option. Upon exercise of a NSO, the optionee normally recognizes ordinary income in an amount equal to the difference between the option exercise price and the fair market value of the shares on the exercise date. If the optionee is an employee, the ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of stock acquired by the exercise of a NSO, any gain or loss, based on the difference between the sale price and the fair market value on the exercise date, will be taxed as capital gain or loss. A capital gain or loss will be long-term if the optionee's holding period is more than 12 months. No tax deduction is available to Inovio with respect to the grant of a NSO or the sale of the stock acquired pursuant to that grant. Inovio generally should be entitled to a deduction equal to the amount of ordinary income recognized by the optionee as a result of the exercise of a NSO, except to the extent the deduction is limited by applicable provisions of the Code or the regulations thereunder.

Vote Required

Stockholders are requested in this Proposal 2 to approve the amendment to the Inovio 2000 Plan. The affirmative vote of the holders of a majority of the shares of Inovio common stock (including the outstanding shares of the Series C preferred stock voting on an as-converted basis) present in person or represented by proxy and entitled to vote at the meeting will be required to approve the amendment to the Inovio 2000 Plan. Abstentions will be counted toward the tabulation of votes cast on the proposal and will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but will not be counted for any purpose in determining whether this matter has been approved.

For the reasons set forth in "*Inovio's Reasons for the Transaction*" beginning on page 65, the board of directors of Inovio that it is advisable and in the best interests of Inovio and its stockholders to amend the Inovio 2000 Plan, subject to stockholder approval, to clarify the acceleration of vesting of Inovio options issued and outstanding thereunder and to remove the termination of unexercised Inovio options issued and outstanding thereunder is completed.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE AMENDMENT TO THE INOVIO 2000 PLAN PROPOSAL 2

Other Matters

Inovio's board of directors knows of no other matters that will be presented for consideration at the special meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

Householding of Proxy Materials

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Inovio stockholders will be "householding" Inovio's proxy materials. A single proxy statement will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders.

Once an Inovio stockholder has received notice from such stockholder's broker that the broker will be "householding" communications to such stockholder's address, "householding" will continue until the broker is notified otherwise or until such stockholder revokes such stockholder's consent. If at any time, an Inovio stockholder no longer wishes to participate in "householding" and would prefer to receive a separate proxy statement and annual report, such stockholder shall notify such stockholder's broker, direct a written request to: Investor Relations, Inovio Biomedical Corporation, 11494 Sorrento Valley Road, San Diego, California 92121 or at (858) 597-6006. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request "householding" of their communications should contact their broker.

SPECIAL MEETING OF VGX STOCKHOLDERS

Questions and Answers About The VGX Special Meeting

When and where is the VGX special meeting?

The VGX special meeting will be held on [], 2009 at [], local time, at VGX's principal executive offices, located at 450 Sentry Parkway, Blue Bell, Pennsylvania 19422. VGX is sending this joint proxy statement/prospectus and the enclosed proxy card to its stockholders because VGX's board of directors is soliciting their proxy to vote at the VGX special meeting.

What are VGX stockholders voting on at the VGX special meeting?

VGX stockholders are being asked to consider and vote upon a proposal to approve a business combination pursuant to the Acquisition Agreement, whereby VGX will merge with and into Submerger, and Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth elsewhere in this joint proxy statement/prospectus. The Merger would result in holders of VGX common stock owning approximately 48.52% of Inovio's outstanding capital stock immediately after the closing and holders of VGX securities owning approximately 51.82% of Inovio on a fully-diluted basis immediately after the closing.

Who can vote at the VGX special meeting?

Only VGX's stockholders of record at the close of business on [], 2009, the "record date," will be entitled to vote at the VGX special meeting. On the record date, there were [] shares of VGX common stock outstanding and entitled to vote. Whether or not a VGX stockholder plans to attend the meeting, VGX urges such stockholders to fill out and return the enclosed proxy card to ensure his or her or its vote is counted.

How do VGX stockholders vote?

VGX stockholders may vote "For" or "Against" the proposal or abstain from voting. If a VGX stockholder is a stockholder of record, such stockholder may vote in person at the VGX special meeting or vote by proxy using the enclosed proxy card. Whether or not such VGX stockholder plans to attend the meeting, VGX urges such stockholder to vote by proxy to ensure such stockholder's vote is counted. A VGX stockholder may still attend the meeting and vote in person if such Stockholder has already voted by proxy.

To vote in person, a VGX stockholder must come to the special meeting and VGX will give each stockholder a ballot when he, she or its authorized representative arrives.

To vote using the proxy card, a VGX stockholder must complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If a VGX stockholder returns such stockholder's signed proxy card to VGX before the special meeting, or brings his or her proxy card to the meeting, VGX will vote such stockholder's shares as he, she or it directs.

How many votes does a VGX stockholder have?

On each matter to be voted upon, a VGX stockholder has one vote for each share of common stock he, she or it owns as of the record date.



What if a VGX stockholder returns a proxy card but does not make specific choices?

If a VGX stockholder returns a signed and dated proxy card without marking any voting selections, such stockholder's shares will be voted "For" all proposals presented for voting by VGX stockholders as described in this joint proxy statement/prospectus, including the Merger. If any other matter is properly presented at the meeting, such VGX stockholder's proxy (one of the individuals named on such stockholder's proxy card) will vote such stockholder's shares using his or her best judgment.

Who is paying for this proxy solicitation?

Inovio is paying for the costs of the joint proxy statement/prospectus and VGX will pay for the cost of soliciting proxies from its stockholders. In addition to these mailed proxy materials, VGX's directors and employees may also solicit proxies in person, by telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. VGX will also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if a VGX stockholder receives more than one proxy card?

If a VGX stockholder receives more than one proxy card, such stockholder's shares are registered on VGX's stock ledger in more than one name or are registered in different accounts. Such VGX stockholder must complete, sign and return each proxy card to ensure that all of the shares are voted.

Can a VGX stockholder change the VGX stockholder's vote after submitting the proxy?

Yes. A VGX stockholder can revoke such stockholder's proxy at any time before the final vote at the meeting. A VGX stockholder who is the record holder of the VGX shares may revoke such stockholder's proxy by any one of three ways:

submitting another properly completed proxy card with a later date;

sending a written notice that such stockholder is revoking the proxy to VGX's Secretary at 450 Sentry Parkway, Blue Bell, Pennsylvania 19422; or

attending the special meeting and voting in person. Simply attending the meeting will not, by itself, revoke a VGX stockholder's proxy.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "For" and "Against" votes and abstentions. Abstentions will be counted towards the vote total for each proposal and will have the same effect as "Against" votes.

How many votes are needed to approve each proposal?

To be approved, the Merger and Acquisition Agreement, must receive a "For" vote from holders of a majority of the shares of VGX common stock entitled to vote at the VGX special meeting. Abstentions will have the same effect as a vote "Against" the proposal. As of the record date, there were [____] shares of VGX common stock outstanding. Therefore, stockholders holding at least [____] shares of VGX common stock must vote "For" the Merger, including adoption of the Acquisition Agreement.



What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if the holders of a majority of the outstanding shares of VGX common stock entitled to vote are present at the VGX special meeting, either in person or by proxy duly authorized. On the record date, there were [____] shares of VGX common stock outstanding and entitled to vote. Therefore, [____] shares of VGX common stock must be represented by stockholders present at the meeting either in person or by proxy to have a quorum.

The shares a VGX stockholder holds will be counted towards the quorum only if he, she or it submits a valid proxy or if the stockholder votes at the meeting. Abstentions will be counted towards the quorum requirement. If there is no quorum, the meeting may be adjourned either by the chairman of the meeting or by vote of the holders of a majority of the shares represented at the meeting.

As a VGX stockholder, what happens if I do not vote on any of the proposals?

If you are a VGX stockholder and you do not submit a proxy card or vote at the VGX special meeting, it will make it difficult for VGX to establish a quorum necessary to transact business at the VGX special meeting and to obtain the requisite vote to approve the Merger proposal. If you are a VGX stockholder and you submit a proxy card and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum but will not be voted on the Merger proposal. If a quorum is established, but you do not vote in person or by proxy, such failure may interfere with VGX's ability to close the proposed Merger as VGX may not receive the votes required to approve the proposal described in this joint proxy statement/prospectus.

How can VGX stockholders find out the results of the voting at the VGX special meeting?

Preliminary voting results will be announced at the VGX special meeting. Final voting results will be published in the earlier of an Inovio Current Report on Form 8-K announcing the closing of the Merger, if the proposals are approved by the VGX stockholders and the Inovio stockholders provide necessary approvals at the Inovio special meeting, or Inovio's periodic report for the reporting period during which the VGX special meeting occurs.

Will the VGX special meeting be adjourned for the purpose of soliciting additional proxies?

VGX does not currently intend to seek an adjournment of the VGX special meeting. However, adjournments may be made for the purpose of, among other things, soliciting additional proxies. Under VGX's bylaws, the VGX special meeting may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares represented thereat. When the VGX special meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place are announced at the meeting at which the adjournment is taken. At the adjourned meeting, VGX may transact any business that might have been transacted at the original meeting.

Proposal 1 Approval of Merger and Acquisition Agreement

Overview

As discussed elsewhere in this joint proxy statement/prospectus, the holders of VGX common stock are being asked to approve a business combination with Inovio, pursuant the Acquisition Agreement between VGX, Submerger and Inovio, whereby VGX will merge with and into Submerger, Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and Inovio will assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt, on the terms and conditions set forth elsewhere in this joint proxy statement/prospectus. Holders of VGX common stock should read carefully this joint proxy statement/prospectus, in its entirety for more detailed information concerning

the Acquisition Agreement and the Merger. In particular, holders of VGX common stock are directed to:

The discussion of the Merger, beginning on page 61 of this joint proxy statement/prospectus, including the explanation of the effect of the Merger on the outstanding VGX securities beginning on page 99 under the heading "*Effect of Merger on VGX Securities*" and beginning on page 72 under the heading "*Resulting Ownership of Inovio; Change of Control*";

The discussion of the terms and conditions of the Acquisition Agreement beginning on page 98 of this joint proxy statement/prospectus; and

The copy of the Acquisition Agreement which is included as Annex A to this joint proxy statement/prospectus.

Effective Time

As discussed elsewhere in this joint proxy statement/prospectus, receipt of the requisite approvals from the VGX and Inovio stockholders for the Merger is only one condition of many to the consummation of the Merger. If approved, VGX and Inovio hope to complete the Merger shortly after obtaining the requisite stockholder approvals at the VGX special meeting and the Inovio special meeting, and believe the closing will occur prior to June 30, 2009. However, VGX and Inovio cannot predict the exact timing of the completion of the Merger because the Merger is subject to several conditions. There may be a substantial period of time between the VGX and Inovio special meetings and the completion of the Merger, and VGX and Inovio may not complete the Merger by June 30, 2009. For a detailed description of the conditions to the transaction, see the section entitled "Conditions to the Transaction" on page 112. The Merger will not be effective, including the issuance of the Inovio securities as consideration for the Merger, until such time as Submerger and VGX file the necessary certificate of merger with the Secretary of State of Delaware.

Vote Required

To be approved, the Merger, including adoption of the Acquisition Agreement, must receive a "For" vote from holders of a majority of the shares of VGX common stock entitled to vote at the VGX special meeting. Abstentions will have the same effect as a vote "Against" the proposal. As of the record date, there were [_____] shares of VGX common stock outstanding. Therefore, stockholders holding at least [____] shares of VGX common stock must vote "For" the Merger proposal including the adoption of the Acquisition Agreement.

THE VGX BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE MERGER, INCLUDING ADOPTION OF THE ACQUISITION AGREEMENT PROPOSAL 1

Other Matters

VGX's board of directors knows of no other matters that will be presented for consideration at the special meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

LEGAL MATTERS

The validity of the Inovio securities offered by this joint proxy statement/prospectus has been passed upon for Inovio by K&L Gates LLP, Los Angeles, California. Certain U.S. federal income tax consequences relating to the Merger will be passed upon for Inovio by K&L Gates LLP, San Francisco, California, and for VGX by Duane Morris LLP, Philadelphia, Pennsylvania.

EXPERTS

The consolidated financial statements of Inovio Biomedical Corporation at December 31, 2008 and 2007, and for each of the three years in the period ended December 31, 2008 included in the joint proxy statement/prospectus of Inovio Biomedical Corporation and VGX Pharmaceuticals, Inc., which is referred to and made part of this Prospectus and Registration Statement, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of VGX Pharmaceuticals, Inc. at December 31, 2008 and 2007, and for the years ended December 31, 2008 and 2007 and the period from December 12, 2000 (inception) through December 31, 2008, included in the joint proxy statement/prospectus of Inovio Biomedical Corporation and VGX Pharmaceuticals, Inc., which is referred to and made part of this Prospectus and Registration Statement, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION ABOUT INOVIO

Inovio files annual, quarterly and current reports, proxy statements and other information with the SEC. Inovio's SEC filings are available to the public from commercial document retrieval services and at the website maintained by the SEC at *http://www.sec.gov*. You may also read and copy any document Inovio files with the SEC at, or obtain copies of the documents at prescribed rates by writing to the SEC's Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room.

Inovio has filed a registration statement on Form S-4 with the SEC with respect to the shares of Inovio common stock to be issued to VGX stockholders in the transaction, the VGX options and warrants to be assumed in the transaction and the shares of Inovio common stock to become issuable upon exercise of the assumed options and warrants. This joint proxy statement/prospectus is a part of that registration statement and constitutes both the prospectus of Inovio and proxy statements of Inovio and VGX for their special meetings. This registration statement, including the attached annexes, exhibits and schedules, contains additional relevant information about Inovio, Inovio capital stock and VGX. This joint proxy statement are omitted in accordance with the rules and regulations of the SEC. The registration statement and its exhibits are available for inspection and copying at the SEC's offices as set forth above.

This joint proxy statement/prospectus also incorporates by reference all documents that Inovio may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this joint proxy statement/prospectus and the date of the VGX special meeting and the date of the Inovio special meeting (other than portions of those documents that are furnished and not filed). Those documents are considered to be part of this joint proxy statement/prospectus, effective as of the date they are filed. In the event of conflicting information in these documents, the information in the latest-filed document should be considered correct.

Inovio has supplied all information contained in this joint proxy statement/prospectus relating to Inovio, and VGX has supplied all information in this joint proxy statement/prospectus relating to VGX.

INFORMATION ON INOVIO'S WEBSITE

Inovio's website is *www.inovio.com*; however, information on Inovio's website is not a part of, or incorporated by reference in, this joint proxy statement/prospectus, and should not be relied upon in

evaluating the proposals set forth for approval by the Inovio stockholders or approval by the VGX stockholders.

INFORMATION ON VGX'S WEBSITE

VGX's website is *www.vgxp.com*; however, information on VGX's website is not part of, or incorporated by reference in, this joint proxy statement/prospectus, and should not be relied upon in evaluating the proposals set forth for approval by the Inovio stockholders or approval by the VGX stockholders.

INOVIO BIOMEDICAL CORPORATION

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders Inovio Biomedical Corporation

We have audited the accompanying consolidated balance sheets of Inovio Biomedical Corporation as of December 31, 2008 and 2007 and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Inovio Biomedical Corporation at December 31, 2008 and 2007 and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

	/s/ Ernst & Young LLP
San Diego, California	
March 27, 2009	

Inovio Biomedical Corporation

CONSOLIDATED BALANCE SHEETS

	As of December 31,				
		2008		2007	
ASSETS					
Current assets:					
Cash and equivalents	\$	14,115,281	\$	10,250,929	
Short-term investments				16,999,600	
Accounts receivable		671,187		1,139,966	
Prepaid expenses and other current assets		477,285		613,656	
Total current assets		15,263,753		29,004,151	
Long-term investments		9,169,471			
Auction rate security rights		4,281,494			
Fixed assets, net		353,807		401,727	
Intangible assets, net		5,850,540		6,186,430	
Goodwill		3,900,713		3,900,713	
Other assets		167,250		282,000	
Total assets	\$	38,987,028	\$	39,775,021	
		, ,		, ,	
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable and accrued expenses	\$	1,367,300	\$	1,807,305	
Accrued clinical trial expenses		399,919		573,767	
Line of credit		12,109,423		,	
Common stock warrants		224,582		367,071	
Deferred revenue		523,544		544,410	
Deferred rent		84,814		61,946	
		ŕ			
Total current liabilities		14,709,582		3,354,499	
Deferred revenue, net of current portion		4,269,151		4,335,806	
Deferred rent, net of current portion		14,898		99,712	
Deferred tax liabilities		887,250		950,250	
		,			
Total liabilities		19,880,881		8,740,267	
		19,000,001		0,710,207	
Commitments and contingencies					
Stockholders' equity:					
Preferred stock par value \$0.001; Authorized shares: 10,000,000,					
issued and outstanding: 71 and 113,382 at December 31, 2008 and					
December 31, 2007, respectively				113	
Common stock par value \$0.001; Authorized shares: 300,000,000,				115	
issued and outstanding: 44,116,800 and 44,023,050 at December 31,					
2008 and 43,870,989 and 43,814,739 at December 31, 2007,					
respectively		44,022		43,815	
Additional paid-in capital		171,868,914		170,730,621	
Receivables from stockholders		1,1,000,717		(50,000)	
Accumulated deficit	(152,812,948)	(139,847,326)	
Accumulated other comprehensive income	(6,159	(157,531	
		0,157		107,001	
Total stockholders' equity		19,106,147		31 034 754	
Total stockholders' equity		19,100,147		31,034,754	
	ሱ	29.097.020	ድ	20 775 021	
Total liabilities and stockholders' equity	\$	38,987,028	\$	39,775,021	

The accompanying notes are an integral part of these consolidated financial statements.

Inovio Biomedical Corporation

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,								
	2008 2007					2006			
Revenue:									
License fee and milestone payments	\$	791,401	\$	2,793,478	\$	1,337,105			
Revenue under collaborative research and development									
arrangements		1,077,967		1,854,303		962,207			
Grants and miscellaneous revenue		228,264		159,948		1,168,866			
Total revenue		2,097,632		4,807,729		3,468,178			
Operating expenses:									
Research and development		5,750,494		9,625,947		8,509,785			
General and administrative		10,005,602	1	1,080,202		8,304,587			
Total operating expenses		15,756,096	2	20,706,149		16,814,372			
Loss from operations	(13,658,464)	(1	(15,898,420)		(13,346,194)			
Other income, net		49,006		3,421,580		320,706			
Interest income, net		643,836		1,272,397		681,546			
Net loss	(12,965,622)	(1	1,204,443)	(12,343,942)				
Imputed and declared dividends on preferred stock				(23,335)	(2,005,664				
Net loss attributable to common stockholders	\$(12,965,622)	\$(1	1,227,778)	\$(14,349,606)			
Amounts per common share basic and diluted:									
Net loss	\$	(0.30)	\$	(0.27)	\$	(0.40)			
Imputed and declared dividends on preferred stock						(0.06)			
Net loss attributable to common stockholders	\$	(0.30)	\$	(0.27)	\$	(0.46)			
Weighted average number of common shares outstanding basic and diluted		43,914,004	2	41,493,412		31,511,683			

The accompanying notes are an integral part of these consolidated financial statements.

Inovio Biomedical Corporation

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Preferree	d stock	Common	stock	Additional	Receivables		Accumulated other	Total
	Number of shares	Amount	Number of shares	Amount	paid-in capital	From stockholders	Accumulated deficit	Comprehensive (loss) income	
Balance at December 31, 2005	1,562,424	1,562	29,468,756	29,469	137,739,954		(114,269,942)	(30,295)	
Exercise of stock options for cash	-,,,	-,	148,629	148	251,280		(,,-,-,-,-)	(20,227)	251,428
Issuance of common			148,029	140	231,280				231,428
stock for patents and other assets			86,956	87	128,835				128,922
Issuance of stockholder note receivable					86,030	(86,030))		- 1
Issuance of common stock for cash, net of					,	(,,			
issuance costs of \$1,161,070			4,074,067	4,074	5,058,931				5,063,005
Issuance of common stock for consulting services			49,261	49	99,951				100,000
Conversions of preferred			49,201	49	99,951				100,000
stock to common stock Stock-based	(534,355)) (534)	1,763,981	1,764	(1,230))			
compensation			45,000	45	1,546,662				1,546,707
Imputed and declared dividends			2,871	3	1,873,317				1,873,320
Comprehensive loss: Net loss attributable to									
common stockholders							(14,349,606)		(14,349,606)
Foreign currency translation gain								67,340	67,340
Total comprehensive loss									(14,282,266)
Balance at December 31, 2006	1,028,069	\$ 1,028	35,639,521	\$ 35,639	\$146,783,730	\$ (86,030)) \$(128,619,548)	\$ 37,045	\$ 18,151,864
Exercise of stock options for cash			94,563	94	218,407				218,501
Exercise of warrants for cash			3,082	3	7,394				7,397
Cashless exercise of			5,002						1,371
warrants Conversions of preferred			38,097	38	(38))			
stock to common stock Conversions of ordinary	(914,687)	(915)	960,238	961	(46))			
shares to common stock			2,201,644	2,202	5,347,793				5,349,995
Cash receipt towards stockholder notes						26.020			26.020
receivable Issuance of common						36,030			36,030
stock for consulting services			263,750	264	610,762				611,026
Issuance of common stock for cash, net of issuance costs of									
\$110,313			4,595,094	4,595	16,059,829				16,064,424
Stock-based compensation			18,750	19	1,702,790				1,702,809
Comprehensive loss: Net loss attributable to common stockholders							(11,227,778)		(11,227,778)

Unrealized gain on investments										9,945	9,945
Foreign currency											
translation gain										110,541	110,541
Total comprehensive loss											(11,107,292)
Balance at December 31,	112 202	¢	112	42 014 720	¢ 42 015	¢ 170 720 (21	¢	(50,000) \$ (120,047,20()	¢	157 521	¢ 21.024.754
2007	113,382	\$	113	43,814,739	\$43,815	\$170,730,621	\$	(50,000) \$(139,847,326)	\$	157,531	\$ 31,034,754
	The ac	con	ıpany	ing notes ar	e an integ	gral part of the	se co	onsolidated financial state	ement	s.	

Inovio Biomedical Corporation

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Continued)

	Preferre	ed stock	Commor	ı stock	Additional	Doc	eivables			umulated other		Total
	Number of shares	Amoun	Number t of shares	Amount	paid-in capital	F	rom cholders	Accumulated deficit	Comprehensive (loss) income		sto	
Balance at December 31, 2007	113,382	\$ 11	3 43,814,739	\$ 43,815	\$170,730,621	\$	(50,000)	\$(139,847,326)	\$	157,531	\$	31,034,754
Exercise of stock options for cash			1,250	1	1,087							1,088
Conversions of preferred stock to common stock	(113,311)) (11	3) 113,311	113								
Reserve for stockholder note receivable							50,000					50,000
Issuance of common stock for consulting												
services			56,250	55	46,520							46,575
Stock-based compensation			37,500	38	1,090,686							1,090,724
Comprehensive loss:												
Net loss attributable to common stockholders								(12,965,622)				(12,965,622)
Unrealized loss on investments										(9,945))	(9,945)
Foreign currency translation loss										(141,427))	(141,427)
Total comprehensive loss												(13,116,994)
Balance at December 31, 2008	71		, ,	. ,	\$171,868,914			\$(152,812,948)			\$	19,106,147

The accompanying notes are an integral part of these consolidated financial statements.

Inovio Biomedical Corporation

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,					
	2008	2007	2006			
Cash flows from operating activities:						
Net loss	\$(12,965,622)	\$(11,204,443)	\$(12,343,942)			
Adjustments to reconcile net loss to net cash used in						
operating activities:						
Depreciation	195,285	185,683	206,743			
Amortization of intangible assets	797,742	831,958	767,900			
Change in value of common stock warrants	(142,489)	(3,173,621)	(135,182)			
Unrealized loss on trading securities	4,380,529					
Recognition of auction rate securities rights	(4,281,494)					
Stock-based compensation	1,090,724	1,702,809	1,546,707			
Compensation for services paid in common stock	46,575	611,026	100,000			
Amortization of deferred tax liabilities	(63,000)	(63,000)	(63,000)			
Deferred rent	(61,946)	(66,832)	(57,385)			
Impairment of long term investments	114,750					
Loss on disposal of fixed assets	9,792					
Realization of loss carryforwards		389,881				
Revenue from conversion of note payable			(10,810)			
Accretion of discount on available-for-sale securities	(60,345)	(86,670)				
Changes in operating assets and liabilities:						
Accounts receivable	464,825	(726,884)	(57,631)			
Prepaid expenses and other current assets	19,518	507,230	(400,417)			
Accounts payable and accrued expenses	(583,841)	(321,080)	(233,894)			
Deferred revenue	(87,521)	(99,806)	3,637,763			
Net cash used in operating activities	(11,126,518)	(11,513,749)	(7,043,148)			
Cash flows from investing activities:	(1.500.000)	(10, (00, 00, 5))				
Purchases of long-term investments	(4,500,000)	(18,602,985)	(24,000,000)			
Proceeds from long-term investments	8,000,000	16,400,000	9,300,000			
Purchases of capital assets	(121,946)	(141,635)	(46,744)			
Capitalization of patents and other assets	(461,852)	(504,095)	(1,318,431)			
Net cash provided by (used in) investing activities	2,916,202	(2,848,715)	(16,065,175)			
Cash flows from financing activities:						
Proceeds from issuance of common stock, net of						
issuance costs	1,088	16,290,322	8,975,735			
Proceeds from line of credit	12,220,494					
Repayment of line of credit	(111,071)					
Reserve for stockholder note receivable	50,000					
Repayment of stockholder note receivable		36,030				
Proceeds from issuance of shares to minority interest			5,349,995			
Payment of preferred stock cash dividend		(23,335)	(132,343)			
Net cash provided by financing activities	12,160,511	16,303,017	14,193,387			
Effect of exchange rate changes on cash	(85,843)	(11,230)	69,975			
	2.044.255	1 000 000	(0.044.041)			
Increase (decrease) in cash and cash equivalents	3,864,352	1,929,323	(8,844,961)			
Cash and cash equivalents, beginning of period	10,250,929	8,321,606	17,166,567			
Cash and cash equivalents, end of period	\$ 14,115,281	\$ 10,250,929	\$ 8,321,606			

The accompanying notes are an integral part of these consolidated financial statements.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. The Company

Inovio Biomedical Corporation, or "Inovio," a Delaware corporation, organized in 2001, is a San Diego-based biomedical company focused on the development of next-generation vaccines to prevent or treat cancers and chronic infectious diseases. Such vaccines, which could potentially protect millions of people from debilitation or death from diseases without adequate treatments, may represent multi-billion dollar market opportunities. Historically, successful development of this new generation of vaccines DNA vaccines has been hindered by the lack of safe, efficient and cost effective DNA delivery methods capable of enabling their potency. However, Inovio's electroporation-based DNA delivery technology has shown potential in pre-clinical and clinical studies to play a pivotal role in facilitating delivery and enhancing the potency of preventive and therapeutic vaccines.

On July 7, 2008, Inovio and VGX Pharmaceuticals, Inc. ("VGX"), a privately-held developer of DNA vaccines, executed a definitive merger agreement providing for the issuance of Inovio shares in exchange for all of the outstanding securities of VGX and the merger of an acquisition subsidiary of Inovio with VGX (the "Merger"). Inovio and VGX subsequently negotiated an amended merger agreement (the "Amended Agreement"), which the parties executed on December 5, 2008. Completion of the Merger under the Amended Agreement is subject to registration with the SEC of the Inovio securities to be issued in the Merger, receipt of approval from both companies' stockholders, and other customary closing conditions.

2. Summary of Significant Accounting Policies

Basis of Presentation

Inovio incurred a net loss attributable to common stockholders of \$13.0 million for the year ended December 31, 2008 and had an accumulated deficit of \$152.8 million as of December 31, 2008. Management believes that Inovio's cash and cash equivalents of \$14.1 million at December 31, 2008 are sufficient to meet its planned working capital needs through December 31, 2009. To continue its product development Inovio plans to raise additional working capital through equity or debt financings. There can be no assurance that additional sources of capital will be available at favorable terms, if at all. If Inovio is not able to secure additional funding, Inovio will be required to scale back its research and development programs, preclinical studies and clinical trials, and general and administrative activities and may not be able to continue in business. These consolidated financial statements do not include any adjustments to the specific amounts and classifications of assets and liabilities, which might be necessary should Inovio be unable to continue in business. Inovio's consolidated financial statements as of and for the year ended December 31, 2008 have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business for the foreseeable future.

Consolidation

The accompanying consolidated financial statements include the accounts of Inovio Biomedical Corporation and its domestic and foreign subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in accordance with U.S. generally accepted accounting principles requires us to make estimates and judgments that affect the reported amounts of

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Inovio bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, Inovio reviews its estimates to ensure that these estimates appropriately reflect changes in the business or as new information becomes available.

Cash and equivalents

Equivalents are highly liquid investments purchased with original maturities of three months or less and are stated at cost, which approximates market value. At December 31, 2008 there were no cash equivalents held in money market funds. At December 31, 2007, cash equivalents included \$3.7 million in money market funds.

Accounts receivable

Trade accounts receivable are recorded at invoiced amounts and do not bear interest. Inovio performs ongoing credit evaluations of our customers' financial condition. Credit is extended to customers as deemed necessary and generally does not require collateral. Management believes that the risk of loss is significantly reduced due to the quality and financial position of our customers. No allowance for doubtful accounts was deemed necessary at December 31, 2008 and 2007.

Long-term investments

Inovio's investments consist of auction rate securities ("ARS") which are on deposit with a major financial institution and are stated at fair market value. All of Inovio's investments are classified as municipal debt securities as of December 31, 2008 and 2007, and are ARS which have contractual maturities in excess of ten years and reset to par on a monthly basis. See Note 3 for further discussion of the Company's long-term investments.

Auction Rate Securities Rights

Auction Rate Security Rights ("ARS Rights") consist of the right to sell ARS held by the Company back to the financial institution which sold them to the Company, at par, at its sole discretion, any time during the period from June 30, 2010 through July 2, 2012, and gives the financial institution the right to purchase these ARS or sell them on the Company's behalf at par anytime through July 2, 2012. See Note 3 for further discussion of the Company's ARS Rights.

Fixed assets

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful life of the assets, generally three to five years. Leasehold improvements are amortized over the shorter of the remaining term of the related leases or the estimated economic useful lives of the improvements. Repairs and maintenance are expensed as incurred.



INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

Cost method investments

Investments in corporate entities with less than a 20% voting interest are accounted for under the cost method. Inovio monitors these investments for impairment and makes appropriate reductions in carrying values if it is determined that an impairment charge is required, based primarily on the financial condition and near-term prospects of these companies.

The Company's cost method investments consist of investments in two non-public companies of \$25,000 and \$10,250 for the year ended December 31, 2008, as compared to \$25,000 and \$125,000, for the year ended December 31, 2007, respectively. During the year ended December 31, 2008 the Company recorded an \$114,750 impairment charge on one of its cost method investments due to certain events indicating a decline in the non-public company's fair value.

Goodwill

Goodwill represents costs which were in excess of the fair value in our acquisition of Inovio AS.

In accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, *Goodwill and Other Intangible Assets*, goodwill and intangible assets with indefinite lives are not amortized but instead are measured for impairment annually, or when events indicate that impairment exists. Our accounting policy with respect to reviewing goodwill for impairment is a two step process. The first step of the impairment test compares the fair value of our reporting unit with its carrying value including allocated goodwill. If the carrying value of our reporting unit exceeds its fair value, then the second step of the impairment test is performed to measure the impairment loss, if any. We test goodwill for impairment at the entity level which is considered our reporting unit. Our estimate of fair value is determined using both the Discounted Cash Flow method of the Income Approach and the Guideline Public Company method of the Market Approach. The Discounted Cash Flow method computes value indicators ("multiples") from the operating data of the selected publicly traded guideline companies. After these multiples were evaluated, appropriate value indicators were selected and applied to the operating statistics of the reporting unit to arrive at indications of value. Specifically, we relied upon the application of Total Invested Capital based valuation multiples for each guideline company. In applying the Income and Market Approaches, premiums and discounts were determined and applied to estimate the fair values of the reporting unit. To arrive at the indicated value of equity under each approach, we then assigned a relative weighting to the resulting values from each approach to determine whether the carrying value of the reporting unit exceeds its fair value, thus requiring step 2 of the impairment test.

We conduct the impairment test annually on November 30th for each fiscal year for which goodwill is evaluated for impairment. We are also aware of the requirement to evaluate goodwill for impairment at other times should circumstances arise pursuant to the guidance provided in SFAS 142, paragraph 26. To date, we have concluded that the fair value of the reporting unit significantly exceeded the carrying value and therefore, step 2 of the impairment test has never been performed.

Intangible Assets

Intangible assets acquired as part of the Inovio AS acquisition are amortized using the straight-line method over their estimated period of contractual and cash flow benefit, which is 18 years.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

Patents are recorded at cost and amortized using the straight-line method over the expected useful lives of the patents or 17 years, whichever is less. Cost is comprised of the consideration paid for patents and related legal costs. If management determines that development of products to which patent costs relate is not reasonably certain or that costs exceed recoverable value, such costs are charged to operations.

License costs are recorded based on the fair value of consideration paid and amortized using the straight-line method over the shorter of the expected useful life of the underlying patents or the term of the related license agreement.

Intangible assets subject to amortization and long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable in accordance with SFAS No. 144 discussed below. Additional factors we consider include the operational performance of our acquired businesses, estimates of future cash flows, market conditions, and other qualitative factors. Any estimates and assumptions we use for reviewing potential impairments are consistent with our internal planning. See Notes 7 and 18 for further discussion of the Company's goodwill and intangible assets.

Income taxes

Inovio accounts for income taxes using the liability method of tax allocation. Future income taxes are recognized for the future income tax consequences attributable to differences between the carrying values of assets and liabilities and their respective income tax bases. Future income tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which temporary differences are expected to be recovered or settled. The effect on future income tax assets and liabilities of a change in rates is included in earnings in the period that includes the enactment date. Future income tax assets are recorded in the consolidated financial statements if realization is considered more likely than not.

Revenue recognition

Revenue is recognized in accordance with SAB No. 104, *Revenue Recognition in Financial Statements*, and EITF Issue 00-21, *Revenue Arrangements with Multiple Deliverables*.

License fees are comprised of initial fees and milestone payments derived from collaborative licensing arrangements. Inovio continues to recognize non-refundable milestone payments upon the achievement of specified milestones, provided the milestone payment is substantive in nature and the achievement of the milestone was not reasonably assured at the inception of the agreement. Inovio defers payments for milestone events which are reasonably assured and recognizes them ratably over the minimum remaining period of the performance obligations. Payments for milestones which are not reasonably assured are treated as the culmination of a separate earnings process and are recognized as revenue when the milestones are achieved.

Inovio has adopted a strategy of co-developing or licensing our gene delivery technology for specific genes or specific medical indications. Accordingly, Inovio has entered into collaborative research and development agreements and has received funding for pre-clinical research and clinical trials. Payments under these agreements, which are non-refundable, are recorded as revenue as the

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

related research expenditures are incurred pursuant to the terms of the agreements and provided collectibility is reasonably assured.

Inovio receives non-refundable grants under available government programs. Inovio records government grants applicable towards current expenditures as revenue when there is reasonable assurance that the Company has complied with all conditions necessary to receive the grants, collectibility is reasonably assured, and the related expenditures have been incurred.

Research and development expenses

Since Inovio's inception, virtually all of the Company's activities have consisted of research and development efforts related to developing electroporation technologies. Research and development expenses consist of expenses incurred in performing research and development activities including salaries and benefits, facilities and other overhead expenses, clinical trials, contract services and other outside expenses. Research and development expenses are charged to operations as they are incurred. Inovio reviews and accrues clinical trials expense based on work performed, which relies on estimates of total costs incurred based on patient enrollment, completion of studies and other events.

Net loss per share

Net loss per share is calculated in accordance with SFAS No. 128, *Earnings Per Share*. Basic loss per share is computed by dividing the net loss for the year by the weighted average number of common shares outstanding during the year. Diluted loss per share is calculated in accordance with the treasury stock method and reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted to common stock. Since the effect of the assumed exercise of common stock options and other convertible securities was anti-dilutive for all periods presented, basic and diluted loss per share are the same.

The following table summarizes potential common shares that were excluded from historical basic and diluted net loss per share calculation because of their anti-dilutive effect:

	As of December 31,	As of December 31,	As of December 31,
Common stock equivalents	2008	2007	2006
Options to purchase common stock	4,616,714	3,465,462	2,798,900
Warrants to purchase common stock	6,890,448	8,892,000	8,663,700
Convertible preferred stock	104,409	217,720	1,177,959
Non-vested restricted common stock	138,750	101,250	
Total	11,750,321	12,676,432	12,640,559

Leases

Leases are classified as either capital or operating leases. Leases which transfer substantially all of the benefits and risks incidental to the ownership of assets are accounted for as if there was an acquisition of an asset and incurrence of an obligation at the inception of the lease. All other leases are accounted for as operating leases. Inovio's San Diego headquarters facility lease, which has escalating payments, is expensed on a straight-line basis over the term of five years. At the end of the original

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

lease term, Inovio has the option of renewing this lease for an additional five-year lease term at an annual rate equal to the fair market rental value of the property, as defined in the lease agreement. This lease represents the primary expense and commitment as indicated in Note 11 "Commitments" below. Other leases exist for the Norway facility and for office machinery, such as copiers, wherein lease expense is recorded as incurred.

Stock-based compensation

Inovio accounts for stock-based compensation in accordance with SFAS No. 123(R), *Share-Based Payment*. Inovio estimates the fair value of stock options granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility and expected option life. Inovio amortizes the fair value of the awards on a straight-line basis. All options grants are amortized over the requisite service period of the awards. Expected volatility is based on historical volatility. The expected life of options granted is based on historical data and Inovio records stock-based compensation expense only for those awards that are expected to vest. The dividend yield is based on the fact that no dividends have been paid on common stock historically, and none are currently expected to be paid.

Assumptions used in the Black-Scholes model are presented below:

	Year Ended December 31,				
	2008	2007	2006		
Risk-free interest rate	1.38% -	4.07% -	4.68% -		
	3.18%	4.67%	4.96%		
Expected volatility	69% - 91%	93% - 98%	98% - 109%		
Expected life in years	4	6	6		
Dividend yield					

Other Accumulated Comprehensive Loss

Components of comprehensive loss are reported in the consolidated financial statements in the period in which they are recognized. The components of comprehensive loss for us include net loss, unrealized gains and losses on investments and foreign currency translation adjustments. The components of accumulated other comprehensive loss are indicated on the Consolidated Statements of Stockholder's Equity.

Pending Adoption of Recent Accounting Pronouncements

In November 2007, the EITF issued EITF Issue No. 07-1, Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property. Companies may enter into arrangements with other companies to jointly develop, manufacture, distribute, and market a product. Often the activities associated with these arrangements are conducted by the collaborators without the creation of a separate legal entity (that is, the arrangement is operated as a "virtual joint venture"). The arrangements generally provide that the collaborators will share, based on contractually defined calculations, the profits or losses from the associated activities. Periodically, the collaborators

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

share financial information related to product revenues generated (if any) and costs incurred that may trigger a sharing payment for the combined profits or losses. The consensus requires collaborators in such an arrangement to present the result of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. EITF Issue No. 07-1 is effective for collaborative arrangements in place at the beginning of the annual period beginning after December 15, 2008. The Company does not expect the adoption of EITF Issue No. 07-1 to have a material impact on its consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations*. SFAS No. 141(R) changes the requirements for an acquirer's recognition and measurement of the assets acquired and liabilities assumed in a business combination, including the treatment of contingent consideration, pre-acquisition contingencies, transaction costs, in-process research and development and restructuring costs. In addition, under SFAS No. 141(R), changes in an acquired entity's deferred tax assets and uncertain tax positions after the measurement period will impact income tax expense. This statement is effective for the Company with respect to business combination transactions for which the acquisition date is after December 31, 2008. The Company is currently evaluating the impact that SFAS No. 141(R) will have on its consolidated financial statements, including specifically evaluating the impact upon consummation of the proposed Merger with VGX, if completed. The impact of adopting SFAS No. 141(R) on the Company's consolidated financial statements depends on the terms of any future business combination transactions.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements (an amendment of Accounting Research Bulletin, or ARB, No. 51).* SFAS No. 160 requires that noncontrolling (minority) interests be reported as a component of equity, that net income attributable to the parent and to the noncontrolling interest be separately identified in the income statement, that changes in a parent's ownership interest while the parent retains its controlling interest be accounted for as equity transactions, and that any retained noncontrolling equity investment upon the deconsolidation of a subsidiary be initially measured at fair value. This statement is effective for fiscal years beginning after December 31, 2008, and shall be applied prospectively. However, the presentation and disclosure requirements of SFAS No. 160 are required to be applied retrospectively for all periods presented. The retrospective presentation and disclosure requirements of this statement will be applied to any prior periods presented in financial statements for the fiscal year ending December 31, 2009, and later periods during which the Company has a consolidated subsidiary with a noncontrolling interest. As of December 31, 2008, the Company does not have any consolidated subsidiaries in which there is a noncontrolling interest.

In April 2008, the FASB issued Staff Position No. 142-3, *Determination of the Useful Life of Intangible Assets* ("FSP No. 142-3"). FSP No. 142-3 amends the factors to be considered in assumptions used to determine the useful lives of recognized intangible assets recognized under SFAS No. 142. The new guidance applies to intangible assets with contractual lives that are acquired individually or with a group of assets as well as those assets acquired in a business combination. The new guidance is effective for fiscal years beginning after December 15, 2008 and interim periods. The Company will adopt the statement on January 1, 2009 and is currently evaluating the impact FSP No. 142-3 will have on its consolidated financial statements.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies (Continued)

In November 2008, FASB ratified EITF Issue No. 08-7, *Accounting for Defensive Intangible Assets*. EITF 08-7 applies to defensive intangible assets, which are acquired intangible assets that the acquirer does not intend to actively use but intends to hold to prevent its competitors from obtaining access to them. As these assets are separately identifiable, EITF 08-7 requires an acquiring entity to account for defensive intangible assets must be recognized at fair value in accordance with SFAS 141R and SFAS 157. EITF 08-7 is effective for financial statements issued for fiscal years beginning after December 15, 2008. The Company will adopt EITF 08-7 on January 1, 2009 and is currently evaluating the potential impact of EITF 08-7 on its consolidated financial statements when implemented.

Adoption of Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board, or FASB, issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 establishes a framework for measuring fair value in accordance with GAAP, clarifies the definition of fair value within that framework, and expands disclosures about the use of fair value measurements. It also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value and the effect of fair value measurements on earnings. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, and does not expand the use of fair value in any new circumstances. SFAS No. 157 was effective for the Company on January 1, 2008. The adoption of SFAS No. 157 did not have a material impact on the Company's consolidated financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment to FASB Statement No. 115.* SFAS No. 159 allows certain financial assets and liabilities to be recognized, at the Company's election, at fair market value, with any gains or losses for the period recorded in the statement of operations. SFAS No. 159 includes available-for-sale securities in the assets eligible for this treatment. Currently, the Company records the unrealized gains or losses for the period in comprehensive income (loss) and in the equity section of the balance sheet. SFAS No. 159 was effective for the Company on January 1, 2008. The Company did not elect to adopt the fair value option under SFAS No. 159 on any assets or liabilities not previously carried at fair value, except for the Auction Rate Securities Rights ("ARS Rights") that were recorded in connection with the Company's acceptance of the offer of ARS Rights from UBS as more fully described in Note 3.

In June 2007, the EITF Issue A EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities.* The consensus requires companies to defer and capitalize prepaid, nonrefundable research and development payments to third parties over the period that the research and development activities are performed or the services are provided, subject to an assessment of recoverability. EITF Issue No. 07-3 is effective for new contracts entered into beginning on January 1, 2008. The adoption of EITF Issue No. 07-3 did not have a material impact on the Company's consolidated financial statements.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Investment Securities and Fair Value Measurements

Currently, the Company records the unrealized gains or losses on available-for-sale securities for the period in comprehensive income (loss) and in the equity section of the balance sheet. SFAS No. 159 was effective for the Company on January 1, 2008. The Company did not elect to adopt the fair value option under SFAS No. 159 on any assets or liabilities not previously carried at fair value, except for the Auction Rate Securities Rights ("ARS Rights") that were recorded in connection with the Company's acceptance of the offer of ARS Rights from its investment provider, UBS Financial Services, Inc., a subsidiary of UBS AG ("UBS"), as more fully described below.

SFAS No. 157 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The Company's financial assets measured at fair value on a recurring basis subject to the disclosure requirements of SFAS No. 157 at December 31, 2008 are as follows:

	Fair Value Measurements at Reporting Date Using			
	Total	Significant Unobservable Inputs (Level 3)		
Auction rate securities, long-term	\$ 9,169,471	\$ 9,169,471		
Auction rate securities rights, long-term	4,281,494	4,281,494		
Total	\$13,450,965	\$ 13,450,965		

The Company has determined that no items meet the criteria for definition within the level 1 or 2 hierarchies. Level 3 assets held as of December 31, 2008 include municipal debt obligations with an auction rate reset mechanism issued by municipalities. These auction rate securities ("ARS") are AAA-rated debt instruments with long-term maturities and interest rates that are reset at short-term intervals through auctions. Due to conditions in the global credit markets, in 2008, these securities are currently not liquid and the interest rates have been reset to predetermined higher rates. Due to the illiquid state of these investments, the Company has classified the balance of its ARS as long-term investments in the balance sheet as of December 31, 2008.

In December 2008, the Company, via its wholly-owned subsidiary Genetronics, Inc., or "Genetronics", which holds the ARS, accepted an offer of ARS Rights from UBS. The ARS Rights permit the Company to require UBS to purchase the Company's ARS at par value at any time during the period of June 30, 2010 through July 2, 2012. If the Company does not exercise its ARS Rights, the ARS will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction fails. If the ARS Rights are not exercised before July 2, 2012 they will expire and UBS will have no further obligation to buy the Company's ARS. UBS has the discretion to purchase or sell the Company's ARS at any time without prior notice so long as the Company receives a payment at par upon any sale or disposition. UBS will only exercise its discretion to purchase or sell the Company's ARS for the purpose of restructurings, dispositions or other solutions that will provide the Company

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Investment Securities and Fair Value Measurements (Continued)

with par value for its ARS. As a condition to accepting the offer of ARS Rights, the Company released UBS from all claims except claims for consequential damages relating to its marketing and sales of ARS. The Company also agreed not to serve as a class representative or receive benefits under any class action settlement or investor fund.

In conjunction with the acceptance of the ARS Rights, Genetronics also amended its existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with the ARS pledged as collateral. Genetronics fully drew down on the credit line in December 2008 (See Note 4).

Typically the fair value of ARS approximates par value due to the frequent resets through the auction process. While the Company continues to earn interest on its ARS at the maximum contractual rates, these investments are not currently trading and therefore do not currently have a readily determinable market value. Accordingly, the estimated fair value of the ARS no longer approximates par value. The Company has used a discounted cash flow model to determine the estimated fair value of its investment in ARS and its ARS Rights as of December 31, 2008. The assumptions used in preparing the discounted cash flow model include estimates for interest rates, timing and amount of cash flows and expected holding period of the ARS and ARS Rights.

The Company elected to measure the ARS Rights under the fair value option of SFAS No. 159 to mitigate volatility in reported earnings due to their linkage to the ARS, and recognized a gain of approximately \$4.3 million and recorded a corresponding long-term investment. Reflecting management's intent to exercise its ARS Rights during the period of June 30, 2010 through July 2, 2012, the Company transferred its ARS from investments available-for-sale to trading securities. As a result of this transfer and as the Company no longer intends to hold the ARS until the fair value recovers, the Company recognized an other-than-temporary impairment loss of approximately \$4.4 million, representing a reversal of the related temporary valuation allowance that was previously recorded in other comprehensive loss. Management believes this loss is primarily attributable to the limited liquidity of these investments and has no reason to believe that any of the underlying issuers are presently at risk of default. The recording of the fair value of the ARS Rights and the recognition of the other-than-temporary impairment loss resulted in a net impact to the Consolidated Statement of Operations for the year ended December 31, 2008 of approximately \$99,000, which was recorded as other expense. The ARS Rights will continue to be measured at fair value utilizing Level 3 inputs until the earlier of their maturity or exercise.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Investment Securities and Fair Value Measurements (Continued)

The following table provides a summary of changes in fair value of the Company's Level 3 financial assets as of December 31, 2008:

	Auction Rate Securities
Balance at January 1, 2008	\$
Transfers in to Level 3	14,050,000
Total unrealized losses included in other expense	(4,380,529)
Recognition of ARS Rights	4,281,494
Purchases and settlements (net)	(500,000)
Balance at December 31, 2008	\$13,450,965
Total loss included in other expense in the consolidated statement of operations relating to assets held at December 31, 2008	\$ (99,035)

4. Line of Credit

On August 26, 2008, the Company received notice from UBS Bank USA ("UBS") that the Company's application had been approved for a \$5.0 million uncommitted demand revolving line of credit ("Line of Credit") secured by ARS held by the Company in an account with UBS Financial Services, Inc. (the "Collateral Account"), to provide additional working capital. On December 19, 2008, the Company amended its existing loan agreement with UBS Bank USA, increasing the existing credit line up to \$12.1 million, with the ARS pledged as collateral. The Company fully drew down on the line of credit on December 23, 2008. Advances under the Line of Credit bear interest at LIBOR plus 1.00% (the "Spread Over LIBOR"). UBS may change the Spread Over LIBOR at its discretion when the Collateral consisting of ARS may be sold, exchanged or otherwise conveyed by the Company for gross proceeds that are, in the aggregate, not less than the par value of such securities. The loan will be treated as a "no net cost loan", as it will bear interest at a rate equal to the average rate of interest paid to the Company on the pledged ARS, and the net interest cost to the Company will be zero.

5. Major Customers and Concentration of Credit Risk

		% of Total		% of Total		% of Total
Customer	2008	Revenue	2007	Revenue	2006	Revenue
Merck	\$ 631,549	30%	\$3,268,884	68%	\$1,535,540	44%
Wyeth	846,693	40	1,118,023	23		
Valentis					655,123	19
U.S Army grant	92,954	4	21,423		898,932	26
All other	526,436	26	399,399	9	378,583	11
Total Revenue	\$2,097,632	100%	\$4,807,729	100%	\$3,468,178	100%

During the years ended December 31, 2008 and 2007, we recognized revenue from our collaboration and licensing agreements with Merck and Wyeth, which were executed in May 2004 and November 2006, respectively. As of December 31, 2008, \$397,000 or 59%, and \$221,000 or 33%, of our total accounts receivable balance of \$671,000, was attributable to Merck and Wyeth, respectively. As of December 31, 2007, \$240,000 or 21%, and \$889,000 or 78%, of our total accounts receivable balance of \$1.1 million, was attributable to Merck and Wyeth, respectively.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Major Customers and Concentration of Credit Risk (Continued)

There is minimal credit risk with these customers based upon collection history, their size and financial condition. Accordingly, we do not consider it necessary to record a reserve for uncollectible accounts receivable.

6. Fixed Assets

Fixed assets at December 31, 2008 and 2007 consist of the following:

	Cost	Accumulated depreciation and amortization	Net book value
As of December 31, 2008			
Machinery, equipment and office furniture	\$1,397,829	\$(1,205,536)	\$192,293
Leasehold improvements	341,133	(179,619)	161,514
	\$1,738,962	\$ (1,385,155)	\$353,807
As of December 31, 2007			
Machinery, equipment and office furniture	\$2,026,992	\$(1,836,966)	\$190,026
Leasehold improvements	734,317	(522,616)	211,701
	\$2,761,309	\$ (2,359,582)	\$401,727

Depreciation expense for the years ending December 31, 2008, 2007 and 2006 was \$195,000, \$186,000 and \$207,000, respectively. In accordance with SFAS No. 144, the company determined that the carrying value of these long-lived assets was not impaired for the periods presented.

7. Goodwill and Intangible Assets

In accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*, the Company's goodwill is not amortized, but is subject to an annual impairment test. The following sets forth the intangible assets by major asset class:

	Useful	De	ecember 31, 200	8	D	December 31, 2007			
	Life (Yrs)	Gross	Accumulated Amortization	Net Book Value	Gross	Accumulated Amortization	Net Book Value		
Non-Amortizing:									
Goodwill(a)		\$ 3,900,713	\$	\$ 3,900,713	\$ 3,900,713	\$ 5	\$ 3,900,713		
Amortizing:									
Patents	8 - 17	5,685,961	(3,255,231)	2,430,730	5,224,109	(2,775,713)	2,448,396		
Licenses	8 - 17	1,198,781	(947,721)	251,060	1,198,781	(854,497)	344,284		
Other(b)	18	4,050,000	(881,250)	3,168,750	4,050,000	(656,250)	3,393,750		
Total Intangible									
assets		10,934,742	(5,084,202)	5,850,540	10,472,890	(4,286,460)	6,186,430		
Total goodwill and									
intangible assets		14,835,455	(5,084,202)	9,751,253	\$ 14,373,603	\$ (4,286,460) \$	\$ 10,087,143		

(a)

Goodwill was recorded from the Inovio AS acquisition in January 2005. In 2007 we recorded a reduction in Goodwill of \$390,000 related to the realization of foreign net operating loss carry forwards.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. Goodwill and Intangible Assets (Continued)

(b)

Other intangible assets represent the fair value of acquired contracts and intellectual property from the acquisition of Inovio AS. At the time of the acquisition, we determined the remaining useful life for the acquired contractual relationships to be approximately 18 years, reflecting the period over which the contractual relationships would contribute to our cash flows, consistent with the guidance in SFAS 142, paragraph 11. We evaluated the useful life of the acquired contractual relationships based upon a review of the legal life of the underlying patents and discussions with the management of Inovio AS regarding estimates of each patent's useful economic life as it related to the acquired contracts. Based on these factors, we determined that our relevant market sales and cash flows would likely decline after 18 years, when the key patents related to the acquired contracts expire. We expect that the acquired contractual relationships will continue to provide positive cash flows through at least 18 years, as determined at the time of acquisition.

Aggregate amortization expense on intangible assets was \$798,000, \$832,000 and \$768,000 for the years ended December 31, 2008, 2007 and 2006, respectively. Amortization expense related to intangible assets at December 31, 2008 for each of the next five fiscal years and beyond is expected to be incurred as follows:

2009	\$ 703,543
2010	652,824
2011	603,148
2012	554,801
2013	504,164
Thereafter	2,832,060
	\$5,850,540

In accordance with SFAS No. 142, the Company has completed its annual impairment tests and fair value analysis for goodwill and other non-amortizing intangible assets, respectively, held throughout the year. The Company conducts the impairment test annually on November 30th for each fiscal year for which goodwill is evaluated for impairment. There were no impairments or impairment indicators present and no loss was recorded during the year ended December 31, 2008.

8. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses at December 31, 2008 and 2007 consist of the following:

	As of December 31, 2008			As of December 31, 2007		
Trade accounts payable	\$	377,332	\$	394,786		
Accrued compensation		372,015		559,685		
Other accrued expenses		617,953		852,834		
	\$	1,367,300	\$	1,807,305		

9. Deferred Revenue

We defer revenue recognition of cash receipts from licensing and other agreements and recognize them ratably over the minimum remaining period of our performance obligations. The combined

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Deferred Revenue (Continued)

current and long-term deferred revenue balance of \$4.8 million consists primarily of an unrecognized balance of \$3.9 million arising from the \$4.5 million payment received from Wyeth in November 2006 for the 15 year collaborative and licensing agreement.

10. Stockholders' Equity

Preferred Stock

				nding as of mber 31,
	Authorized	Issued	2008	2007
Series A Preferred Stock, par \$0.001	1,000	817		
Series B Preferred Stock, par \$0.001	1,000	750		
Series C Preferred Stock, par \$0.001	1,091	1,091	71	71
Series D Preferred Stock, par \$0.001	1,966,292	1,966,292		113,311

The following is a summary of changes in the number of outstanding shares of our preferred stock for the years ended December 31, 2006, 2007 and 2008:

	Series A	Series B	Series C	Series D
Shares Outstanding as of January 1, 2006	52	100	337	1,561,935
Preferred Shares converted	(52)	(100)	(235)	(533,968)
Shares Outstanding as of December 31, 2006			102	1,027,967
Preferred Shares converted			(31)	(914,656)
Shares Outstanding as of December 31, 2007			71	113,311
Preferred Shares converted				(113,311)
Shares Outstanding as of December 31, 2008			71	

The shares of the Company's outstanding Series C Preferred Stock have the following pertinent rights and privileges, as set forth in the Company's Amended and Restated Certificate of Incorporation and its Certificates of Designations, Rights and Preferences related to the various series of preferred stock.

Dividend Preferences

The holders of all series of the Company's preferred stock are entitled to receive dividends on a pari passu basis with the holders of common stock, when, if and as declared by the Company's Board of Directors.

In addition, the holders of the Series C Preferred Stock received a mandatory dividend rate of 6% per annum per outstanding share of Series C Preferred Stock, payable quarterly, based on the \$10,000 Liquidation Preference of such share through the period ending on May 20, 2007. These dividends were paid in cash or common stock equal to the equivalent cash amount divided by the 20 day preceding average closing price. The Company could only elect to pay the dividends in shares of common stock if the average closing price of the shares of common stock for the 20 days immediately preceding the dividend payment date was equal to or greater than the conversion price of either of the relevant series of Preferred Stock. All dividends were paid to outstanding Series C Preferred Stockholders on each quarter-end payment date. No dividends were paid to holders of our Series C

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

Preferred Stock during the year ended December 31, 2008. We paid cash dividends to holders of our Series C Preferred Stock of \$23,000 during the year ended December 31, 2007.

Rights on Liquidation

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company (a "liquidation event"), before any distribution of assets of the Company shall be made to or set apart for the holders of common stock, the holders of Series C Preferred Stock, pari passu, are entitled to receive payment of such assets of the Company in an amount equal to \$10,000 per share of such series of preferred stock, plus any accumulated and unpaid dividends thereon (whether or not earned or declared).

If the assets of the Company available for distribution to stockholders exceed the aggregate amount of the liquidation preferences payable with respect to all shares of each series of preferred stock then outstanding, then, after the payment of such preferences is made or irrevocably set aside, the holders of the Company's common stock are entitled to receive a pro rata portion of such assets based on the aggregate number of shares of common stock held by each such holder. The holders of the Company's outstanding preferred stock shall participate in such a distribution on a pro-rata basis, computed based on the number of shares of common stock which would be held by such preferred holders if immediately prior to the liquidation event all of the outstanding shares of the preferred stock had been converted into shares of common stock at the then current conversion value applicable to each series.

A Change of Control of the Company (as defined in the Certificates of Designations, Rights and Preferences) is not a liquidation event triggering the preferences described above, and is instead addressed by separate terms in the Series C Certificates of Designations, Rights, and Preferences.

Although the liquidation preferences are in excess of the par value of \$0.001 per share of the Company's preferred stock, these preferences are equal to or less than the stated value of such shares based on their original purchase price.

Voting Rights

The holders of all series of the Company's preferred stock outstanding have full voting rights and powers equal to the voting rights and powers of holders of the Company's common stock and are entitled to notice of any stockholders' meeting in accordance with the Company's Bylaws. Holders of the Company's preferred stock are entitled to vote on any matter upon which holders of the Company's common stock have the right to vote, including, without limitation, the right to vote for the election of directors together with the holders of common stock as one class.

Actions Requiring the Consent of Holders of Convertible Preferred Stock

As long as a certain number of shares of each series of the Company's preferred stock issued on the respective "Date of Original Issue" for such series are outstanding, the consent of at least a majority of the shares of that series of preferred stock outstanding are necessary to approve:

(a) Any amendment, alteration or repeal of (i) any of the provisions of the relevant series' Certificate of Designation, including any increase in the number of authorized shares of such series

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

or (ii) the Company's Certificate of Incorporation or Bylaws in a manner that would adversely affect the rights of the holders of the relevant series of preferred stock;

(b) the authorization, creation, offer, sale or increase in authorized shares by the Company of any stock of any class, or any security convertible into stock of any class, or the authorization or creation of any new series of preferred stock ranking in terms of liquidation preference, redemption rights or dividend rights, pari passu with or senior to, the relevant series of preferred stock in any manner;

(c) the declaration or payment of any dividend or other distribution (whether in cash, stock or other property) with respect to the Company's capital stock or that of any subsidiary, other than a dividend or other distribution pursuant to the terms of the relevant series of preferred stock or other series of preferred stock noted in the relevant Certificate of Designation; and

(d) except for the holders of the Series D Preferred Stock, the redemption, purchase or other acquisition, directly or indirectly, of any shares of the Company's capital stock or any of its subsidiaries or any option, warrant or other right to purchase or acquire any such shares, or any other security, other than certain accepted redemptions of preferred stock, certain outstanding warrants, the repurchase of shares at cost from employees of the Company upon termination of employment in accordance with written agreements pursuant to which the shares were issued, or other specified repurchase or redemption rights pursuant to written agreements outstanding at the time of original issuance of the preferred stock in question.

These specific voting rights are applicable for the Series C Preferred Stock as long as at least 35% of the number of shares of Series C Preferred Stock issued on the Date of Original Issue remain outstanding, and the same threshold applies to the Series D Preferred Stock. As of December 31, 2008, there were no voting rights remaining.

Participation Rights

Holders of the Series C Preferred Stock have the right to participate with respect to the Company's issuance of any equity or equity-linked securities or debt convertible into equity or in which there is an equity component ("Additional Securities") on the same terms and conditions as offered by the Company to the other purchasers of such Additional Securities. However securities issued or issuable upon any of the following are not deemed "Additional Securities": (A) the conversion of outstanding preferred stock or exercise of related warrants, or the issuance of shares of common stock as payment of dividends to holders of preferred stock, (B) the exercise of any warrants or options outstanding prior to the authorization or issuance of the series of preferred stock in question (C) the issuance or exercise prices at or above fair market value) of common stock, stock awards or options under, or the exercise of any options granted pursuant to, any Board-approved employee stock option or similar plan for the issuance of options or capital stock of the Company, (D) the issuance of shares of common stock pursuant to a stock split, combination or subdivision of the outstanding shares of common stock, and (E) for evaluation of the rights of the Series C Preferred Stock only, in connection with a bona fide joint venture or development agreement or strategic partnership, the primary purpose of which is not to raise equity capital.

Each time the Company proposes to offer any Additional Securities, it is obligated to provide each holder of shares of the Series C Preferred Stock notice of such intention including the terms of such

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

intended offering (including size and pricing) and the anticipated closing date of the sale. These preferred stockholders then have a specified period in which to respond to the Company to elect to purchase or obtain, at the price and on the terms specified in the Company's notice, up to that number of such Additional Securities which equals such holder's Pro Rata Amount. The "Pro Rata Amount" for any given holder of shares of the Series C Preferred Stock equals that portion of the Additional Securities offered by the Company which equals the proportion that the number of shares of common stock that such preferred stockholder owns or has the right to acquire to the total number of shares of common stock then outstanding (assuming in each case the full conversion and exercise of all convertible and exercisable securities then outstanding).

The holders of the Series C Preferred Stock have the right to pay the consideration for the Additional Securities purchasable upon such participation with shares of such series of Preferred Stock, which will be valued for such purpose at the applicable series' Liquidation Preference plus any accrued and unpaid dividends for such purpose. However, when shares of such preferred stock are used as participation consideration, then such holder's Pro Rata Amount is increased (but not decreased) to the extent necessary to equal that number of Additional Securities as are convertible into or exchangeable for such number of shares of Common Stock as is obtained by dividing (a) the Liquidation Preference attributable to such holder's shares of the applicable series of Preferred Stock plus any accrued and unpaid dividends on such Preferred Stock by (b) the Conversion Value then in effect for such shares, and in such event the Company shall be obligated to sell such number of Additional Securities to each such holder, even if the aggregate Pro Rata Amount for all such holders exceeds the aggregate amount of Additional Securities that the Company had initially proposed to offer. To the extent that not all holders of a particular series of preferred stock elect to participate up to their full Pro Rata Amounts, the participating holders of that series of preferred stock have the right to increase their participation accordingly.

The participation rights of the holders of the Series C Preferred Stock may not be assigned or transferred, other than assignment to any wholly-owned subsidiary or parent of, or to any corporation or entity that is, within the meaning of the Securities Act, controlling, controlled by or under common control with, any such holder. As a result of transfers, the holders of the Series C Preferred Stock outstanding as of December 31, 2008 no longer had such participation rights.

During our October 2006, December 2005 and January 2005 common stock offerings, we informed holders of our outstanding Series A, B, and C Cumulative Convertible Preferred Stock with participation rights, of their ability to participate in the respective offering based upon the pricing of the transaction and the applicable liquidation preference for the series of preferred share participating. These participating stockholders obtained incremental shares of common stock as a result of exercising their participation rights, thereby converting their outstanding shares of Cumulative Convertible Preferred Stock at a lower offering price compared to their current conversion price. The right to participate was available only for a limited period time in relation to the specific transaction and the exercise of the existing participation right did not reflect or create a lasting change in the holders' conversion privileges. Some of the participating stockholders had previously converted a portion of their shares of the Company's preferred stock through exercise of their participation rights in the noted offerings.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

Conversion Rights

The Series C Preferred Stock each provide the holder of such shares an optional conversion right and provide a mandatory conversion upon certain triggering events.

Right to Convert The holder of any share or shares of Series C Preferred Stock has the right at any time, at such holder's option, to convert all or any lesser portion of such holder's shares of the Preferred Stock into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing (i) the aggregate Liquidation Preference applicable to the particular series of preferred shares, plus accrued and unpaid dividends thereon by (ii) the applicable Conversion Value (as defined in the relevant series' Certificate of Designations, Rights and Preferences) then in effect for such series of preferred shares. The Company is not obligated to issue any fractional shares or scrip representing fractional shares upon such conversion and instead shall pay the holder an amount in cash equal to such fraction multiplied by the current market price per share of the Company's common stock.

Mandatory Conversion The Company has the option upon thirty (30) days prior written notice, to convert all of the outstanding shares of the Series C Preferred Stock into such number of fully paid and non-assessable shares of common stock as is determined by dividing (i) the aggregate Liquidation Preference of the shares of the relevant series of preferred stock to be converted plus accrued and unpaid dividends thereon by (ii) the applicable Conversion Value (as defined in the relevant series' Certificate of Designations, Rights and Preferences) then in effect, if at any time after twelve months following the Original Issue Date of each such series of preferred stock all of the following triggering events occur:

(i) The registration statement covering all of the shares of common stock into which the particular series of preferred stock is convertible is effective (or all of the shares of common stock into which the preferred stock is convertible may be sold without restriction pursuant to Rule 144 under the Securities Act of 1933, as amended);

(ii) the Daily Market Price (as defined in the applicable Certificates of Designations, Rights and Preferences) of the common stock crosses a specified pricing threshold for twenty of the thirty consecutive trading days prior to the date the Company provides notice of conversion to the holders; and

(iii) the average daily trading volume (subject to adjustment for stock dividends, subdivisions and combinations) of the common stock for at least twenty of the thirty consecutive trading days prior to the date the Company provides notice of conversion to the holders exceeds 25,000 shares.

As of December 31, 2008, our outstanding shares of the Series C Preferred Stock were convertible into 104,409 shares of our common stock at a conversion price of \$6.80 per share, and the applicable Daily Market Price of the common stock for triggering mandatory conversion equaled \$18.00 per share. As of December 31, 2008 there were no shares of Series D Preferred Stock outstanding.

Imputed and Declared Dividends on Preferred Stock

The holders of our Series A and B Preferred Stock were entitled to receive an annual dividend at the rate of 6%, payable quarterly, through September 30, 2006. These dividends were payable in cash unless the closing price of our common shares for the 20 trading days immediately preceding the

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

dividend payment date was equal to or greater than the conversion price of such shares, in which event we may have elected to pay the dividends to the holders in common stock. As part of this dividend to holders of Series A and B Preferred Stock, we issued a total of 2,871 common shares valued at \$8,000, and paid \$15,000 in cash during 2006. There were no shares of Series A or B Preferred Stock outstanding on December 31, 2008, 2007 or 2006, respectively.

The holders of our Series C Preferred Stock are entitled to receive an annual dividend at the rate of 6%, payable quarterly, through May 20, 2007. These dividends are payable in cash unless the closing price of our common shares for the 20 trading days immediately preceding the dividend payment date is equal to or greater than the conversion price of such shares, in which event we may elect to pay the dividends to the holders in common stock. As part of this dividend, we paid cash of \$23,000 during fiscal 2007 to holders of our Series C Preferred Stock. We paid cash \$117,000 during fiscal 2006 to holders of our Series C Preferred Stock and accrued \$15,000 for certain holders of our Series C Preferred Stock who participated in our October 2006 equity financing, during fiscal 2006. No dividends were paid to holders of our Series C Preferred Stock during the year ended December 31, 2008.

During 2006, we recorded an imputed dividend charge of \$1.9 million during the three months ended December 31, 2006, related to the investors who converted \$1.2 million of their Series C Preferred Stock investment into 473,744 shares of our common stock as part of our October 2006 private placement. This imputed dividend charge was calculated using guidance contained in Emerging Issues Task Force ("EITF") Issue No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments*. As part of this private placement, these investors received 304,450 additional shares of our common stock, as compared to the number of shares of our common stock into which their existing Series C Preferred Stock could have been converted under the original terms of the Series C Preferred Stock. Under EITF Issue No. 00-27, this incremental number of shares of our common stock was multiplied by the price of our common stock on the commitment date of the original Series C Preferred Stock issuance, or \$6.08 per share, to calculate the \$1.9 million imputed dividend charge associated with this beneficial conversion.

Common Stock

In August 2007, we entered into an agreement with an outside consulting advisor pursuant to which we issued 230,000 registered shares of common stock and registered warrants to purchase 150,000 shares of common stock, as payment of a non-refundable retainer in connection with the engagement of its services. The warrants issued have an exercise price of \$3.00 per share, and are exercisable through August 6, 2012. As of December 31, 2008, none of these warrants have been exercised.

In May 2007, we completed a registered equity financing, whereby we sold 4,595,094 shares of our common stock resulting in gross aggregate cash proceeds of \$16.2 million.

In March 2007, we entered into an agreement in which we agreed to issue a total of 90,000 restricted shares of our common stock in equal quarterly installments in exchange for consulting services. As of December 31, 2008, we had issued all 90,000 restricted common shares.

In January 2007, we exchanged for 2,201,644 restricted shares of our common stock and warrants to purchase up to 770,573 restricted shares of our common stock for 2,201,644 ordinary shares of our Singapore subsidiary Inovio Asia Pte. Ltd. (IAPL), pursuant to the terms of the Securities Purchase

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

and Exchange Agreement under which the ordinary shares were originally issued by IAPL in October 2006 for \$5.3 million. The warrants issued have an exercise price of \$2.87 per share and are exercisable through October 13, 2011. As of December 31, 2008, none of these warrants have been exercised.

In March 2007, we terminated our exclusive royalty-free license to IAPL allowing our subsidiary to use certain of our intellectual property, which had been issued in October 2006 prior to the ordinary share financing described above, in exchange for 6,584,365 ordinary shares of IAPL. Upon termination we retained the IAPL ordinary shares received in the license transaction.

In October 2006, we completed a registered offering with foreign investors, whereby we sold 4,074,067 shares of our common stock and issued warrants to purchase 1,425,919 shares of our common stock which resulted in gross aggregate cash proceeds of \$9.9 million. As part of this offering, we informed holders of our then outstanding Series C Preferred Stock who held participation rights, of their ability to participate in the respective offering based upon the pricing of the transaction and the applicable liquidation preference for their series of preferred shares with such rights. Some of these participating stockholders had previously converted a portion of their shares of preferred stock pursuant to their optional conversion rights, and most of these participating stockholders wholly converted their remaining shares of the Company's preferred stock through exercise of their participation rights in this offering. By electing to participate in this offering, these participating preferred stockholders converted 115.12 shares of previously issued Series C Preferred Stock and \$14,571 of accrued dividends into 479,722 restricted shares of our common stock and warrants to purchase 167,902 restricted shares of our common stock. These participating stockholders received 304,450 additional restricted shares of our common stock as compared to the number of shares of our common stock into which their existing Series C Preferred Stock could have been converted under the original terms of the Series C Preferred Stock. As a result, we recorded an imputed dividend charge of \$1.9 million related to the participating stockholders who converted \$1.2 million of their previous Series C Preferred Stock investment. We calculated this imputed dividend charge pursuant to the guidance contained in Emerging Issues Task Force ("EITF") Issue No. 00-27, Application of Issue No. 98-5 to Certain Convertible Instruments, where the incremental number of shares of our common stock which was received by our participating Series C Preferred Stockholders was multiplied by the price of our common stock on the commitment date of the original Series C Preferred Stock issuance, or \$6.08 per share, to calculate the imputed dividend charge associated with this beneficial conversion. All warrants issued in connection with our 2006 registered offering have an exercise price of \$2.87 per share and are exercisable through October 13, 2011. As of December 31, 2008, none of these warrants have been exercised.

In July and October 2006, we issued 25,000 and 24,261 shares of our common stock, respectively, to an outside consulting company in payment of a non-refundable retainer in connection with the engagement of its services.

In June 2006, we issued 86,956 common shares to a licensing company in exchange for various patents and other assets and a \$50,000 shareholder note receivable.

Warrants

In addition to warrants granted as discussed above, the Company has issued the following additional warrants.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

Participants in our December 2005 private placement were issued five-year warrants to purchase an aggregate of 3,462,451 shares of our common stock with an exercise price of \$2.93 per share, exercisable through December 30, 2010. As of December 31, 2008, none of these warrants have been exercised.

In connection with the leasing of our new corporate headquarters, the Company issued a warrant to purchase 50,000 shares of our common stock at \$5.00 per share to the landlord of this leased facility in December 2004. This warrant is immediately exercisable and expires on December 6, 2009, five years from the date of issuance. This warrant was valued on the date of issuance using the Black-Scholes pricing model. The fair value of this warrant, \$121,000, will be recognized ratably over the five-year term of the lease as rent expense. As of December 31, 2008, none of these warrants have been exercised.

Participants in our Series C Preferred Stock offering in May 2004 were issued five-year warrants to purchase 561,084 shares of our common stock at an exercise price of \$8.80 per share, exercisable through May 10, 2009. The placement agents for the Series C Preferred Stock offering were also issued five-year warrants to purchase 152,519 shares of our common stock at an exercise price of \$6.80 per share, exercisable through May 10, 2009. As of December 31, 2008, none of these warrants have been exercised.

On September 15, 2000, we entered into an exclusive license agreement with the University of South Florida Research Foundation, Inc. (USF), whereby USF granted us an exclusive, worldwide license to USF's rights in patents and patent applications generally related to needle electrodes ("License Agreement"). Pursuant to the License Agreement, we granted USF and its designees warrants to acquire 150,000 common shares for \$9.00 per share until September 14, 2010. Of the total warrants granted, 75,000 vested at the date of grant and the remainder will vest upon the achievement of certain milestones. The 75,000 non-forfeitable vested warrants were valued at \$554,000 using the Black- Scholes pricing model and were recorded as other assets with a credit to additional paid-in capital. The remaining 75,000 warrants are forfeitable and will be valued at the fair value on the date of vesting using the Black- Scholes pricing model. As of December 31, 2008, no warrants issued in connection with this licensing agreement had been exercised.

In July 2008, warrants to purchase 2,001,552 shares of our common stock expired, issued in connection with our Series A and B Preferred Stock offerings.

Stock options

The Company has one active stock and cash-based incentive plan, our 2007 Omnibus Incentive Plan (the "Incentive Plan"), pursuant to which we have granted stock options and restricted stock awards to executive officers, directors and employees. The plan was adopted on March 31, 2007, approved by the stockholders on May 4, 2007, and approved by the stockholders as amended on May 2, 2008. The Incentive Plan reserves 1,750,000 shares of our common stock for issuance as or upon exercise of incentive awards granted and to be granted at future dates. At December 31, 2008, we had 42,938 shares of common stock available for future grant and had outstanding 138,750 shares of unvested restricted common stock, 101,250 shares of vested restricted stock, and options to purchase 1,465,812 shares of common stock. The awards granted and available for future grant under the Incentive Plan generally have a term of ten years and generally vest over a period of three years. The Incentive Plan terminates by its terms on March 31, 2017.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

The Incentive Plan supersedes all of our previous stock option plans, which include our 1997 Stock Option Plan, under which we had options to purchase 14,750 shares of common stock outstanding and our Amended 2000 Stock Option Plan, under which we had options to purchase 3,136,152 shares of common stock outstanding at December 31, 2008. The terms and conditions of the options outstanding under these plans remain unchanged.

Total compensation cost under SFAS No. 123(R) for our stock plans for the years ended December 31, 2008, 2007 and 2006 was \$1.0 million, \$1.6 million, and \$1.3 million of which \$286,000, \$354,000 and \$423,000 was included in research and development expenses and \$746,000, \$1.2 million and \$921,000 was included in general and administrative expenses, respectively.

At December 31, 2008 and 2007, there was \$752,000 and \$1.3 million of total unrecognized compensation cost, respectively, related to unvested stock options, which is expected to be recognized over a weighted-average period of one year.

The Company accounts for options granted to non-employees in accordance with Emerging Issues Task Force ("EITF") No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services,* and Statement of Financial Accounting Standard ("SFAS") No. 123(R), *Share-Based Payment*. The fair value of these options at the measurement dates was estimated using the Black-Scholes pricing model.

Total stock-based compensation for options granted to non-employees for the years ended December 31, 2008, 2007 and 2006, was \$58,000, \$119,000, and \$203,000, respectively. As of December 31, 2008 and 2007, 1,076,031 and 455,937 options remained outstanding, respectively.

The following table summarizes total stock options outstanding at December 31, 2008:

	0	Options outstanding Weighted- average remaining			Options ex		able ighted-
Exercise price	Options outstanding	contractual life (in years)	1	Veighted average rcise price	Options exercisable	av ex	erage ercise orice
\$0.00 - \$2.00	1,914,717	8.1	\$	1.03	868,668	\$	1.23
\$2.01 - \$4.00	2,231,998	6.9	\$	2.97	1,662,143	\$	2.92
\$4.01 - \$6.00	386,499	5.3	\$	4.95	386,499	\$	4.95
\$6.01 - \$8.00	68,750	4.4	\$	6.22	68,750	\$	6.22
\$8.01 - \$22.00	14,750	0.5	\$	15.59	14,750	\$	15.59
	4,614,714	7.2	\$	2.42	3,000,810	\$	2.83

At December 31, 2008, the aggregate intrinsic value of options outstanding was \$9,000, the aggregate intrinsic value of options exercisable was \$2,000, and the weighted average remaining contractual term of options exercisable was 6.3 years.

At December 31, 2007, the aggregate intrinsic value of options outstanding was \$150; the aggregate intrinsic value of options exercisable was \$150 and the weighted average remaining contractual term of options exercisable was 6.1 years.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Stockholders' Equity (Continued)

Stock option activity under our stock option plans was as follows:

	Number of shares	Weighted exercis	0
Balance, December 31, 2005	2,383,888	\$	3.55
Granted	872,750		2.56
Exercised	(148,628)		1.69
Cancelled	(309,110)		4.64
Balance, December 31, 2006	2,798,900		3.22
Granted	963,125		3.20
Exercised	(94,563)		2.31
Cancelled	(202,000)		4.57
Balance, December 31, 2007	3,465,462		3.15
Granted	1,474,500		0.86
Exercised	(1,250)		0.87
Cancelled	(321,998)		3.14
Balance, December 31, 2008	4,616,714	\$	2.42

The weighted average exercise price was \$3.56 for the 233,185 options which expired during the year ended December 31, 2008, \$6.36 for the 118,250 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2008, \$6.50 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 31, 2007 and \$5.53 for the 167,687 options which expired during the year ended December 3

The weighted average grant date fair value per share was \$0.46 for options granted during the year ended December 31, 2008, \$2.51 for options granted during the year ended December 31, 2007 and \$2.18 for options granted during the year ended December 31, 2006.

The aggregate intrinsic value of options exercised was \$138 during the year ended December 31, 2008; \$95,000 during the year ended December 31, 2007 and \$158,000 during the year ended December 31, 2006.

A summary of the Company's nonvested restricted shares as of December 31, 2008 and activity during the year is as follows:

	Number of shares	ave gran	ghted- erage it-date value
Nonvested at January 1, 2008	101,250	\$	3.69
Granted	75,000		0.87
Vested	(37,500)		2.28
Nonvested at December 31, 2008	138,750	\$	2.55

As of December 31, 2008, there was \$179,000 of total unrecognized compensation cost related to nonvested stock-based compensation arrangements. That cost is expected to be recognized over a weighted-average period of 1.1 years.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Commitments

On January 28, 2005, the Company moved into its headquarters of 22,867 square feet in San Diego, California. This lease runs through February 28, 2010. The annual rent for this leased property was \$433,901 in the first two years and \$452,767 in year three and four of the original lease term. The annual rent for the fifth and final year of the original lease term is \$480,207. At the end of the original lease term, we have the option of renewing this lease for an additional five-year lease term at an annual rate equal to the fair market rental value of the property, as defined in the lease agreement.

In January 2008, we entered into a new facility lease in Oslo, Norway to support our research and development activities conducted through our subsidiary Inovio AS. The term of the lease is for three years and may be terminated with three months notice. Monthly rent is approximately \$3,000 per month.

Rent expense was \$422,000, \$490,000, and \$489,000 for the years ended December 31, 2008, 2007 and 2006, respectively. This amount is net of sublease income of \$103,000, \$38,000 and \$38,000, respectively. Future minimum lease payments under non-cancelable operating leases as of December 31, 2008 are as follows:

2009 2010 2011 Thereafter	\$539,825 138,152 5,640
Total	\$683,617

In the normal course of business, the Company is a party to a variety of agreements pursuant to which we may be obligated to indemnify the other party. It is not possible to predict the maximum potential amount of future payments under these types of agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by us under these types of agreements have not had a material effect on our business, consolidated results of operations or financial condition.

12. Litigation

From time to time the Company becomes involved in various lawsuits, claims and proceedings relating to the conduct of our business. The Company is currently involved in the following litigation:

Pyrce v. Inovio Biomedical Corporation, Genetronics Biomedical Corporation, Genetronics, Inc., Inovio AS, DOES 1 to 50, Superior Court of California, County of San Diego, Case No. 37-2007-000758899-CU-BC-CTL (Hon. Ronald L. Styn). The plaintiff, a former consultant to Inovio AS, commenced this civil lawsuit against the Company and various subsidiaries in state court on September 28, 2007. Plaintiff's original counsel withdrew from the case, plaintiff was proceeding *pro se* until obtaining a new attorney who appeared in September of 2008 and filed a nine-count amended complaint. The Court dismissed three of Plaintiff's counts and Plaintiff thereafter filed a nine-count second amended complaint by which Plaintiff seeks approximately \$780,000 in damages. The plaintiff has not yet served Inovio AS. The Company disputes the allegations and intends to vigorously defend against them.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Income Taxes

In accordance with SFAS 109, *Accounting for Income Taxes*, a deferred tax asset or liability is determined based on the difference between the financial statement and tax basis of assets and liabilities as measured by the enacted tax rates which will be in effect when these differences reverse. We provide a valuation allowance against net deferred tax assets unless, based upon the available evidence, it is more likely than not that the deferred tax asset will be realized.

The components of the provision (benefit) for income taxes are shown below:

	As of December 31, 2008	As of December 31, 2007	As of December 31, 2006
Current:			
Federal	\$	\$	\$
State			
Foreign			
	\$	\$	\$
Deferred:			
Federal	\$	\$	\$
State			
Foreign	(63,000)	327,000	(63,000)
	(63,000)	\$ 327,000	\$ (63,000)

The reconciliation of income tax attributable to operations computed at the statutory tax rates to income tax expense (recovery), using a 35% statutory tax rate, is:

		ear ended ember 31, 2008	-	ear ended cember 31, 2007		ear ended ember 31, 2006
Income taxes at statutory rates	\$ (4,538,000)	\$ ((3,786,000)	\$ (4,368,000)
State income tax, net of federal benefit		(668,000)		(742,000)		(659,000)
Change in valuation allowance		5,328,000	((6,445,000)		4,636,000
IRC Section 382 limitation			1	2,749,000		
Fair value warrant		50,000	((1,192,000)		
Other		(235,000)		(257,000)		328,000
	\$	(63,000)	\$	327,000	\$	(63,000)

The income tax expense (recovery) has been recorded as a reduction to general and administrative expenses, as its effect is immaterial.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Income Taxes (Continued)

Significant components of our deferred tax assets and liabilities as of December 31, 2008 and 2007 are shown below:

	As of December 31, 2008	As of December 31, 2007
Deferred tax assets:		
Capitalized research expense	\$ 3,566,000	\$ 929,000
Net operating loss carry forwards	24,891,000	23,019,000
Research and development and other tax credits	2,152,000	1,356,000
Other	4,049,000	4,028,000
Valuation allowance	34,658,000 (34,658,000)	29,332,000 (29,332,000)
Total deferred tax assets		
Deferred tax liabilities:		
Acquired intangibles	(887,000)	(950,250)
Net deferred tax liabilities	(887,000)	\$ (950,250)

The net deferred tax liability of \$887,000 as of December 31, 2008, resulted from the acquisition of Inovio AS and reflects the net effect of temporary differences between the carrying amount of intangible assets for financial statement reporting purposes and the amount used for income tax purposes. The liability will be amortized over the life of the underlying intangible, which is 18 years and will be accounted for as an income tax recovery.

As of December 31, 2008, we had federal and California tax net operating loss carry forwards of approximately \$59.4 million and \$58.0 million, respectively. The federal loss carry forwards will begin to expire in 2019 unless previously utilized. The California loss carry forwards will begin to expire in 2013. The difference between the federal and California tax loss carry forwards is primarily attributable to the capitalization of research and development expenses for California income tax purposes and the 50% to 60% limitation of California loss carry forwards. In addition, we have federal and state research tax credit carry forwards of \$1.2 million and \$1.5 million, respectively. The federal tax credit carry forwards will begin to expire in 2022. The California research tax credit carry forwards do not expire. At December 31, 2008, the Company had foreign tax loss carry forwards related to the acquisition of Inovio AS of approximately \$2.1 million. The foreign net operating loss carry forwards begin to expire in 2011.

Utilization of the NOL and tax credit carryforwards will be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, and similar state provisions due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes will limit the amount of NOL and tax credit carryforwards and other deferred tax assets that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing ownership of certain stockholders or public groups in the stock of the corporation by more than 50 percentage points over a three-year period. An analysis was performed of ownership activity through December 31, 2008 which indicated that multiple ownership changes have occurred in previous years which created annual

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Income Taxes (Continued)

limitations on the Company's ability to utilize NOL and tax credit carryovers. Such limitations will result in approximately \$12.7 million of tax benefits related to NOL and tax credit carryforwards that will expire unused. Accordingly, the related NOL and R&D credit carryforwards have been removed from deferred tax assets accompanied by a corresponding reduction of the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, related to our operations in the U.S. will not impact our effective tax rate.

In July 2006, the FASB issued FIN 48, which clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements in accordance with Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes*. FIN 48 prescribes a recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. Additionally, FIN 48 provides guidance on the de-recognition, classification, interest and penalties, accounting in interim periods, and disclosure requirements for uncertain tax positions. We adopted the provisions of FIN 48 beginning January 1, 2007. The adoption of FIN 48 did not impact the Company's financial condition, results of operations or cash flows. As of December 31, 2008, the Company has not recorded any uncertain tax benefits.

We file income tax returns in the U.S. and various foreign and state jurisdictions. Due to our losses incurred, we are essentially subject to income tax examination by tax authorities from our inception to date. Our policy is to recognize interest expense and penalties related to income tax matters as tax expense. At December 31, 2008, we do not have any significant accruals for interest related to unrecognized tax benefits or tax penalties.

14. 401(k) Plan

In 1995, our U.S. subsidiary adopted a 401(k) Profit Sharing Plan (the "Plan") covering substantially all of its employees. The defined contribution plan allows the employees to contribute a percentage of their compensation each year. We currently match 50% of our employees' contributions, up to 6% of their annual compensation. Our contributions are recorded as expense in the accompanying consolidated statements of operations and totaled \$58,000, \$55,000 and \$45,000 for the years ended December 31, 2008, 2007 and 2006, respectively.

15. Segment Information

The Company operates in one business segment in the United States and Europe. Revenues are attributable to the geographical area based on the location of the customer. During the year ending December 31, 2008 revenues in Europe and the United States totaled \$285,000 and \$1.8 million, respectively. During the year ending December 31, 2007 revenues in Europe and the United States totaled \$267,000 and \$4.5 million, respectively, and during the year ending December 31, 2006 revenues in Europe and the United States totaled \$262,000 and \$3.2 million, respectively. Long-lived assets within the United States consist primarily of patents and other intellectual property. Long-lived assets outside the United States consist primarily of goodwill and intangible assets. As of December 31, 2008, long-lived assets in Europe and the United States totaled \$7.1 million and \$2.7 million, respectively. As of December 31, 2007, long-lived assets in Europe and the United States totaled \$7.7 million and \$2.8 million, respectively, and as of December 31, 2006, long-lived assets in Europe and the United States totaled \$7.9 million and \$2.9 million, respectively.

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. Related Party Transactions

In March 2004, we announced the selection of Quintiles Transnational Corp., a global pharmaceutical services organization, as the clinical research organization ("CRO") for our clinical trials in the U.S. and Europe. In addition, the investment division of this CRO, Qfinance, Inc., was an investor in our Series A, B and C Preferred Stock. During the year ended December 31, 2006, Qfinance, Inc. converted 50, 100 and 109 shares respectively, of our Series A, B and C Preferred Stock into a total of 725,788 of our common shares. Total clinical trial expenses paid to Quintiles Transnational Corp. for the years ended December 31, 2008, 2007, and 2006, were \$0, \$23,000 and \$371,000, respectively.

17. Supplemental Disclosures of Cash Flow Information

	Year ended December 31, 2008		Year ended December 31, 2007		 ear ended eember 31, 2006
Supplemental schedule of financing activities:					
Conversion of minority interest into common stock	\$		\$ 5	5,349,995	\$
Interest paid	\$	31,170	\$		\$
Imputed dividends on preferred stock	\$		\$		\$ 1,851,056
Common stock issued in connection with declared					
dividends on preferred stock	\$		\$		\$ 22,264
Cashless exercise of warrants	\$		\$	38	\$
Conversions of preferred stock to common stock	\$	113	\$	961	\$ 1,764
Issuance of common stock for patents and other assets	\$		\$		\$ 128,922
Issuance of common stock in exchange for shareholder					
note receivable	\$		\$		\$ 86,030
Leasehold improvements financed by landlord	\$	35,211	\$	92,486	\$ 172,054
Investment received in exchange for licensing agreement	\$		\$		\$ 125,000
					,

18. Inovio AS

On December 31, 2007, the Company's wholly-owned Norwegian subsidiary Inovio AS transferred certain patent and other intellectual property rights ("IPR") to our wholly owned U.S. subsidiary Genetronics Inc. The value assigned to these rights was \$1.9 million, which was determined by and was the responsibility of management of Inovio, who considered in part preliminary work performed by a valuation specialist in Norway. All Norwegian tax gains associated with this transfer of the patents and IPR was offset by prior year tax loss carry forwards. Subsequent to year-end, the Company changed the name of Inovio AS to Inovio Tec AS. Simultaneously, the Company incorporated a new Norwegian wholly-owned subsidiary under the name Inovio AS, for the purpose of organizing a research effort directed towards the development of specific cancer vaccine candidates. The Company expects funding for this program to be about \$5.0 million over the next several years. In January 2008, all employees, employee agreements, lease agreements and fixed assets were transferred from Inovio Tec AS to Inovio AS.

19. Quarterly Financial Information (Unaudited)

The following unaudited quarterly financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results of the interim



INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Quarterly Financial Information (Unaudited) (Continued)

periods. The four quarters for per share figures may not add for the year because of the different number of shares outstanding during the year. The results of operations for any period are not necessarily indicative of the results to be expected for any future period. Summarized unaudited quarterly data for the years ended December 31, 2008 and 2007, are as follows:

	E Decei	uarter nded mber 31, 2008		Quarter Ended September 30, 2008		Quarter Ended June 30, 2008		Quarter Ended arch 31, 2008
Consolidated Statement of Operations:								
Revenue:								
License fee and milestone payments	\$	179,823	\$	214,825	\$	203,924	\$	192,829
Revenue under collaborative research and								
development arrangements		(81,240)		239,912		459,110		460,185
Grants and miscellaneous revenue		228,264						
Total revenue		326,847		454,737		663,034		653,014
Operating Expenses:								
Research and development	1	,199,455		1,274,387	1	,679,264	1	,597,388
General and administrative	2	,588,989		1,928,928	3	3,086,180	2	2,401,505
Total operating expenses	3	,788,444		3,203,315	2	1,765,444	3	8,998,893
Loss from operations	(3	,461,597)	(2,748,578)	(4	4,102,410)	(3	3,345,879)
Interest income, net		56,708		97,008		191,371		298,749
Other income, net	((170,844)		307,162		(112,733)		25,421
Net loss attributable to common stockholders	\$ (3	,575,733)	\$ (2,344,408)	(4	4,023,772)	(3	3,021,709)
Amounts per common share basic and diluted:								
Net loss attributable to common stockholders	\$	(0.08)	\$	(0.05)	\$	(0.09)	\$	(0.07)
Weighted average number of common								
shares basic and diluted	44	,011,800	4	3,929,654	43	3,874,739	43	3,837,739
			F-3	6				

INOVIO BIOMEDICAL CORPORATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Quarterly Financial Information (Unaudited) (Continued)

	Quarter Ended December 31, 2007	Quarter Ended September 30, 2007	Quarter Ended June 30, 2007	Quarter Ended March 31, 2007
Consolidated Statement of Operations:				
Revenue:				
License fee and milestone payments	\$ 2,212,854	\$ 136,870	\$ 209,265	\$ 234,489
Revenue under collaborative research and				
development arrangements	1,054,031	265,970	286,312	247,990
Grants and miscellaneous revenue	54,854	83,671		21,423
Total revenue	3,321,739	486,511	495,577	503,902
Operating Expenses:	, ,	,	,	,
Research and development	1,866,322	2,335,378	2,907,836	2,516,411
General and administrative	3,266,767	3,177,723	2,344,551	2,291,161
	, ,	, ,		
Total operating expenses	5,133,089	5,513,101	5,252,387	4,807,572
Loss from operations	(1,811,350)	(5,026,590)	(4,756,810)	(4,303,670)
Interest income, net	357,514	405,023	286,792	223,068
Other income, net	427,906	1,927,064	727,305	339,305
Net loss	(1,025,930)	(2,694,503)	(3,742,713)	(3,741,297)
Imputed and declared dividends on	(-,,)	(_,.,.,,	(0,0,0,0,0,0,0)	(0,0,0,0,0,0,0)
preferred stock			(8,244)	(15,091)
Net loss attributable to common stockholders	(1,025,930)	\$ (2,694,503)	\$ (3,750,957)	\$ (3,756,388)
Amounts per common share basic and diluted:				
Net loss attributable to common stockholders	\$ (0.02)	\$ (0.06)	\$ (0.09)	\$ (0.10)
Weighted average number of common shares basic and diluted	43,812,905	43,699,683	40,674,947	37.694.634
shares basic and unuted	+3,012,903	43,099,083 F-37	40,074,947	37,094,034

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Consolidated Financial Statements

YEARS ENDED DECEMBER 31, 2008 AND 2007 AND THE PERIOD FROM DECEMBER 12, 2000 (INCEPTION) THROUGH DECEMBER 31, 2008

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Report of Independent Registered Public Accounting Firm

The Board of Directors VGX Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of VGX Pharmaceuticals, Inc. (a development-stage company) as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for the years then ended and for the period from December 12, 2000 (inception) through December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of VGX Pharmaceuticals, Inc. as of December 31, 2008 and 2007, and the results of its operations and its cash flows for the years then ended and for the period from December 12, 2000 (inception) through December 31, 2008, in conformity with accounting principles generally accepted in the United States.

The accompanying financial statements have been prepared assuming that VGX Pharmaceuticals, Inc. will continue as a going concern. As more fully described in Note 1, the Company has historically incurred operating losses and cash flow deficiencies and there is uncertainty as to the Company's ability to obtain financing as needed to sustain operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

March 18, 2009 Philadelphia, Pennsylvania

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Consolidated Balance Sheets

	December 31			
		2008		2007
Assets				
Current assets:				
Cash and cash equivalents	\$	4,212,220	\$	15,814,097
Accounts receivable		3,825		22,100
Receivables due from related parties		3,867,536		
Inventories purchased from related parties		189,370		
Inventories		36,095		2,129,930
Restricted cash				1,000,000
Prepaid expenses and other current assets		100,584		468,412
		0 400 600		
Total current assets		8,409,630		19,434,539
Property and equipment, net of accumulated depreciation of \$270,308				
and \$936,661 at December 31, 2008 and 2007, respectively		429,966		1,516,232
Equity investment in affiliated entity		1,375,439		7,966,143
Intangible assets, net of accumulated amortization of \$874,729 and		2 4 04 55 4		2 0 6 1 0 6 0
\$480,332 at December 31, 2008 and 2007, respectively		3,101,771		3,861,068
Goodwill		907,076		1,084,844
Debt issuance costs, net		120 145		129,037
Other assets		130,147		130,227
	¢	14 254 020	ሰ	24 122 000
Total assets	\$	14,354,029	\$	34,122,090
Liabilities and stockholders' equity				
Current liabilities:	.	0.54 0.00	<i>•</i>	000.050
Accounts payable	\$	956,302	\$	883,370
Accounts payable and accrued expenses due to related parties		249,009		2 444 021
Accrued expenses		1,687,761		2,444,031
Current portion of long-term debt Deferred revenue		2,140,000		10,310,000
Other current liabilities		45,756		3,779,099 357,229
Other current habilities		45,750		551,229
Total automat lightlitics		5 070 020		17 772 720
Total current liabilities		5,078,828		17,773,729
Long-term debt Other noncurrent liabilities		4,400,000		2,940,000 5,646
Other holicultent habilities				5,040
Total liabilities		9,478,828		20,719,375
Minority interest		688,863		20,719,373 956,497
Stockholders' equity:		000,005		<i>930</i> , 4 <i>91</i>
Preferred stock, \$0.0001 par value; 1,000,000 shares authorized, no				
shares outstanding				
Common stock, \$0.0001 par value; 100,000,000 shares authorized,				
41,870,230 shares and 44,798,574 shares issued and outstanding at				
December 31, 2008 and 2007, respectively		4,187		4,480
Additional paid-in capital		73,710,837		65,085,032
Accumulated other comprehensive (loss) income		(1,416,844)		642,036
Deficit accumulated during the development stage		(68,111,842)		(53,285,330)
		· / //		. , -,•)
Total stockholders' equity		4,186,338		12,446,218
······································		.,,		,,210
Total liabilities and stockholders' equity	\$	14,354,029	\$	34,122,090
Total haomites and stockholders equity	φ	17,334,049	φ	57,122,090

See accompanying notes.

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Consolidated Statements of Operations

		Year Ended I	ıber 31	Period From December 12, 2000 (Inception) to		
		2008		2007	December 31 2008	l,
Revenue:						
Revenue from product sales	\$	606,211	\$	723,411	\$ 1,329,62	22
Government contract revenue		1,990,411			1,990,4	11
Government grant revenue		86,120		668,955	1,827,52	28
License fee revenue					75,0	00
Revenue from related parties		376,072			376,0	72
Other operating revenue, net		68,425		36,448	104,8	73
Total revenue		3,127,239		1,428,814	5,703,5	06
Operating expenses:		0,127,203		1,120,011	5,705,5	00
Cost of product sales		2,237,238		2,204,254	4,441,4	92
Research and development		13,125,479		10,781,960	39,184,5	
General and administrative		7,808,636		5,082,119	32,969,70	
General and administrative		7,000,020		5,002,117	52,969,1	00
Total operating expenses		23,171,353		18,068,333	76,595,7	88
Loss from operations		(20,044,114)	(16,639,519)	(70,892,2	82)
Other income (expense):						
Gain on sale of manufacturing assets to related						
party, net of tax		6,653,153			6,653,1	53
Losses from equity investment in affiliated entity		(1,632,812)		(990,338)	(3,648,6	81)
Interest income		423,312		919,026	2,289,6	
Interest expense		(712,242)		(1,128,713)	(3,043,4	
Other income, net		218,557			218,5	
Minority interest		267,634		43,503	311,12	
Total other income (expense), net		5,217,602		(1,156,522)	2,780,44	40
Net loss	\$	(14,826,512)	\$ (17,796,041)	\$ (68,111,84	42)
See acco	mnar	wing notes				

See accompanying notes.

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Consolidated Statements of Stockholders' Equity (Deficit)

	Common		Additional Paid-in	Deferred Stock		Accumulated Other Comprehensive	During the Development	
	Shares	Amount	Capital	Compensation			Stage	Total
Issuance of common stock to Founders Net loss	14,050,000	\$ 1,405	\$ 291,470	\$-	-\$	\$-	\$ (292,875)	\$ 292,875 (292,875)
1101 1035							(2)2,075)	(2)2,075)
Balance, December 31, 2000	14,050,000	1,405	291,470				(292,875)	
Issuance of common stock for patents	3,550,000	355	(355)				(2)2,013)	
Issuance and exercise of options to	150,000	15	24,728					24,743
non-employees	150,000	15	24,720					24,743
Note conversion	1,800,000	180	299,820					300,000
Issuance of warrants in connection with debt	1,000,000	100	62,079					62,079
Issuance of warrants to employees and related			113,828					113,828
• •			115,626					115,626
party Net loss							(730,410)	(730,410)
1001							(750,410)	(750,410)
	10.550.000	1.055	701 570				(1.022.205)	
Balance, December 31, 2001	19,550,000	1,955	791,570				(1,023,285)	(229,760)
Issuance of common stock at \$0.50	930,000	93	232,407					232,500
Note conversion	440,000	44	103,200					103,244
Options to non-employees			62,855	(59,465)				3,390
Amortization of deferred stock compensation				6,632				6,632
Issuance of warrants to employees and related			37,618					37,618
party								
Net loss							(413,367)	(413,367)
Balance, December 31, 2002	20,920,000	2,092	1,227,650	(52,833)			(1,436,652)	(259,743)
Issuance of common stock at \$0.60	433,890	43	118,535					118,578
Note conversion/retirement	837,200	84	157,596					157,680
Exercise of stock options and warrants	105,000	11	23,115					23,126
Issuance of options and warrants to employees			601,234	(211,614)				389,620
Issuance of warrants in connection with debt			51,309					51,309
Issuance of options and warrants to			87,600					87,600
non-employees								
Amortization of deferred stock compensation				94,535				94,535
Net loss							(748,545)	(748,545)
Balance, December 31, 2003	22.296.090	2,230	2,267,039	(169,912)			(2,185,197)	(85,840)
Issuance of common stock at \$0.60	41,110	4	12,329	(10),)12)			(2,105,177)	12,333
Issuance of common stock at \$1.00	1,447,000	145	617,519					617,664
Issuance of common stock to non-employees	24,000	2	7,140					7,142
Issuance of common stock to employees	130,000	13	64,987					65,000
Issuance of common stock at \$2.00	1,851,750	185	3,703,315		(2,065,500))		1,638,000
Exercise of warrants	6,042,725	604	(604)		(2,005,500	<i>')</i>		1,050,000
Issuances of common stock to non-employees	53,604	6	53,598					53,604
Note conversion	50,601	5	11,062					11,067
Issuance of options and warrants to employees	50,001	5	3,366,004	(1,855,657)				1,510,347
Issuance of options and warrants to			440,100	(1,055,057)				440,100
non-employees			1+0,100					110,100
Amortization of deferred stock compensation				276,810				276,810
Net loss				270,010			(3,808,249)	(3,808,249)
1100 1000							(3,000,279)	(3,000,277)
	01.000.000	0.10.1	10 5 10 100		(0.0/2.200		15 000 110	
Balance, December 31, 2004	31,936,880	3,194	10,542,489	(1,748,759)	(2,065,500))	(5,993,446)	737,978
			F-42					

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Consolidated Statements of Stockholders' Equity (Deficit) (Continued)

					F *	Accumulated		
	Common		Additional Paid-in	Deferred Stock	0	Other Comprehensive	•	
	Shares	Amount	Capital	Compensation	Receivable	Income	Stage	Total
Balance, December 31, 2004 (from previous	21 026 880	\$ 2 104	\$ 10 542 480	\$ (1 749 750)	\$ (2.065.500)	¢	- \$ (5,993,446) \$	727 078
<i>page)</i> Collection of share purchase contract	51,950,880	\$ 5,194	\$10,542,489	\$ (1,748,759)	2,065,500	ъ	- \$ (3,993,440) \$	5 737,978 2,065,500
Issuance of common stock at \$2.25	1,261,546	126	2,583,903		2,005,500			2,005,500
Issuance of common stock at \$2.25	310,211	31	808,493					808,524
Issuance of common stock to	510,211	51	000,495					000,524
non-employees	13,000	1	25,999					26,000
Issuance of options and warrants to		-	,,,,,					,
employees			9,204,972	(3,333,418)				5,871,554
Issuance of options and warrants to								
non-employees			882,675					882,675
Exercise of stock options and warrants	2,679,933	268	(268))				
Amortization of deferred stock								
compensation				1,816,241				1,816,241
Change in foreign currency translation						113,052		113,052
Net loss							(11,335,149)	(11,335,149)
Balance, December 31, 2005	36,201,570	3,620	24,048,263	(3,265,936)		113,052	(17,328,595)	3,570,404
Reclassification of deferred compensation	, . ,	- ,	,,	(-,,,		- ,	(),,,	- , ,
on the adoption of SFAS No. 123(R)			(3,265,936)	3,265,936				
Issuance of common stock at \$3.00	3,347,812	335	9,491,866					9,492,201
Issuance of common stock at \$5.00	1,383,000	138	6,522,075					6,522,213
Issuance of common stock to								
non-employees	125,000	12	424,988					425,000
Compensation expense for stock option								
and warrant awards			11,016,997					11,016,997
Expense for options and warrants to								
non-employees			455,510					455,510
Issuance of options related to equity								
financing activities			254,682					254,682
Exercise of stock options and warrants	1,330,800	133	4,358					4,491
Note conversion	246,173	25	553,814					553,839
Change in foreign currency translation						478,183		478,183
Net loss							(18,160,694)	(18,160,694)
Balance, December 31, 2006	42,634,355	4,263	49,506,617			591,235	(35,489,289)	14,612,826
Issuance of common stock at \$5.00	2,024,219	203	10,105,892					10,106,095
Issuance of common stock to								
non-employees	130,000	13	649,987					650,000
Issuance of common stock to employees	10,000	1	49,999					50,000
Compensation expense for stock option								
and warrant awards			4,604,190					4,604,190
Expense for options and warrants to								
non-employees			168,347					168,347
Change in foreign currency translation						50,801		50,801
Net loss							(17,796,041)	(17,796,041)
Balance, December 31, 2007	44,798,574	4,480	65,085,032			642,036	(53,285,330)	12,446,218
Issuance of common stock to								
non-employees	470,000	47	1,191,653					1,191,700
Issuance of common stock to employees	10,000	1	7,099					7,100
Rescission of stock issuance to employees	(3,373,344)	(338)	338					
Rescission of stock issuance to								
non-employees	(60,000)	(6)	(4,494))				(4,500)
Compensation expense for stock option								
and warrant awards			7,158,941					7,158,941

Expense for options and warrants to non-employees			266,021				266,021	
Exercise of stock options and warrants	25,000	3	6,247				6,250	
Change in foreign currency translation						(2,058,880)	(2,058,880)	
Net loss						(14,826,512) (14,826,512)	
Balance, December 31, 2008	41,870,230	\$ 4,187	\$73,710,837	\$	\$	- \$ (1,416,844) \$ (68,111,842) \$ 4,186,338	
See accompanying notes.								
			F-43					

Consolidated Statements of Cash Flows

	Year Ended December 31			D (1	Period from December 12, 2000 (Inception) to December 31,	
		2008	2007		2008	
Cash flows from operating activities	<i>ф</i>	(14026 512)	. (17 70(0.11)	¢	((0.111.0.40))	
Net loss	\$	(14,826,512)	\$ (17,796,041)	\$	(68,111,842)	
Adjustments to reconcile net loss to net cash used in operating						
activities:						
Gain on sale of manufacturing assets to related party, net of		(((52 152)			(((52 152)	
tax		(6,653,153)	1 500 1 (0		(6,653,153)	
Depreciation and amortization		1,136,295	1,523,163		2,819,830	
Stock-based compensation		8,433,051	5,081,735		35,697,782	
Stock-based compensation to related parties Interest converted into common stock		190,711	390,802		2,132,399	
Loss on disposal		617			53,839	
Minority interest in net loss		(267,634)	(42 502)		2,781	
Losses from equity investment in affiliated entity		1,632,812	(43,503) 990,338		(311,137) 3,648,681	
Changes in operating assets and liabilities:		1,032,012	990,558		5,040,001	
Accounts receivable		18,275	6,048		24,323	
Receivables due from related parties		(867,536)	0,040		(867,536)	
Inventories purchased from related parties		(189,370)			(189,370)	
Inventories		(162,273)	(1,811,812)		(1,974,085)	
Prepaid expenses and other assets		330,194	(383,812)		(113,208)	
Accounts payable and accrued expenses		(564,929)	297,900		2,203,003	
Accounts payable and accrued expenses due to related		(304,929)	291,900		2,203,005	
parties		249.009			249,009	
Deferred revenue from manufacturing operations		83,789	3,412,089		3,495,878	
Other current liabilities		(308,549)	169,305		45,756	
		(200,200)			,	
Net cash used in operating activities		(11,765,203)	(8,163,788)		(27.847.050)	
Cash flows from investing activities		(11,703,203)	(8,105,788)		(27,847,050)	
Purchase of ADViSYS, Inc., net of cash acquired			(2,058,762)		(2,058,762)	
Sale of manufacturing assets to related party		6,110,000	(2,030,702)		6,110,000	
Equity investment in affiliated entity		0,110,000			(9,362,501)	
Investment in third-party stock			(60,000)		(60,000)	
Purchases of property and equipment		(234,400)	(614,814)		(950,385)	
Proceeds from sale of minority interest		(20 1,100)	1,000,000		1,000,000	
			-,,		-,,	
Nat each provided by (yead in) investing activities		5 975 600	(1,733,576)		(5 221 649)	
Net cash provided by (used in) investing activities Cash flows from financing activities		5,875,600	(1,755,570)		(5,321,648)	
Decrease in restricted cash	\$	1,000,000	\$	\$		
Proceeds from debt borrowings	φ	100,000	1,600,000	φ	15,989,435	
Repayment of debt to investors		(6,810,000)	(2,139,435)		(8,949,435)	
Debt issuance costs		(0,010,000)	(171,500)		(386,500)	
Proceeds from issuance of common stock		1,750	5,485,000		30,709,909	
rocedus nom issuance of common stock		1,700	5,105,000		50,705,505	
Net cash (used in) provided by financing activities		(5,708,250)	4,774,065		37,363,409	
ret easit (used in) provided by initiatening activities		(3,700,230)	4,774,005		57,505,407	
			(5 100 000)		4.10.1.7.1	
Net (decrease) increase in cash and cash equivalents		(11,597,853)	(5,123,299)		4,194,711	
Effects of exchange rates on cash and cash equivalents		(4,024)	21,533		17,509	
Cash and cash equivalents, beginning of period		15,814,097	20,915,863			
Cash and cash equivalents, end of period	\$	4,212,220	\$ 15,814,097	\$	4,212,220	
Cash and cash equivalents, end of period	ψ	7,212,220	φ 13,017,097	ψ	7,212,220	
Supplemental schedule of neurosch investige and fine						
Supplemental schedule of noncash investing and financing cash flow activities						
Capital lease for office equipment	\$		\$ 9,562	\$	9,562	
Capital lease for office equipment	φ		φ 9,302	φ	9,502	

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Issuance of common stock to acquire ADViSYS, Inc.	\$		\$	4,621,095	\$	4,621,095
Conversion of long-term debt and accrued interest to common stock	\$		\$		\$	553,839
Issuance of warrants in connection with debt	\$		\$		\$	58,953
Supplemental schedule of cash flow information						
Interest paid	\$	686,308	\$	909,681	\$	1,610,989
See accompanying notes.						

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements

December 31, 2008

1. Description of the Business and Basis of Presentation

VGX Pharmaceuticals, Inc. (VGX) is a development-stage company incorporated in Delaware as Viral Genomix, Inc. on December 12, 2000 (inception). VGX began operations on January 1, 2001, and is a biopharmaceutical company engaged in the discovery and development of drugs and DNA vaccines for the treatment of infectious diseases, including the HIV virus, as well as cancer and inflammatory diseases. VGX has built a broad product pipeline encompassing these major disease categories, and these product candidates and technology programs are protected by VGX's extensive global intellectual property patents. VGX has generated an accumulated deficit of \$68.1 million since inception. VGX anticipates incurring additional losses for the foreseeable future. Substantial additional financing will be needed by VGX to fund its operations and to develop its products. There is no assurance that such financing will be available when needed.

VGX Animal Health, Inc. (Animal Health) is a biotechnology company engaged in the development and commercialization of products designed to add to the economic value of livestock and improve the health of companion animals. The Animal Health franchise was acquired as part of the acquisition of ADViSYS, Inc. in February 2007. VGX carved out the acquired Animal Health franchise into a separate company in order to clearly segregate the Animal Health franchise from its core technology dedicated to developing drugs for human application. Animal Health's lead candidate is LifeTide SW5 for porcine. In January 2008, Animal Health received an approval by the Australian Pesticides and Veterinary Medicines Authority (APVMA) for LifeTide SW5, VGX's leading Growth Hormone Releasing Hormone (GHRH) product for swine therapy. LifeTide SW5 is an injectable DNA plasmid encoding for porcine GHRH, and is administered as a once-in-a-lifetime treatment for use in sows of breeding age to increase the number of piglets weaned. The demand for LifeTide SW5 is subject to the commodity price risk of the porcine market. Also, since remittances for the purchase of LifeTide SW5 are in Australian dollars, the revenues for Animal Health will be subject to exchange rate risk.

Animal Health completed an equity financing in the third quarter of 2007 in which it raised \$1,000,000 from the sale of its common stock, valued at \$0.75 per share, to a third-party, lowering the percentage of VGX's ownership in Animal Health to 86%. In the first quarter of 2008, Animal Health issued 1.3 million shares to VGX in accordance with the license agreement signed between the two parties in September 2007. As of December 31, 2008, VGX owns 88% of the outstanding stock of Animal Health. Animal Health is consolidated in the results of VGX's consolidated financial statements.

On June 10, 2008, VGX entered into an Asset Purchase Agreement with a related party to sell the assets of the plasmid manufacturing division in The Woodlands, Texas, in exchange for \$9,110,000 in cash. The plasmid manufacturing division was originally acquired by VGX as part of the acquisition of assets of ADViSYS, Inc. in February 2007. The payment is structured so that the last tranche of the purchase price will be received by March 31, 2009. There are no other milestone or royalty payments owed by either party to the Agreement. VGX has reflected a gain on the sale of these assets in its consolidated statement of operations of \$6.7 million, net of taxes, for the year ended December 31, 2008.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

1. Description of the Business and Basis of Presentation (Continued)

VGX is subject to those risks associated with biotechnology companies in a similar stage of development. There can be no assurance that VGX's research and development activities will be successful, that products developed will obtain necessary regulatory approval, or that any approved product will be commercially viable. In addition, VGX operates in an environment of rapid technological change and is largely dependent on the services of its employees and consultants.

The financial statements of VGX have been prepared assuming it will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Accordingly, the financial statements do not include any adjustments to recorded asset values that might be necessary should VGX be unable to continue in existence. VGX has incurred continued operating losses, and has experienced increasing cash outflows from operating activities since inception. VGX has not established a consistent revenue stream. In addition, it is uncertain whether VGX will become profitable in the foreseeable future, or if VGX will continue to be able to obtain capital financing as needed to sustain its operations. These factors raise substantial doubt about VGX's ability to continue as a going concern. Management believes that actions presently being taken will allow for VGX to continue as a going concern. These actions include the issuance of convertible debt securities, the sale of equity securities, merger with a publicly traded entity, and the continued research and development of its products to achieve a sustainable revenue stream.

Definitive Merger Agreement

On July 7, 2008, Inovio Biomedical Corporation (NYSE Amex: INO/INOVIO), a developer of electroporation-based DNA vaccine delivery technology, and VGX, a privately held DNA vaccine developer, executed a definitive merger agreement (the Merger Agreement), which provides for the issuance of INOVIO's securities in exchange for all of the outstanding securities of VGX, and the merger of an acquisition subsidiary of INOVIO with and into VGX (the Merger). Each company's Board of Directors has approved the Merger Agreement and the all-stock transaction it contemplates. The transaction is subject to completion of the registration of the INOVIO securities to be issued with the Securities and Exchange Commission (SEC), receipt of approval from both companies' stockholders of the transaction, and other customary closing conditions. The parties expect to complete the merger in the second quarter of 2009; however, the actual timing of the transaction will depend on a number of factors, some of which are beyond either company's control. Upon closing of the merger, INOVIO anticipates changing its name to VGX Pharmaceuticals, Inc.

The Merger Agreement anticipates that at the time of closing of the merger, a wholly owned acquisition subsidiary of INOVIO will merge into VGX, with VGX surviving as a wholly owned subsidiary of INOVIO. Concurrently, INOVIO will issue shares of its common stock in exchange for all of the outstanding shares of VGX common stock based on an exchange ratio derived from the comparative fully diluted share capitalization of the companies, excluding the shares of VGX common stock underlying \$5.5 million of VGX convertible debt (the Excluded Debt). INOVIO will also assume all outstanding VGX options and warrants and all VGX convertible debt in excess of the Excluded Debt, which will be adjusted based on the exchange ratio and become exercisable or convertible, as applicable, for INOVIO's common stock. The Excluded Debt will also be assumed at closing, but

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

1. Description of the Business and Basis of Presentation (Continued)

unlike the VGX convertible debt discussed above, the principal outstanding under the Excluded Debt at closing will be immediately converted into shares of INOVIO's common stock at \$1.05 per share.

INOVIO is required to use commercially reasonable efforts to register the securities to be issued in the merger under the Securities Act of 1933, as amended, on a registration statement on Form S-4 to be filed with the SEC. Registered shares of INOVIO common stock received in the transaction by certain significant holders of VGX common stock and certain affiliates and all employees of VGX and shares of INOVIO common stock held by all affiliates and employees of INOVIO at the time of consummation of the transaction will be subject to lock-up arrangements that will provide for 25% of the shares initially subject to the lock-up per individual to be released from such restrictions upon each six-month anniversary of the closing date of the transaction. The lock-up restrictions will also apply to the shares of INOVIO common stock issued upon assumption and conversion of VGX convertible debt for six months after the closing date of the transaction. INOVIO anticipates listing the securities to be issued in the merger with the NYSE Amex (NYSE).

INOVIO must submit information about the proposed transaction to the NYSE for review and determination of whether the transaction qualifies as a "reverse merger" under Company Guide Section 341, which, if applicable, could require INOVIO to re-qualify for initial listing of its securities on the NYSE. The parties do not believe that the transaction is a "reverse merger" as defined by the NYSE and believes that additional listing criteria should apply.

On December 5, 2008, VGX and INOVIO agreed to the Amended and Restated Merger Agreement under which some of the key terms outlined under the July 7, 2008 Merger Agreement were changed. Under the Amended and Restated Merger Agreement, VGX will merge into a wholly owned acquisition subsidiary of INOVIO, with the acquisition subsidiary remaining as the surviving entity; VGX will cease to exist. The acquisition subsidiary will change its name to VGX Pharmaceuticals, LLC. INOVIO will not change its name to VGX Pharmaceuticals, as had been previously outlined in the Merger Agreement dated July 7, 2008. The headquarters of the combined company will also remain in San Diego, instead of moving to Blue Bell, Pennsylvania. A key change in the management structure was also outlined in the Amended and Restated Merger Agreement, in which Avtar Dhillon, M.D., the current CEO of INOVIO, will remain as an executive of the combined company as president. The amount of outstanding VGX convertible debt (Excluded Debt) was decreased from the previously stated \$5.5 million to \$4.4 million, as was the number of shares to be placed into a 10-year voting trust, which decreased from 12.5 million shares to 8.5 million.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements of VGX include the accounts of its majority-owned subsidiary, Animal Health. All significant intercompany transactions and balances have been eliminated upon consolidation.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from such estimates.

Fair Value of Financial Instruments

Management believes that the carrying amounts of VGX's financial instruments, including cash and cash equivalents, restricted cash, accounts payable, accrued expenses, and current portion of long-term debt, approximate fair value due to the short-term nature of those instruments.

Cash and Cash Equivalents

Cash and cash equivalents are stated at market value. Cash equivalents include only securities having a maturity of three months or less at the time of purchase. VGX limits its credit risk associated with cash and cash equivalents by placing them with banks it believes are highly creditworthy. As of December 31, 2008 and 2007, cash and cash equivalents consisted of bank deposits only. VGX had restricted cash of \$1,000,000 as of December 31, 2007, which was restricted as collateral for one of VGX's creditors. The restriction was removed in June 2008 when the debt to this creditor was repaid in full.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined by the first-in, first-out method. Inventory includes the cost of raw materials used in production, direct labor costs, and an allocated portion of manufacturing overhead. Overhead costs include electricity, depreciation, and other manufacturing costs that cannot be linked to the production of goods. At December 31, 2008, all manufacturing inventory had been sold to a related party in conjunction with an asset purchase agreement, and the balance reflects Animal Health's LifeTide SW5 product inventory of \$189,370 purchased from a related party, and electroporation (EP) array inventory of \$36,095.

Property and Equipment

Property and equipment consists of research and lab equipment, office furniture, and computers and is recorded at cost. Maintenance and repairs are charged to expense as incurred, and costs of improvements are capitalized. Depreciation is recognized using the straight-line method based on an estimated useful life of three to seven years for the related assets. Depreciation expense was \$247,961 and \$916,757 for the years ended December 31, 2008 and 2007, respectively, and \$1,193,701 for the period from December 12, 2000 (inception) through December 31, 2008.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

Long-Lived Assets

In accordance with Statement of Financial Accounting Standards (SFAS) No. 144, *Accounting for the Impairment of Long-Lived Assets*, long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. As of December 31, 2008, VGX management believes that no revision to the remaining useful lives or write-down of long-lived assets is required.

Goodwill and Intangible Assets

VGX accounts for goodwill and intangible assets in accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*. Goodwill represents the excess of the purchase price over fair value of net assets acquired, and totaled \$907,076 at December 31, 2008. In accordance with SFAS No. 142, goodwill is not amortized; rather, it is tested for impairment at least annually.

When VGX acquired the assets of ADViSYS, Inc. in February 2007, a portion of the goodwill associated with the transaction was attributable to the purchase of the assembled workforce, both in the manufacturing and research areas of the operation. In June 2008, VGX sold its manufacturing assets that were previously acquired from ADViSYS, Inc. to a related party, along with the assembled workforce supporting those operations. The indicated value of the assembled workforce was allocated proportionately between manufacturing and research personnel, based on the number of employees in each functional area at the time of the acquisition. As a result of the subsequent divestiture in June 2008, VGX recognized an impairment charge of \$177,768 (the portion of the original value of assembled workforce allocated to manufacturing operations) in the consolidated statement of operations for the year ended December 31, 2008 as an offset to the gain on the sale of manufacturing assets, net of tax.

Intangible assets with finite lives, primarily customer contracts and proprietary technology, are amortized over their estimated useful lives, from three to nine years. Amortization of intangible assets was \$759,297 and \$480,332 for the years ended December 31, 2008 and 2007, respectively, and \$1,239,629 for the period from December 12, 2000 (inception) through December 31, 2008.

Included in intangible asset amortization expense for the year ended December 31, 2008 is an impairment charge of \$240,808 related to the manufacturing contracts that were sold to a related party as part of the asset purchase agreement.

When VGX acquired the assets of ADViSYS, Inc. in February 2007, a portion of the purchase price was allocated to intangible assets related to two DNA plasmid manufacturing customer contracts that were assigned to VGX in conjunction with the asset purchase agreement. In June 2008, VGX sold its manufacturing assets to a related party and, as part of that transaction, recognized the remaining unamortized intangible asset values for the two customer contracts of \$240,808 as an impairment

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

charge, since VGX no longer had any involvement with those customers from a manufacturing perspective. This impairment expense is included in the consolidated statement of operations for the year ended December 31, 2008.

Amortization of intangible assets for the five years subsequent to December 31, 2008 is expected to be \$477,125 for each of 2009, 2010, 2011, 2012, and 2013.

Deferred Issuance Costs

VGX capitalizes costs associated with obtaining financing and amortizes them using the effective interest method. Amortized deferred issuance costs are classified as interest expense in the consolidated statements of operations and totaled \$129,037, \$126,074, and \$386,500, for the years ended December 31, 2008, 2007, and for the period from December 12, 2000 (inception) to December 31, 2008, respectively. In September 2008, stock options for 71,000 shares of common stock were issued to settle the outstanding liability related to these deferred issuance costs. As the equity value of VGX's stock had declined since the incurrence of the liability, fair market value of the stock options for 71,000 shares also decreased. The value of the liability carried on the books of VGX reflected the fair market value of the stock options at the time of the incurrence of the liability; when the options were finally issued, and the associated deferred asset and liability were removed from the books of VGX, the result was a gain of \$226,534, which is reflected in other income for the year ended December 31, 2008 and the period from December 12, 2000 (inception) through December 31, 2008.

Equity Investment in Affiliated Entity

VGX accounts for its investment in VGX International, Inc. using the equity method of accounting. Should circumstances change, such as a change in the percentage of ownership, VGX will review its accounting treatment for its investment. The equity investment is presented on the consolidated balance sheets, net of unamortized acquisition costs and adjusted for its portion of the losses incurred by the affiliate. Acquisition costs are being amortized using the straight-line method over five years.

Revenue Recognition

VGX has been awarded grants from certain third-party organizations to help fund research for the drugs that VGX is attempting to bring to full commercial use. Once research and development expenditures qualifying under the grant are incurred, grant reports are periodically completed and submitted to the granting agency for review. If approved, the granting agency will then remit payment to VGX. Such amounts are recorded as revenue upon receipt.

With regard to revenue recognition related to product sales, VGX recognizes revenue in accordance with SEC Staff Accounting Bulletin (SAB) No. 104 and records revenue when it has satisfied all the requirements under SAB No. 104.

With regard to contract manufacturing services, VGX recognizes revenue from the DNA plasmids it produces for its customers, to their specifications, only upon shipment from its premises, at which

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

time title and all benefits and risks of ownership pass to the customer. The value of the inventory includes the cost of raw materials, direct labor and facility overhead. Overhead costs include indirect manufacturing costs such as utilities and depreciation that cannot be directly linked to the production of specific products. Revenue related to contract manufacturing services totaled \$566,211 and \$723,411 in 2008 and 2007, respectively, and these activities and processes were sold to a related party in June 2008.

Deferred revenue represents billings for products and services that will be recognized when the products are shipped or the services provided. VGX manufactures DNA plasmids for its customers, to their specifications, in compliance with the terms and conditions outlined in a contract or master services agreement. The agreements typically consist of a series of payments to be made to VGX at specified points during the production process, which typically spans several months. As a result, payments are made to VGX for these contracted services in advance of, and during, the production process, and are recorded as deferred revenue on the consolidated balance sheets until the product is shipped to the customer, at which time revenue is recognized. During 2007, several progress payments were made to VGX from its customers; however, at the request of the customer, VGX stored the inventory in its facility, thus resulting in a significant amount of deferred revenue at December 31, 2007. Since these services were sold as part of the asset purchase agreement executed in 2008, the deferred revenue on the consolidated balance sheets at the time of the sale was considered in the calculation of the gain on the sale of these assets.

Foreign Currency Translation

VGX complies with SFAS No. 52, *Foreign Currency Translation*, which established standards for reporting on investments in foreign companies The foreign currency translation adjustment represents the foreign currency translation related to VGX's equity investment, to loans received from investors in foreign currency, and to Animal Health's sales of its LifeTide SW5 product in Australia, and is included in accumulated other comprehensive income on the consolidated balance sheets. For the years ended December 31, 2008 and 2007, \$7,977 and \$93,975, respectively, of foreign currency losses were included in the consolidated statements of operations.

Cost of Sales

Cost of product sales includes costs to manufacture and purchase inventory sold to customers, along with shipping, handling and distribution expenses incurred in delivering these goods to customers. Also included in product sales are unabsorbed labor and overhead costs incurred at the DNA plasmid manufacturing facility not directly related to the production of inventory held for sale to customers.

Research and Development Expenses

Research and development costs are charged to expense as incurred. Research and development expenses include, among other costs, salaries and other personnel-related costs, consultant fees, preclinical costs, costs to conduct clinical trials, costs to manufacture drug candidates and clinical supplies, laboratory supplies costs, patent application costs, and facility-related costs. Costs incurred

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

under agreements with third parties are charged to expense as incurred in accordance with the specific contractual performance terms of such agreements. Costs of third parties include costs associated with preclinical and clinical support activities.

Income Taxes

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Deferred tax assets and liabilities are measured at the balance sheet date using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period such tax rate changes are enacted.

Acquisitions

Acquisitions are accounted for under the purchase method of accounting in accordance with SFAS No. 141R, *Business Combinations*, whereby the purchase price is allocated to the underlying net assets based on management's estimates of the fair value of intangible and tangible assets acquired and liabilities assumed. The excess of purchase price over estimated fair value is recorded as goodwill.

Stock-Based Compensation VGX

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123(R), *Share-Based Payment*, a revision of SFAS No. 123, *Accounting for Stock-Based Compensation*, that addresses the accounting for share-based payment transactions in which an enterprise receives employee services in exchange for (a) equity instruments of the enterprise or (b) liabilities that are based on the fair value of the enterprise's equity instruments or that may be settled by the issuance of such equity investments. SFAS No. 123(R) requires that an entity measure the cost of equity-based service awards based on the grant-date fair value of the award and recognize the cost of such awards over the period during which the employee is required to provide service in exchange for the award (the vesting period). SFAS No. 123(R) requires that an entity measure the cost of liability-based service awards based on current fair value that is remeasured subsequently at each reporting date through the settlement date. VGX had previously adopted the fair-value method of SFAS No. 123, using the Black-Scholes Model to account for equity-based awards issued to employees and directors and has adopted this new standard effective January 1, 2006 under the modified prospective transition method requires VGX to recognize share-based compensation expense in the consolidated statements of operations for all share-based payments granted, modified, or settled after the date of adoption as well as for any awards that were granted prior to the adoption date for which the requested service has not been provided as of the adoption date.



VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

The per-share weighted-average fair value of the options granted during 2008 and 2007 was estimated at \$0.33 and \$2.66, respectively, on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2008	2007
Expected dividend yield	0%	0%
Expected volatility	50%	50%
Risk-free interest rate	3.0%	4.7%
Expected life	6 years	6 years

The weighted-average valuation assumptions were determined as follows:

Expected stock price volatility: The expected volatility used is based on historical volatilities of similar entities within VGX's industry which were commensurate with VGX's expected term assumption as described in SAB No. 107 relating to SFAS No. 123(R).

Expected term of options: The expected term of options represents the period of time options are expected to be outstanding. The expected term of the options granted is derived from the "simplified" method as described in SAB No. 107 relating to SFAS No. 123(R).

Risk-free interest rate: VGX bases the risk-free interest rate on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period that is commensurate with the assumed expected option term.

Expected annual dividends: The estimate for annual dividends is \$0.00, because VGX has not historically paid, and does not expect to pay for the foreseeable future, a dividend.

Estimated forfeiture rate: VGX's estimated annual forfeiture rate on 2008 stock option grants ranges between 0.00% and 4.31%, based on the historical forfeiture experience of various employee groups.

The compensation expense under SFAS No. 123(R) for the years ended December 31, 2008 and 2007 was \$8,623,762 and \$5,472,537, respectively, net of estimated forfeiture.

In September 2008, the VGX board of directors approved a re-pricing of certain high-priced options issued to employees and consultants to lower the grant price in order to improve employee morale. The options were re-priced to new grant prices, which ranged from \$1.00 to \$2.25. The new grant prices were determined and were the responsibility of the VGX Board of Directors and management, which considered, in part, preliminary work performed by an independent valuation firm. The grant price prior to the re-pricing was \$5.00. The re-pricing of the options was done in accordance with SFAS No. 123(R). Using the Black-Scholes option pricing model, the fair values of the modified options at the modification date were calculated. This was then compared against the fair values of the original options at the modification date.

The differences between the two were recognized as compensation expense over the remaining life of the options. If the vesting schedule of the options was accelerated, the additional compensation expenses were recognized immediately as opposed to over the length of the vesting schedule.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

There was an additional re-pricing of options that were not compliant with Section 409A. In this case, the grant prices of the options were adjusted upwards from \$0.025 to \$0.50 to \$1.00 to \$1.25. As the fair values of the modified options at the modification date were lower than the fair values of the original options at the modification date, no additional compensation expenses were recognized.

In 2008, VGX recorded charges related to option re-pricing and acceleration. The total estimated increase in compensation expenses due to the re-pricing and acceleration is \$2,968,747, \$324,123, and \$52,734 in 2008, 2009, and 2010, respectively. In July of 2008, there was a share rescission by six individuals with respect to an aggregate of 3,433,344 shares. In exchange for the rescission of the shares, these individuals were reissued their original warrants and options with a grant price that was greater than or equal to the fair market value of the common stock of VGX as of the reissue date.

VGX accounts for stock-based compensation to non-employees using the fair-value method in accordance with SFAS No. 123(R) and Emerging Issues Task Force (EITF) Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services.* For the years ended December 31, 2008 and 2007, VGX granted stock options to consultants of 232,000 and 75,200, respectively, and recorded stock-based compensation expense of \$266,021 and \$168,347, respectively. These options generally vest over a period of three years, though some vest over a period less than three years or immediately upon grant. VGX valued the stock option grants to non-employees using the same method and assumptions as stock option grants to employees.

In addition to the awards of stock options, VGX awarded 480,000 and 140,000 shares of common stock during the years ended December 31, 2008 and 2007, respectively, to employees and non-employees. In connection with awards of stock, VGX recorded compensation expense of \$1,198,800 and \$700,000, respectively.

Stock-Based Compensation for Subsidiary Animal Health

Animal Health, a subsidiary of VGX, has adopted a 2007 equity incentive plan for the issuance of options to employees and consultants. Animal Health uses the same accounting policies as VGX regarding stock-based compensation.

The per-share weighted-average fair value of the options granted by Animal Health during 2008 and 2007 was \$0.38 and \$0.04, respectively, on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

		2008	2007
Expected dividend yield		0%	0%
Expected volatility		50%	50%
Risk-free interest rate		3.0%	4.7%
Expected life		6 years	6 years
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VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

The weighted-average valuation assumptions were determined as follows:

Expected stock price volatility: The expected volatility used is based on historical volatilities of similar entities within Animal Health's industry which were commensurate with Animal Health's expected term assumption as described in SAB No. 107 relating to SFAS No. 123(R).

Expected term of options: The expected term of options represents the period of time options are expected to be outstanding. The expected term of the options granted is derived from the "simplified" method as described in SAB No. 107 relating to SFAS No. 123(R).

Risk-free interest rate: Animal Health bases the risk-free interest rate on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period that is commensurate with the assumed expected option term.

Expected annual dividends: The estimate for annual dividends is \$0.00, because Animal Health has not historically paid, and does not expect to pay for the foreseeable future, a dividend.

Estimated forfeiture rate: Animal Health's estimated annual forfeiture rate on 2008 stock option grants ranges between 0.00% and 0.60%, based on the historical forfeiture experience of various employee groups. Animal Health did not estimate the forfeiture rate for 2007 because it had no historical data in which to make an assumption. The total size of the expense was also deemed to be immaterial therefore, making forfeiture assumption less significant.

The compensation expense under SFAS No. 123(R) for the Animal Health 2007 equity incentive plan for the years ended December 31, 2008 and 2007 was insignificant.

Reclassifications

Certain prior-year balances have been reclassified to conform with the current presentation.

Recent Accounting Pronouncements

In May 2008, the FASB issued Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement) (FSP APB 14-1). This Staff Position clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants. Additionally, this Staff Position specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early adoption is not permitted. VGX does not expect the adoption of this accounting guidance to have a material impact on the consolidated results of operations or financial position.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles*. SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

with U.S. GAAP. VGX is currently evaluating the impact that SFAS No. 162 will have on its consolidated financial statements.

Effective January 1, 2008, VGX has adopted the provisions of SFAS No. 157, *Fair Value Measurements*, to measure assets and liabilities. SFAS No. 157 establishes a common definition for fair value to be applied to U.S. GAAP requiring use of fair value, establishes a framework for measuring fair value, and expands disclosure about such fair value measurements. SFAS No. 157 is effective for financial assets and financial liabilities for fiscal years beginning after November 15, 2007. Issued in February 2008, FASB Staff Position (FSP) 157-1, *Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13*, removed leasing transactions accounted for under SFAS No. 13 and related guidance from the scope of SFAS No. 157. FSP 157-2, *Partial Deferral of the Effective Date of Statement 157*, deferred the effective date of SFAS No. 157 for all nonfinancial assets and financial liabilities to fiscal years beginning after November 15, 2008. The partial implementation of SFAS No. 157 for financial assets and financial liabilities, effective January 1, 2008, did not have a material impact on VGX's consolidated financial statements. VGX is currently assessing the impact of SFAS No. 157 for non-financial assets and non-financial liabilities on its consolidated financial statements. See Note 4, Fair Value Measurements.

VGX management anticipates that, based on the composition of its existing assets and liabilities, the valuations used to estimate the fair value will rely on observable and unobservable inputs. Observable inputs are those that reflect a public market, whereas unobservable inputs are those that reflect management's assumptions about the assumptions market participants would use in pricing the underlying asset or liability. VGX management does not believe that SFAS No. 157 will have a material impact on the amounts reported in the financial statements; however, additional disclosures about the inputs used to develop the measurements of fair value and the effects of certain measurements reported in the consolidated statements of operations for a fiscal period will be required.

Effective January 1, 2008, VGX adopted SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS No. 159 provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of a company's choice to use fair value on its earnings. Adoption of SFAS No. 159 did not have an impact on VGX's consolidated results of operations and financial position.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations* (SFAS No. 141(R)), which is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. SFAS No. 141(R) establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any non-controlling interest in the acquiree, and the goodwill acquired in the business combination. SFAS No. 141(R) also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141(R) will be applied

VGX Pharmaceuticals, Inc.

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Notes to Consolidated Financial Statements (Continued)

December 31, 2008

2. Summary of Significant Accounting Policies (Continued)

prospectively. VGX does not expect the adoption of SFAS No. 141(R) to have a material impact on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, *Non-controlling Interests in Consolidated Financial Statements (an amendment of Accounting Research Bulletin No. 51)*. SFAS No. 160 requires that non-controlling (minority) interests be reported as a component of equity, that net income attributable to the parent and to the non-controlling interest be separately identified in the income statement, that changes in a parent's ownership interest while the parent retains its controlling interest be accounted for as equity transactions, and that any retained non-controlling equity investment upon the deconsolidation of a subsidiary be initially measured at fair value. This statement is effective for fiscal years beginning after December 31, 2008, and shall be applied prospectively. However, the presentation and disclosure requirements of SFAS No. 160 are required to be applied retrospectively for all periods presented. The retrospective presentation and disclosure requirements of this statement will be applied to any prior periods presented in financial statements for the fiscal year ending December 31, 2009, and later periods during which VGX had a consolidated subsidiary with a non-controlling interest.

In November 2007, the FASB ratified EITF Issue No. 07-1, *Accounting for Collaborative Agreements Related to the Development and Commercialization of Intellectual Property*. EITF Issue No. 07-1 defines collaborative agreements as contractual arrangements in which the parties are active participants to the arrangement and are exposed to the significant risks and rewards that are dependent on the ultimate commercial success of the endeavor. Additionally, it requires that revenue generated and costs incurred on sales to third parties as they relate to a collaborative agreement be recognized as gross or net based on EITF Issue No. 99-19, *Reporting Revenue Gross as a Principal versus Net as an Agent*. It also requires payments between participants to be accounted for in accordance with already existing generally accepted accounting principles, unless none exist, in which case a reasonable, rational, consistent method should be used. EITF Issue No. 07-1 is effective for fiscal years beginning after December 15, 2008 for all collaborative arrangements existing as of that date, with retrospective application to all periods. VGX management is currently evaluating the impact of this standard and does not anticipate the adoption of EITF Issue No. 07-1 to have a material impact on the consolidated financial statements.

In July 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* (FIN 48). FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 will be applied to all tax positions accounted for under SFAS No. 109 upon initial adoption.

VGX adopted FIN 48 effective January 1, 2008 with no impact on its consolidated financial statements. VGX recognizes interest and penalties, if any, related to uncertain tax positions in income tax expense. Upon adoption of FIN 48, VGX had no interest or penalties accrued related to uncertain tax positions, due to the net operating loss carryforwards that VGX has available.

VGX Pharmaceuticals, Inc.

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Notes to Consolidated Financial Statements (Continued)

December 31, 2008

3. Related-Party Transactions

On June 10, 2008, VGX entered into an asset purchase agreement with VGXI, Inc, a Delaware incorporated wholly owned subsidiary of VGX International, a publicly traded company in Korea, of which VGX owns 30.37% of outstanding shares. Under the agreement, VGX divested its assets related to the DNA plasmid manufacturing business, a business which it had acquired in February of 2007 under an asset purchase agreement with ADViSYS, Inc. The aggregate sale price was \$9,110,000 in cash, which is to be paid in installments, the first of which, amounting to \$1,750,000, was received in June 2008. The second installment of \$1,360,000 was received in July 2008, and the third installment of \$3,000,000 was received in December 2008 by VGX; the remaining \$3,000,000 is to be received in March 2009. There are no milestone or contingent payments as part of this agreement. Four current and former employees of VGX received approximately \$58,000 from the related party as compensation for their contribution to the post-acquisition integration efforts in 2008.

VGX recorded a one-time gain on the sale of manufacturing assets of \$6,653,153, net of tax of \$69,500. The recorded gain was net of VGX's 30.37% stake in VGX International of \$2,901,856. In conjunction with the sale of the manufacturing assets, VGX wrote off the value of intangible assets associated with the plasmid manufacturing business namely the value of customer contracts acquired through the asset purchase agreement with ADViSYS, Inc. The unamortized amount of these contracts was \$240,808 just prior to the sale of the business and this impairment is reflected in the consolidated statement of operations for the year ended December 31, 2008. VGX also adjusted its goodwill attributable to the assembled workforce acquired from ADViSYS, Inc. in February 2007 for the manufacturing operations, determined to be \$177,768, and offset this charge against the gain on the sale of these assets.

For the year ended December 31, 2008, VGX recognized revenue from related parties of \$376,072 which consisted of licensing and cost sharing fees of \$200,000, rent from a sublease agreement on The Woodlands manufacturing and office facility of \$119,054, and consulting fees for DNA plasmid manufacturing support of \$57,018. No related-party revenue was recognized for any prior periods.

For the years ended December 31, 2008 and 2007, and the period from December 12, 2000 (inception) through December 31, 2008, VGX reflected expenses of \$190,711, \$390,802, and \$2,132,399, respectively, in the consolidated statements of operations for stock options and awards granted to related parties.

Research and development expenses for the year ended December 31, 2008 includes \$1,330,104 of materials and supplies purchased from a related party that VGX intends to use in upcoming clinical trials and pre-clinical development projects. No research materials were purchased from related parties in any prior periods.

In addition to the expenses noted above, for the year ended December 31, 2008, VGX incurred operating expenses in conjunction with related party activities of \$214,764, of which \$119,054 represents lease payments on the facility in The Woodlands, Texas, reimbursed to VGX by the related party; \$67,228 of compensation expenses for technical support for process development and manufacturing activities, of which \$57,018 is reimbursed to VGX; and \$28,482 for other services provided to VGX by related parties.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

4. Fair Value Measurements

On January 1, 2008, VGX adopted SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value and establishes a framework for measuring fair value in accordance with generally accepted accounting principles. In February 2008, the FASB issued Staff Position No. 157-2, *Effective Date of FASB Statement No. 157*, which deferred the effective date of SFAS No. 157 for one year for non-financial assets and liabilities recorded at fair value on a non-recurring basis. As defined by SFAS No. 157, the fair value of an asset or liability would be based on an "exit price" basis rather than an "entry price" basis. Additionally, the fair value should be market-based and not an entity-based measurement. SFAS No. 157 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. SFAS No. 157 describes three levels of input that may be used to measure fair value.

Level 1 Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that the company has the ability to access at the measurement date.

Level 2 Financial assets and liabilities whose values are based on quoted prices in markets where trading occurs infrequently or whose values are based on quoted prices of instruments with similar attributes in active markets. Level 2 inputs include the following:

Quoted prices for similar assets or liabilities, in active markets;

Quoted prices for identical or similar assets or liabilities in non-active markets;

Inputs other than quoted prices that are observable for substantially the full term of the asset or liability; and

Inputs that are derived principally from or corroborated by observable market data for substantially the full term of the asset or liability.

Level 3 Financial assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs reflect management's own assumptions about the assumptions a market participant would use in pricing the asset or liability.

	Fair Value Measurements at December 31, 2008				
	Fair Value at December 31, 2008	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Assets measured at fair value on a recurring basis					
Cash and cash equivalents(1)	\$3,981,376	\$3,981,376	\$	\$	
Total	\$3,981,376	\$3,981,376	\$	\$	

Cash and cash equivalents consist primarily of money market funds with original maturity dates of three months or less.

VGX Pharmaceuticals, Inc.

(A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

4. Fair Value Measurements (Continued)

VGX has no liabilities that are financial instruments that would be required to be disclosed as of December 31, 2008 under SFAS No. 157.

5. Inventories

Inventories consist of the following:

	December 31			r 31
		2008		2007
Raw materials	\$		\$	37,827
Work in process				1,682,276
Finished goods				382,902
Total manufacturing inventory				2,103,005
Product inventory LifeTide SW5 purchased from related				2,100,000
party		189,370		
Other EP arrays		36,095		26,925
-				
Total inventories	\$	225,465	\$	2,129,930

6. Accrued Expenses

Accrued expenses consist of the following:

	December 31			
		2008		2007
Payroll and related expenses	\$	81,615	\$	368,144
Professional fees		217,965		246,052
Accrued research costs		362,254		745,801
Accrued interest		951,981		1,055,084
Accrued Texas franchise tax		69,500		
Other		4,446		28,950
Total accrued expenses	\$ 1	1,687,761	\$	2,444,031

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

7. Debt

Debt consists of the following:

	December 31			
		2008		2007
Unsecured convertible notes payable	\$	6,540,000	\$	12,250,000
Secured convertible note payable				1,000,000
Total debt		6,540,000		13,250,000
Current portion of long-term debt		2,140,000		10,310,000
Long-term debt	\$	4,400,000	\$	2,940,000

In June 2005, VGX issued a \$1,000,000 two-year maturity convertible note with an annual interest rate of 5%. The note was convertible into common shares and was collateralized by a check for the same amount, which was recognized as restricted cash on VGX's consolidated balance sheet. In June 2008 this debt was repaid and the related restriction on cash was eliminated.

From August 2005 to December 2005, VGX reached an agreement with various investors to issue \$4,000,000 in convertible notes ranging in maturity from 18 months to 24 months with annual interest rates ranging from 5% to 40%. Additionally, \$6,650,000 in convertible notes were issued during the first half of 2006 with an annual interest rate of 5%. Of the total debt, \$3,350,000 was secured by equity securities of a related party; these were repaid in 2008 with the concomitant collaterals being released. In November 2006, VGX entered into an agreement with an investor to issue a short-term note in the amount of 2,010,000,000 Korean wons or \$2,116,863 secured by equity securities of a related party. The note was repaid in 2007. During 2007, VGX reached an agreement with various investors to issue \$1,600,000 in convertible notes ranging in maturity from 19 to 20 months. In June 2008, VGX secured an additional \$100,000 note with a maturity term of 24 months; this note is to be automatically converted to equity upon a public event for VGX. Of the \$6,540,000 in total notes outstanding at December 31, 2008, agreements had been reached with note holders of \$4,400,000 in principal in which the conversion price would be automatically set to \$1.05 and converted to equity upon a public event.

In November 2008, an agreement was reached with three convertible note holders representing a total of \$2,140,000 in principal in which the convertible feature of the aforementioned notes was removed. In return, VGX agreed to repay the debt at the earlier of the maturity date or the closing date of the proposed merger with INOVIO (see Note 1). The maturity dates of the notes are April 2009.

Also in November 2008, an agreement was reached with the holders of \$4,400,000 in convertible notes, to either extend the notes until 2010 or be extendable at VGX's discretion to 2010. As part of this agreement, the terms related to the automatic conversion of these notes at a public event at a conversion price of \$1.05 was removed. The notes will still be automatically converted to equity at \$1.05 if the shares of the combined company trade at or above \$2.10 for five consecutive trading days.

Based on the renegotiated conversion rate of \$1.05, the estimated maximum number of shares of common stock to be issued upon conversion of this \$4.4 million is 4,788,095 shares. The calculation assumed conversion of principal and accrued interest at \$1.05 on the maturity date for \$2.4 million of

VGX Pharmaceuticals, Inc. (A Development-Stage Company)

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

7. Debt (Continued)

the notes and only the principal for the remaining \$2 0 million note; this note holder had requested that only the principal be converted.

Minimum principal repayments of debt as of December 31, 2008 are as follows:

2009	\$2,140,000
2010	4,400,000
	\$6.540.000

8. Minority Interest

VGX owns 88% of the outstanding stock of Animal Health, a biotechnology company engaged in the development and commercialization of products designed to add to the economic value of livestock and improve the health of companion animals. Animal Health is consolidated in the results of VGX's consolidated financial statements. The minority interest liability represents, in aggregate, that portion of the combined total equity that is owned by the minority investor. The minority investor's share of the combined net loss is separately disclosed in the consolidated statements of operations.

9. Stockholders' Equity (Deficit)

As of December 31, 2008, VGX is authorized to issue up to 100,000,000 shares of common stock and 1,000,000 shares of preferred stock. As of December 31, 2008, VGX had not issued any preferred stock.

Common Stock

2001 Equity Compensation Plan

In August 2001 (and as amended in June 2008), VGX adopted the 2001 Equity Compensation Plan (the Plan) that authorizes VGX to grant up to 11,060,000 shares of common stock to eligible employees, directors, and consultants to the Company in the form of restricted stock and stock options. The amount and terms of grants are determined by the Board of Directors. The term of the options may be up to 10 years, and options are exercisable in cash or as otherwise determined by the board of directors. Generally, options vest 33% per year on each anniversary of the date of grant.

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

Information relative to the Plan from inception is as follows:

	Options	Weighted- Average Exercise Price	Aggregate Exercise Price
Balance December 31, 2000		\$ 0.00005	\$
Granted	150,000	0.00005	7.50
Exercised	(150,000)	0.00005	(7.50)
Balance December 31, 2001			
Granted	350,000	0.095	33,250
Balance December 31, 2002	350,000	0.095	33,250
Granted	1,252,224	0.04	50,056
Exercised	(50,000)	0.19	(7,500)
Cancelled/Forfeited	(75,000)	0.05	(3,750)
Balance December 31, 2003	1,477,224	0.05	72,056
Granted	1,686,000	0.14	243,300
Balance December 31, 2004 Granted Exercised	3,163,224 1,699,450 (120,000)	0.10 0.27 0.17	315,356 452,613 (20,400)
Balance December 31, 2005	4,742,674	0.16	747,569
Granted	2,702,633	0.10	2,218,290
Exercised	(968,000)	0.19	(182,500)
Cancelled/Forfeited	(150,000)	0.30	(45,000)
Balance December 31, 2006	6,327,307	0.43	2,738,359
Granted	2,616,700	5.00	13,083,500
Exercised			
Cancelled/Forfeited	(229,000)	0.87	(200,000)
Balance December 31, 2007	8,715,007	1.80	15,621,859
Granted	1,123,000	1.29	1,445,000
Exercised	, _)		, ,
Cancelled/Forfeited	(23,833)	1.56	(37,165)
Balance December 31, 2008	9,814,174	\$ 0.99	\$17,029,694

As part of the rescission of option exercise, VGX returned to the optionee \$4,500, which represented the premium that had been paid to VGX when the options were exercised in 2007.

As of December 31, 2008, options to purchase 9,814,174 shares of common stock were outstanding, of which 6,406,341 shares were exercisable. The weighted-average remaining contractual life of all options was 7.1 years.

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

The following table summarizes information about stock options outstanding at December 31, 2008:

Range of Exercise Prices	Outstanding	Options Outstanding Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price
			\$ (0.00)
\$0.05 \$0.10	1,183,224	4.9	\$ 0.05
\$0.11 \$0.25	1,109,000	5.7	\$ 0.20
\$0.26 \$0.71	453,133	7.0	\$ 0.32
\$0.71 \$1.50	6,953,817	7.7	\$ 1.29
\$1.50 \$2.50	115,000	8.1	\$ 2.25

9,814,174

Range of Exercise Prices	Exercisable	Options Exercisable Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price
\$0.05 \$0.10	1,183,224	4.9	\$ 0.05
\$0.11 \$0.25	1,109,000	5.7	\$ 0.20
\$0.26 \$0.71	453,133	7.0	\$ 0.32
\$0.71 \$1.50	3,609,317	7.1	\$ 1.28
\$1.50 \$2.50	51,667	8.1	\$ 2.25

6,406,341

Range of Exercise Prices	Unexercisable	Options Unexercisable Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price
\$0.05 \$0.10			
\$0.11 \$0.25			
\$0.26 \$0.71			
\$0.71 \$1.50	3,344,500	8.4	\$ 1.31
\$1.50 \$2.50	63,333	8.2	\$ 2.25

3,407,833

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

The total fair value of shares vested during 2007 and 2008 totaled \$4,772,537 and \$7,759,380, respectively. As of December 31, 2008, there was \$3,304,650 of total unrecognized compensation expense, net of estimated forfeitures, related to unvested options granted under the stock plans. That expense is expected to be recognized as follows:

Year ended December 31,2009	\$2,454,689
Year ended December 31,2010	573,292
Year ended December 31,2011	6,669

\$3,304,650

As of December 31, 2008, 450,826 shares were available for future grants under the Plan. Certain employee option vestings may be accelerated in the event of a change in control of VGX.

Warrants to Acquire Common Stock

As of December 31, 2008, in connection with prior-year debt issuances, VGX had outstanding 10-year warrants to purchase 208,933 shares of common stock at a weighted-average exercise price of \$0.29 per share, exercisable through various dates through December 2013. The total expense recognized under the Black-Scholes option pricing model for these warrants was \$46,108. In 2008, there was an exercise of a warrant for 25,000 shares for which a premium of \$6,250 was paid to VGX.

As of December 31, 2008, VGX had outstanding 10-year warrants to purchase 4,808,800 shares of common stock at an average exercise price of \$1.11 per share, exercisable through April 2016; these were issued to current and former employees of VGX. The total expense recognized under the Black-Scholes option pricing model for these warrants was \$13,278,687.

Shares Reserved for Future Issuance

At December 31, 2008, VGX has reserved the following shares of common stock for issuance:

Common stock options outstanding	9,814,174
Common stock options available for future grant	450,826
Common stock warrants	5,017,733
	15,282,733

Common Stock Animal Health

As of December 31, 2008, Animal Health is authorized to issue up to 20,000,000 shares of common stock.

2007 Equity Compensation Plan

In May 2007, Animal Health adopted the 2007 Equity Compensation Plan (the AH Plan) that authorizes Animal Health to grant up to 1,500,000 shares of common stock to eligible employees,

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

directors, and consultants to Animal Health in the form of restricted stock and stock options. The AH Plan was subsequently amended in February 2008, with both Board and stockholder approval to increase the number of shares eligible to be granted under the plan to 2,000,000 shares of Animal Health common shares. The amount and terms of grants are determined by the Board of Directors. The term of the options may be up to 10 years, and options are exercisable in cash or as otherwise determined by the Board of Directors. Generally, options vest 33% per year on each anniversary of the date of grant.

Information relative to the AH Plan from inception is as follows:

	Options	Weighted- Average Exercise Price	Aggregate Exercise Price
Balance December 31, 2006		\$	\$
Granted	1,255,667	0.07	87,614
Exercised			
Balance December 31, 2007	1,255,667	0.07	87,614
Granted	409,500	0.75	307,125
Exercised			
Cancelled/Forfeited	(10,000)	0.75	(7,500)
Balance December 31, 2008	1,655,167	\$ 0.23	\$ 387,239

As of December 31, 2008, options to purchase 1,655,167 shares of common stock were outstanding, and the weighted-average remaining contractual life of all options was 8.77 years.

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

The following table summarizes information about stock options outstanding at December 31, 2008:

			Options Outstanding Weighted-	
			Average	Weighted-
-			Remaining	Average
Range			Contractual	Exercise
Exercise I	Prices	Outstanding	Life (Years)	Price
\$0.0001	\$0.50	1,139,000	8.42	\$ 0.0001
\$0.51	\$1.00	516,167	9.53	\$ 0.75

1,655,167

		Options Exercisable Weighted-	
		Average	Weighted-
		Remaining	Average
Range of		Contractual	Exercise
Exercise Prices	Exercisable	Life (Years)	Price
\$0.0001 \$0.50	379,667	8.42	\$ 0.0001
\$0.51 \$1.00	106,667	8.87	\$ 0.75

486,334

		Options Unexercisable Weighted-	
		Average	Weighted-
		Remaining	Average
Range of		Contractual	Exercise
Exercise Prices	Unexercisable	Life (Years)	Price
\$0.0001 \$0.50	759,333	8.42	\$ 0.0001
\$0.51 \$1.00	409,500	9.71	\$ 0.75

1,168,833

As of December 2008, there were no exercises of any stock options.

The total fair value of shares vested during 2007 and 2008 equals \$42,080 and \$27,243, respectively. As of December 31, 2008, there was \$130,446 of total unrecognized compensation expense, net of estimated forfeitures, related to unvested options granted under the stock plans. That expense is expected to be recognized as follows:

Year ended December 31, 2009	\$ 78,271
Year ended December 31, 2010	52,175
	\$130,446

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

9. Stockholders' Equity (Deficit) (Continued)

As of December 31, 2008, 344,833 shares were available for future grants under the AH Plan. Certain employee option vestings may be accelerated in the event of a change in control of Animal Health.

Shares Reserved for Future Issuance

At December 31, 2008, Animal Health has reserved the following shares of common stock for issuance:

Common stock options outstanding Common stock options available for future grant	1,655,167 344,833
Common stock options available for future grant	544,855
	2,000,000

10. Commitments

Government Contract Awards

In August 2007, VGX was awarded a contract from the Defense Threat Reduction Agency (DTRA) to develop its constant current electroporation technology for intradermal (ID) delivery of DNA vaccines and therapeutics. The contract is for \$1,990,411 over 12 months. Under the contract, VGX will demonstrate in vivo efficacy of novel vaccines derived from DNA plasmidbased pox virus antigens delivered using a skin micro-electroporation system. Revenue is recognized when the cost vouchers for incurred expenses are approved and reimbursement is received, which began in February 2008. For the year ended December 31, 2008, revenue from government contracts was \$1,990,411. The total cost incurred by VGX on this project was \$2,093,500, of which \$731,777 was recognized in 2007 and the balance of \$1,361,723 in 2008.

In September 2008, VGX was awarded a contract with the National Institute of Allergy and Infectious Diseases (NIAID) to study novel micro-electrodes for delivery of optimized DNA vaccines for HIV. The contract is effective September 30, 2008 and is for five years with two one-year options (period of performance September 30, 2008 September 29, 2015 including the two options). The value for the five years is \$21,269,154 with two option years, six and seven, valued at \$1,193,230 and \$1,132,465, respectively, for a total value of \$23,594,849. Costs incurred in the fourth quarter of 2008 totaling \$640,665 have been reflected in the consolidated statement of income as research and development expenses. VGX submits cost vouchers for these expenses on a monthly basis to the NIAID for reimbursement, and records revenue upon approval of these cost vouchers and receipt of payment. None of the cost vouchers submitted by VGX in 2008 were approved prior to December 31, 2008. As a result, no revenue has been reflected in the consolidated statement of operations for the year ended December 31, 2008.

Leases

In May 2005, VGX signed a facility lease with a lessor for a lease through May 2010. The lease provides for one additional five-year renewal option. In addition, VGX has entered into equipment

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

leases consisting of a three-year operating lease for a copier expiring in June 2009, and a five-year telecommunications lease expiring in February 2010. The five-year telecommunications lease automatically renews for another five years under the same terms unless notified within 30 days of expiration. In 2006, VGX entered into a three-year lease with a broadband network provider to enhance connectivity. All leases contain renewal options. In 2007, VGX signed a capital equipment lease for a copier for a three-year term expiring August 2010. There was a bargain purchase option which made the copier a capital lease. The value of the copier is properly booked as a fixed asset, and was subsequently transferred to a related party as part of the asset purchase agreement executed in June 2008. In November 2007, VGX signed a facility lease in Houston through October 2017. The agreement is a renewal of a lease that was assigned to VGX when it acquired the assets of ADViSYS, Inc. in February 2007. In June 2008, a sublease agreement was executed between VGX and the related party that purchased the manufacturing assets at the Houston facility, whereby 87.5% of the lease expenses are reimbursed to VGX monthly. Future minimum lease payments under the facility lease as well as the other equipment leases are as follows:

	Equipment	Facility
2009	\$ 16,766	\$ 406,101
2010	4,688	304,398
2011		254,361
2012		257,657
Thereafter		1,291,580
Total minimum lease payments	\$ 21,454	\$2,514,097

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Rent expense under operating leases was \$415,047 and \$322,477 in 2008 and 2007, respectively. Rent expense from inception to December 31, 2008 was \$995,498.

License Agreements

In November 2001, VGX entered into a license agreement with a university to license certain patent rights. The license agreement required issuance of VGX stock in lieu of an up-front cash payment, which was recorded as research and development expense in 2001. The license agreement requires various milestone payments. They include a \$500,000 payment for the enrollment of the first patient in Phase III trials, a \$500,000 payment for the filing of the new drug application (NDA) for the first licensed product, a \$500,000 payment on the anniversary of the filing, a \$1,500,000 payment upon the receipt of an NDA approval letter for the first licensed product, and a \$1,500,000 payment on the first anniversary of the receipt of an approval for the first licensed product. These payments are in effect through the later of the expiration of the licensed patents or 10 years after the first commercial sale of covered product. The agreement is valid through the later of 25 years from the effective date, or the expiration of the last to expire or abandonment of the patent rights.

In May 2003, VGX entered into a research and development agreement with a pharmaceutical company in China in which VGX granted to the aforementioned company exclusive rights in The People's Republic of China, Taiwan, Hong Kong, and Macao to research, develop, and market

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

recombinant Viral Protein r (Vpr) protein and Adeno-Vpr-based products as treatments for cancer and sepsis. The license agreement required a \$75,000 up-front payment, which was recorded as revenue in the accompanying consolidated statement of operations for the year ended December 31, 2003. The license agreement also requires milestone payments upon the enrollment of the first patient in a Phase II trial and royalty payments equal to a specified percentage of future commercial sales of products manufactured using the licensed technology, through the later of the expiration of the licensed patents or 10 years after the first commercial sale of covered product. In March 2007, VGX terminated the agreement with this party for its failure to comply with the terms of the agreement.

In December 2005, VGX entered into an alliance agreement with a European pharmaceutical company for the worldwide rights to conduct research and development and market a drug with indications in rheumatoid arthritis and psoriasis. The license agreement required issuance of VGX stock as well as an up-front cash payment, which was recorded as research and development expense in the accompanying consolidated statement of operations for the year ended December 31, 2005. The license agreement requires various milestone payments upon the completion of patient enrollment for a Phase II trial product for \$50,000; a \$250,000 payment upon completion of the first Phase III trial product; and a \$2,000,000 payment upon NDA approval of a trial product. These payments are in effect through the later of the expiration of the licensed patents or 10 years after the first commercial sale of covered product. The agreement is valid through the later of 20 years from the effective date or the expiration of the last to expire or abandonment of the patent rights.

In November 2006, VGX entered into a license agreement with a U.S.-based company for its patented DNA-delivery technology to use in the intratumoral delivery of a proprietary gene to control the growth of melanoma and other cancers. Under the terms of the agreement, VGX paid the licensor an up-front license fee in cash and equity. There will also be payments based on successful completion of clinical and regulatory milestones. They include a payment upon the beginning of a Phase II trial, a payment upon sale of licensed product in any of France, Germany, Italy, the U.S., or the United Kingdom. VGX will, in return, be exclusively supplied with the licensor's electroporation devices for the therapy included in the license agreement and will also pay the licensor royalties on the sale of products covered by the license. The term of the agreement will extend until the last to expire of any royalty period for any licensed product. The royalty period will be, with respect to any particular licensed product in any country, the period of time beginning on the first commercial sale of such licensed product in such a country and extending until the earlier of 1) the date when there is not any valid claim included in any licensor patent right in any country that would be infringed by the sale of the licensed product in such country.

In December 2006, VGX entered into an R&D collaboration and license agreement with a related party in which VGX granted the licensee exclusive worldwide rights to conduct research, development activities, sales, licensing, and marketing of VGX-1027 for Type I diabetes (T1D).

There are milestone and royalty payments due to VGX from the licensee. The milestone payments are due upon 1) the completion of a Phase I study, 2) upon completion of patient accrual for a T1D

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

Phase II trial, 3) upon completion of patient accrual for a Phase III clinical trial, 4) upon NDA submission, and 5) upon NDA approval. However, the actual amount of the milestone payments had been contractually agreed to be negotiated at a later time. The two parties have agreed to also share R&D costs on a mutually agreeable basis. The terms of the agreement shall terminate the earlier of 1) expiration of the last-to-expire patent or 2) 20 years from the effective date. In October 2007, an amendment was made to the agreement in which the sharing of the R&D costs between VGX and the related party was clarified. The related party agreed to be responsible for all third-party costs related to the completion of Phase I clinical trials. In August 2008, an amendment between VGX and the related party was reached in which VGX agreed to pay for the cost of the Multiple Ascending Dose (MAD) Study, which is expected to cost approximately \$0.9 million. The related party will in turn reimburse VGX for the cost of the study within 60 days of the study closure. Costs incurred for the MAD study as of December 31, 2008 were \$625,304.

In April 2007, VGX entered into a commercial license agreement with a U.S.-based company to license its proprietary technology for the clinical and commercial production of Vpr protein. The license agreement requires various milestone and royalty payments. This includes payments to be made annually on each anniversary of the acceptance of an investigational new drug application (IND) until an NDA is filed, a payment upon submission of NDA or biologic license application (BLA), and a payment upon receipt of marketing approval for the product.

In April 2007, VGX entered into a license agreement with a university to license certain patent rights. Upon the execution of this agreement, VGX made an initial payment of \$100,000 to the university. The license agreement requires various milestone payments. They include a \$125,000 payment upon filing of an IND application, a \$250,000 payment upon enrollment of first subject in a Phase II clinical trial, a payment of \$375,000 upon enrollment of first subject in a Phase III clinical trial, a payment of \$250,000 upon filing of NDA and a payment of \$1,500,000 upon receipt of approval in the U.S., the EU, or Japan (whichever is first to occur). In addition, VGX is required to make minimum payments, related to research and development activities, of \$200,000 in the first 12-month period, \$250,000 in the second 12-month period, \$300,000 in the third 12-month period, and a total of \$400,000 for all years subsequent to the third 12-month period until the termination of the agreement. The agreement is valid through the later of 10 years after the first sale of the first licensed product, or the expiration or abandonment of the last patent to expire or become abandoned.

In May 2007, VGX entered into a license agreement with a university to license certain patent rights. The license agreement requires various milestone payments. They include an annual maintenance fee of \$25,000, a \$75,000 payment upon beginning of a Phase I trial, a \$100,000 payment upon beginning of a Phase II trial, a \$250,000 payment upon the initiation of a Phase III trial, and a \$500,000 payment upon the first commercial sale of the licensed product. The agreement also calls for a royalty payment on net sales. There is a sliding scale of milestone payments for achievement of clinical milestones for second and third clinical indications. The agreement is valid through 10 years after the first sale of the first licensed product.

In June 2007, VGX entered into a license agreement with a related party in which it grants to the licensee exclusive worldwide rights to conduct research, development activities, sales, licensing, and marketing of VGX-100 for gastric cancer in humans. There are milestone and royalty payments due to

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

VGX from the licensee. The milestone payments are due upon 1) the completion of a Phase I study, 2) upon completion of patient accrual for a gastric cancer Phase II trial, 3) upon completion of patient accrual for a Phase III clinical trial, 4) upon NDA submission, and 5) upon NDA approval. However, the actual amount of the milestone payments had been contractually agreed to be negotiated at a later time. The two parties have agreed to also share R&D costs on a mutually agreeable basis. The terms of the agreement shall terminate the earlier of 1) expiration of the last-to-expire patent or 2) 20 years from the effective date.

In September 2007, VGX entered into a license agreement with a related party to license out certain patent rights related to its Animal Health franchise. The license agreement requires various milestone and royalty payments from the related party to VGX. These include a \$250,000 payment for the filing of an investigative new animal drug (INAD), \$500,000 payment upon initiation of Phase III or pivotal trial, \$1,000,000 payment upon receipt of new animal drug application (NADA) approval letter for the first licensed product in the U.S., \$1,000,000 payment upon receipt of NADA approval letter for the first licensed product in the territories outside the EU and the U.S. Notwithstanding the above payment schedule, the related party does not have to make any milestone payments to VGX unless it has raised at least \$5,000,000 in capital. In connection with this agreement VGX and the related party also reached a nonexclusive agreement in which VGX grants device and manufacturing patent rights to the aforementioned related party. Also as part of the agreement, the related party has agreed to make certain royalty payments to VGX should the related party fail to make proper payment to the seller. As a result of the asset purchase agreement signed in 2008, the manufacturing patent rights have been assigned to the related party.

In October 2007, VGX entered into an agreement with a related party in which it grants to the licensee exclusive, nonsublicensable, royalty-bearing patent rights for certain manufacturing processes related to the production of plasmids. The territory covered under the agreement is Asia. The agreement requires royalty payments as a percentage of net sales. This agreement has been superseded by the asset purchase agreement signed in June 2008.

In April 2008, VGX entered into a license agreement with a related party in which it grants to the licensee exclusive rights in Korea to the development, sales, licensing, and marketing for the CELLECTRA® device. There are milestone and royalty payments due to VGX from the licensee. These include a \$100,000 payment to VGX upon filing of each IND using CELLECTRA®, \$150,000 payment upon initiation of each Phase II trial, \$250,000 payment upon initiation of each Phase III trial, \$500,000 payment upon each BLA approval, and a \$750,000 payment upon first commercial sale of CELLECTRA® for each BLA. The licensee also agreed to pay a \$100,000 cost sharing fee, which is included as revenue from related parties in the consolidated statement of operations for 2008, as well as \$25,000 annually on each subsequent anniversary to partially cover the costs of patents, product enhancement, and other associated R&D efforts. The terms of the agreement shall terminate the earlier of 1) expiration of the last-to-expire patent, or 2) 20 years from the effective date.

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

In December 2008, VGX entered into a license agreement with a related party in which it grants to the licensee exclusive rights to the development, sales, licensing, and marketing of VGX3400, its candidate for avian influenza, in humans, in the Republic of Korea. There is a \$100,000 up-front licensing fee, which is included as revenue from related parties in the consolidated statement of operations for 2008, as well as a royalty payment on net sales due to VGX from the licensee. The licensee is also responsible for filing and maintenance fees related to the patents for VGX-3400 in the Republic of Korea. There are no other additional milestone payments due from the licensee. The term of the agreement shall terminate upon later of: (a) the last to expire patent or (b) twenty (20) years after the effective date.

Research Agreements

In December 2005, VGX entered into a sponsored research agreement with a university to reimburse the university for all direct and indirect costs incurred in the conduct of the sponsored research. The term of the agreement is five years. VGX has committed a total of \$1,035,000 (\$207,000 per year) during the term of this agreement. The payments are to be made in increments of \$207,000 during the term of the sponsored research agreement.

In June 2006, VGX entered into a sponsored research agreement with a university to reimburse the university for all direct and indirect costs incurred in the conduct of the sponsored research. The term of the agreement is two years but can be extended to five years upon review of the progress of the research. The total value of the agreement is not to exceed \$1,000,000. The maximum liability of VGX during the two-year term of the agreement is \$400,000. This agreement was cancelled on April 13, 2008 through mutual agreement.

In March 2008, VGX entered into a sponsored research agreement with a university to reimburse the university for all direct and indirect costs incurred in the conduct of the sponsored research. The term of the agreement is five years and the total value of the agreement is not to exceed \$1,180,000. The payments are to be made in increments of \$118,000 during the term of the sponsored research agreement.

Supply Agreements

In July 2005, VGX entered into a supply agreement with a manufacturer to purchase a minimum annual amount of 500 kilograms of the active pharmaceutical ingredient (API). The supply agreement is contingent upon the receipt of the regulatory approval of the VGX NDA for the product. The term of the agreement is 10 years from receipt of the approval of the NDA. There is an automatic renewal for successive terms of two years unless a written notice is provided to the other party within 180 days prior to the end of the term. In July 2008, VGX sent a written notice to the manufacturer stating VGX's intent to terminate the agreement. With the discontinuation of the PICTOVIR and the Hep-C small molecule drug programs, VGX no longer requires the supply of the API.

In July 2005, VGX entered into a supply agreement with a manufacturer to purchase a minimum annual amount of 1,000 kilograms of the API. The supply agreement is contingent upon the receipt of the regulatory approval for sale of the product. The term of the agreement is five years from receipt of

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Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

the approval for sale of the product. This agreement will be in force after the initial five-year term unless a written notice is provided to the other party requesting that the agreement be terminated. In July 2008, VGX sent a written notice to the manufacturer stating VGX's intent to terminate the agreement. With the discontinuation of the PICTOVIR and the Hep-C small molecule drug programs, VGX no longer requires the supply of the API.

In March 2006, VGX entered into a supply agreement with a related party to purchase a minimum annual amount of 20,000 kilograms of the API. The supply agreement is contingent upon the receipt of the regulatory approval for sale of the product in the U.S. The term of the agreement is the later of five years from receipt of the approval for sale of the product or from May 1, 2009 to April 2014. This agreement will be in force after the initial five-year term unless a written notice is provided to the other party requesting that the agreement be terminated.

In June 2008, in conjunction with the Asset Purchase Agreement between VGX and VGXI, Inc, VGX entered into a supply agreement with a related party in which the related party was granted Most Favored Status as a supplier of DNA plasmids. As a part of this agreement, VGX issued a purchase order for \$1,764,503 to the related party to supply VGX with needed DNA plasmids for the upcoming Phase I and Phase II clinical trials. Animal Health also issued a purchase order to the related party for \$248,518 for a supply of LifeTide SW5, its growth hormone releasing hormone (GHRH) DNA therapy approved for use in Australia. This supply agreement is in effect for 10 years from the effective date. In December 2008, purchases of \$1,114,503 and \$199,409 were made by VGX and Animal Health, respectively, in partial satisfaction of the aforementioned commitments made in June 2008.

Sales and Marketing Agreements

In February 2007, VGX entered into a sales and marketing agreement with a related party in which the licensee was granted exclusive rights to sell and market PICTOVIR in Asia, Africa, and the Middle East. There are milestone and royalty payments associated with the agreement. This includes a \$3,000,000 payment to VGX upon completion of Phase III trials for PICTOVIR, a \$3,000,000 payment to VGX upon submission of NDA for PICTOVIR, and a \$5,000,000 payment to VGX upon NDA approval. The terms of the agreement shall terminate upon the earlier of 1) expiration of the last-to-expire patent, or 2) 20 years after the effective date.

In April 2007, VGX entered into a sales and marketing agreement with a related party in which the licensee was granted exclusive rights to sell and market VGX-410C in Asia, Africa, and the Middle East. There are milestone and royalty payments associated with the agreement. They include a \$3,000,000 payment to VGX upon completion of Phase III trials for VGX-410C, a \$3,000,000 payment to VGX upon submission of NDA for VGX-410C, a \$5,000,000 payment for NDA approval in Japan, and a \$5,000,000 payment to VGX upon NDA approval in any country except for Japan. The terms of the agreement shall terminate upon the earlier of 1) expiration of the last-to-expire patent, or 2) 20 years after the effective date. VGX decided in December 2007 to discontinue the VGX-410C program to concentrate its efforts on other candidates in its pipeline.

In August 2007, Animal Health entered into a sales and marketing agreement with an Australia- based company to import, warehouse, and distribute its products to veterinarians in Australia. A \$5,000

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Notes to Consolidated Financial Statements (Continued)

December 31, 2008

10. Commitments (Continued)

payment was made to the Australian company upon execution of this agreement, and another \$5,000 payment was due upon receipt of final regulatory approval of Animal Health's product in Australia. The additional payment was made in 2008 upon the announcement of the approval. Additionally, under the terms of the agreement, Animal Health will pay the distributor a commission based on a percentage of all sales in Australia.

In February 2008, VGX entered into a sales and marketing agreement with a related party in which the licensee was granted exclusive rights to sell and market VGX-1027 for rheumatoid arthritis (RA), in Asia (excluding Japan), Africa, and the Middle East. There are milestone and royalty payments associated with the agreement due to VGX. They include a \$1,500,000 payment for the initiation of a Phase II trial for RA, a \$3,000,000 payment for the initiation of a Phase III trial, a \$3,000,000 payment for the submission of NDA, and a \$5,000,000 payment upon approval of NDA. The terms of the agreement shall terminate upon the earlier of 1) expiration of the last-to-expire patent, or 2) 20 years after the effective date.

In August 2008, Animal Health entered into Marketing and Distribution Agreement with an Australia-based company in which the Australian company becomes the exclusive distributor of LifeTide SW5 in Australia. The term of the agreement is three (3) years from the signing of the agreement, with automatic one (1) year extension.

11. Income Taxes

VGX accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

At December 31, 2008, VGX had federal net operating loss carryforwards of approximately \$36,282,000, which will expire in 2021 through 2028 if not utilized. In addition, VGX had state net operating loss carryforwards of approximately \$30,135,000. The state net operating losses are subject to an annual limitation of \$3,000,000 or 12.5% of taxable income, whichever is greater, and expire in 2021 through 2028.

The Tax Reform Act of 1986 (the Act) provides for a limitation on the annual use of net operating loss (NOLs) and research and development tax credit carryforwards following certain ownership changes (as defined by the Act) that could limit VGX's ability to utilize these carryforwards. VGX may have experienced an ownership change, as defined by the Act, as a result of past financings, but VGX has not yet undertaken a study to determine if it has undergone any ownership change as defined in Internal Revenue Code (IRC) Section 382. An ownership change could cause an annual limitation on the usage of the above NOLs. Accordingly, VGX's ability to utilize the aforementioned carryforwards may be limited. Additionally, U.S. tax laws limit the time during which these carryforwards may be applied against future taxes; therefore, VGX may not be able to take full advantage of these carryforwards for federal income tax purposes.



Notes to Consolidated Financial Statements (Continued)

December 31, 2008

11. Income Taxes (Continued)

VGX adopted the provisions of FIN 48 on January 1, 2008. VGX did not have any unrecognized tax positions and there was no material effect on its financial condition or results of operations as a result of adopting FIN 48.

VGX's policy is to recognize interest and penalties accrued on any unrecognized tax positions as a component of income tax expense. As of the date of adoption of FIN 48, VGX did not have any accrued interest or penalties associated with any unrecognized tax benefits, nor was any interest expense recognized during the period.

The components of the net deferred tax assets are as follows:

	December 31				
		2008		2007	
Net operating losses	\$	14,636,700	\$	11,028,000	
Other temporary differences		16,618,500		12,167,700	
Gross deferred tax assets		31,255,200		23,195,700	
Deferred tax asset valuation allowance		(31,255,200)		(23,195,700)	
	\$		\$		

In assessing the realizability of deferred tax assets, VGX considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the temporary differences representing net future deductible amounts become deductible. Due to VGX's history of losses, the deferred tax assets are fully offset by a valuation allowance at December 31, 2008 and 2007. The valuation allowance in 2008 increased by \$8,059,500 and related primarily to additional net operating losses incurred by VGX.

The reconciliation of the U.S. statutory rate with VGX's effective tax rate for the year ended December 31, 2008 is summarized as follows:

	2008
Federal statutory rate	35.00%
Effect of:	
Change in valuation allowance	(34.73)
Other	(0.27)
Effective rate	0.0%

12. Equity Investment in Affiliated Entity

In October 2005, VGX purchased 250,000 shares of a Korean-based company, Dong-IL Fabrics, at an aggregate purchase price of \$4,787,824. At the date of purchase, VGX's ownership represented 33% of the total outstanding shares of Dong-IL Fabrics. Additionally, VGX incurred \$110,400 of acquisition costs associated with the investment. In 2006, the name of Dong-IL Fabrics was officially changed to

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

12. Equity Investment in Affiliated Entity (Continued)

VGX International (VGXI). Also in 2006, VGX invested an additional \$4,408,065 in VGXI. Finally, during 2006, VGXI had a secondary offering in which VGX elected not to fully participate. Prior to that offering, VGX's ownership percentage was 38%. Accordingly, the December 31, 2007 carrying value of the investment in VGXI is less than VGX's ownership percentage of VGXI's equity. VGX's current ownership percentage in VGXI is 30%. In December 2008, VGX agreed to partially participate in the secondary offering of VGXI, and invest approximately \$200,000 in the latest round of financing. As VGX's participation is less than the full amount allocated under the existing ownership percentage, VGX's ownership percentage of VGXI is expected to decrease to approximately 25% upon the closing of the round in February 2009.

Under the equity method of accounting in accordance with Accounting Principles Board (APB) Opinion No. 18, *The Equity Method of Accounting for Investments in Common Stock*, VGX has recorded an interest in the earnings or losses of VGXI beginning from the date of purchase. VGX's interest in the losses of VGXI from the date of purchase through December 31, 2008 is \$3,648,681, which includes \$69,920 of amortized acquisition costs. As of December 31, 2008, the market value of the shares of VGXI held by VGX was \$7,432,880 based on the per share value of 1,210 Korean wons and an exchange rate of 1,265.82 Korean wons/U.S. dollar. VGXI is a publicly traded company whose shares are traded on the Korean Stock Exchange. The equity investment in affiliated entity on the consolidated balance sheets is less than VGX's portion of the net assets of VGXI.

The financial position and results of operations of VGXI as of and for the year ended December 31, 2008 are as follows:

Financial Position

	D	ecember 31, 2008
Assets		
Current assets	\$	13,062,487
Fixed assets		4,973,905
Other assets		12,323,265
Total assets	\$	30,359,657
Liabilities		
Current liabilities	\$	6,468,120
Long-term liabilities		604,943
Total liabilities		7,073,063
Total equity		23,286,594
Total liabilities and equity	\$	30,359,657

Notes to Consolidated Financial Statements (Continued)

December 31, 2008

12. Equity Investment in Affiliated Entity (Continued)

Results of Operations

	Year Ended December 31, 2008
Revenues	\$ 12,671,485
Cost of sales	11,521,819
Gross profit	1,149,666
Operating expenses	5,905,442
Operating loss	\$ (4,755,776)
Net loss	\$ (5,304,105)

In October 2007, VGX made a strategic investment of \$60,000 in a biotechnology company based in Colorado. The two companies have also agreed to cooperate on various future research projects. The investee is a private company in which VGX holds less than 10% of outstanding shares.

13. Comprehensive Loss

Comprehensive loss for the years ended December 31, 2008 and December 31, 2007 includes net loss, unrealized losses on foreign bank account activity, and foreign currency translation gains and losses. A summary of VGX's comprehensive loss is as follows:

	Year Ended I	Period from December 12, 2000 (Inception) to December 31,	
	2008	2007	2008
Comprehensive loss:			
Net loss	\$ (14,826,512)	\$ (17,796,041)	\$ (68,111,842)
Unrealized losses on foreign bank activity	(2,845)	(46)	(36,532)
Foreign currency translation adjustments	(2,056,035)	50,848	(1,380,312)
Comprehensive loss	\$ (16,885,392)	\$ (17,745,239)	\$ (69,528,686)

14. Subsequent Events

In February 2009, VGXI successfully completed a secondary offering in which it issued an additional 6.6 million shares. As VGX did not participate fully in the secondary offering, its percentage ownership in VGXI decreased from 30% to 25%.

In February 2009, VGX agreed to accept from VGXI 25,000 shares of VGXI common stock as a milestone payment for the completion of a Phase I clinical trial for VGX-1027, which is currently expected to be completed by the second quarter of 2009. The aforementioned milestone payment is due per the VGX-1027 license agreement signed between VGX and VGXI in December 2006.

INDEX TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS

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INOVIO BIOMEDICAL CORPORATION

VGX PHARMACEUTICALS, INC.

UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS

The following unaudited pro forma combined statements of earnings combine the historical consolidated statements of earnings of Inovio Biomedical Corporation (Inovio) and VGX Pharmaceuticals, Inc. (VGX) giving effect to the merger and related events, as if they had been consummated on January 1, 2008. The unaudited pro forma combined balance sheet combines the historical consolidated balance sheet of Inovio as of December 31, 2008 and the historical consolidated balance sheet of VGX as of December 31, 2008 giving effect to the merger and related events, as if they had been consummated on December 31, 2008 and giving effect to significant events affecting Inovio and VGX through April 24, 2009. The fiscal year ends of Inovio and VGX are both December 31.

The pro forma information is preliminary, is being furnished solely for informational purposes and is not necessarily indicative of the combined financial position or results of operations that might have been achieved for the periods or dates indicated, nor is it necessarily indicative of the future results of the combined company. The pro forma information is based on preliminary estimates and assumptions set forth in the notes to the unaudited pro forma combined financial statements. The pro forma information does not reflect cost savings expected to be realized from the elimination of certain expenses and from synergies expected to be created or the costs to achieve such cost savings or synergies. No assurance can be given that cost savings or synergies will be realized.

In December 2007, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141(R), *Business Combinations*, as well as SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements (an amendment of Accounting Research Bulletin, or ARB, No. 51)*. SFAS No. 141(R) changes the requirements for an acquirer's recognition and measurement of the assets acquired and liabilities assumed in a business combination, including the treatment of contingent consideration, pre-acquisition contingencies, transaction costs, in-process research and development and restructuring costs. SFAS No. 160 requires that noncontrolling (minority) interests be reported as a component of equity, that net income attributable to the parent and to the noncontrolling interest be separately identified in the income statement, that changes in a parent's ownership interest while the parent retains its controlling interest be accounted for as equity transactions, and that any retained noncontrolling equity investment upon the deconsolidation of a subsidiary be initially measured at fair value. While both statements are not effective for most practitioners until annual periods beginning after December 15, 2008, the unaudited pro forma combined financial statements are presented in accordance with SFAS No. 141(R) and SFAS No. 160, to better illustrate the proper accounting treatment effective upon the projected closing date of the merger in 2009.

Pro forma adjustments are necessary to reflect the estimated purchase price, including the new equity structure, and to adjust VGX's net tangible and intangible assets and liabilities to preliminary estimated fair values. Pro forma adjustments are also necessary to reflect the amortization expense related to amortizable intangible assets related to the pro forma adjustments.

The pro forma adjustments to VGX's assets and liabilities and allocation of purchase price are preliminary and are based on Inovio management's estimates of the fair value of the assets to be acquired and liabilities to be assumed. Inovio made estimates of fair value of the VGX assets acquired and liabilities assumed using reasonable assumptions based on historical experience and information obtained from VGX management. The valuation methodology used to estimate the value of the identified intangible assets acquired was the excess earnings method. This method reflects the present value of the operating cash flows generated by the intangible asset after taking into account the cost to realize the revenue, and an appropriate discount rate to reflect the time value and risk associated with



INOVIO BIOMEDICAL CORPORATION

VGX PHARMACEUTICALS, INC.

UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

the invested capital. To value a particular intangible asset, the value and required rate of return for other assets that contribute to the generation of the revenue earned by that intangible asset must be determined. The required returns on these other assets are deducted from the future net operating income to determine the returns specifically earned by the intangible asset. A discount rate percent was then applied that considered the reasonable expectation of the risk profile of the proprietary technology in order to bring the future income to a present value.

The final purchase price allocation will be completed after asset and liability valuations are finalized. A final determination of these fair values, which cannot be made prior to the completion of the transaction, will include Inovio management's consideration of a final valuation based on the actual net tangible and intangible assets of VGX that exist as of the consummation of the merger. Any final adjustments may change the allocation of the purchase price, which could affect the fair value assigned to the assets and liabilities and could result in a change to the unaudited pro forma combined financial statements presented herein. Amounts preliminarily allocated to major classes of assets and liabilities assumed, and the estimated useful lives of intangible assets with indefinite and definite lives, currently reflect preliminary valuations as of March 24, 2009, the most recent practicable date, but may change significantly, which could result in a material increase or decrease in amortization of definite lived intangible assets. The preliminary valuation as of March 24, 2009 has not been updated to reflect our most recent valuation as of April 24, 2009, as the share price change between March 24 and April 24, 2009 of \$0.02 (or 6%) is not considered significant to the transaction valuation. Estimates related to the determination of the lives of assets acquired may also change, which could result in a material increase or adjustments, not reflected herein, that are likely to be recorded.

Certain reclassifications have been made to conform VGX's historical amounts to Inovio's presentation.

The unaudited pro forma combined financial information should be read in conjunction with the audited financial statements and accompanying notes of Inovio and VGX included elsewhere in this joint proxy statement/prospectus.

Inovio Biomedical Corporation

Unaudited Pro Forma Balance Sheets

As of December 31, 2008

		Inovio	VGX	Pro Forma Adjustments		Pro Forma Combined
ASSETS				. .		
Current assets:						
Cash and cash equivalents	\$	14,115,281	\$ 4,212,220) \$		\$ 18,327,501
Accounts receivable		671,187	3,825	5		675,012
Prepaid expenses and other current assets		477,285	100,584	1		577,869
Receivables due from related parties			3,867,530	5		3,867,536
Inventories purchased from related parties			189,370)		189,370
Inventories			36,095	5		36,095
Total current assets		15,263,753	8,409,630)		23,673,383
Long-term investments		9,169,471				9,169,471
Auction rate security put option		4,281,494				4,281,494
Fixed assets, net		353,807	429,960	5		783,773
Intangible assets, net		5,850,540	3,101,77	(3,101,771)	В	36,877,613
				21,046,558	В	
				9,980,515	В	
Goodwill		3,900,713	907,070	6 (907,076)	А	3,900,713
Other assets		167,250	130,147	7 (10,250)	Н	287,147
Equity investment in affiliated entity			1,375,439	11,473,845	D	12,849,284
Total assets	\$	38,987,028	\$ 14,354,029	\$ 38,481,821		\$ 91,822,878
LIABILITIES AND STOCKHOLDERS						
EQUITY						
Current liabilities:						
Accounts payable and accrued expenses	2	1 367 300	\$ 2,803.07	,		\$ 1 260 372

Current liabilities:				
Accounts payable and accrued expenses	\$ 1,367,300	\$ 2,893,072		\$ 4,260,372
Accrued clinical trial expenses	399,919			399,919
Line of credit	12,109,423			12,109,423
Common stock warrants	224,582			224,582
Deferred revenue	523,544			523,544
Deferred rent	84,814			84,814
Current portion of long-term debt		2,140,000		2,140,000
Other current liabilities		45,756		45,756
Total current liabilities	14,709,582	5,078,828		19,788,410
Deferred revenue, net of current portion	4,269,151			4,269,151
Deferred rent, net of current portion	14,898			14,898
Deferred tax liabilities	887,250			887,250
Long-term debt		4,400,000		4,400,000
Total liabilities	19,880,881	9,478,828		29,359,709
Commitments and contingencies				
Noncontrolling interest		688,863	(688,863) I	

Stockholders' equity:

Common stock	44,022	4,187	(4,187)	С	85,752
			41,733	Е	
			(3)	Н	
Additional paid-in capital	171,868,914	73,710,837	(73,710,837)	С	186,006,162
			14,147,495	Е	
			(10,247)	Н	
Receivables from stockholders					
Accumulated deficit	(152,812,948)	(68,111,842)	68,111,842	С	(124,323,767)
			28,489,181	F	
Accumulated other comprehensive (loss) income	6,159	(1,416,844)	1,416,844	С	6,159
Total parent stockholders' equity	19,106,147	4,186,338	38,481,821		61,774,306
Noncontrolling interest			688,863	Ι	688,863
8			,		,
Total equity	19,106,147	4,186,338	39,170,684		62,463,169
1 0					
Total liabilities and stockholders' equity	\$ 38,987,028	\$ 14,354,029	\$ 38,481,821		\$ 91,822,878
Total hashires and stockholders' equity	\$ 55,907,020	φ 11,331,02 <i>)</i>	¢ 50,101,021		φ <i>γ</i> 1,022,070
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Inovio Biomedical Corporation

Unaudited Pro Forma Combined Statements of Operations

For the Year Ended December 31, 2008

Revenue:		Inovio	•	VGX	Pro Forma Adjustments		С	o Forma ombined
License fee and milestone payments	\$	791,401	\$		\$		\$	791,401
Revenue under collaborative research and		1,077,967						1 077 067
development arrangements Grant and miscellaneous revenue		228,264		530,617				1,077,967 758,881
Revenue from product sales		220,204		606,211				606,211
Government contract revenue				1,990,411				1,990,411
				-,,,,,,,,				-,,,,,,,
Total revenue:		2,097,632		3,127,239				5,224,871
Operating Expenses:								
Research and development		5,750,494		13,125,479	2,221,905	G	2	1,097,878
General and administrative	1	0,005,602		7,808,636			1	7,814,238
Cost of product sales				2,237,238				2,237,238
Total operating expenses	1	5,756,096	2	23,171,353	2,221,905		4	1,149,354
Loss from operations	(1	3,658,464)	(2	20,044,114)	(2,221,905)		(3	5,924,483)
-		(10.00)		(800.080)				
Interest income (expense)		643,836		(288,930)				354,906
Other income (expense) Losses from equity investment		49,006		218,557 (1,632,812)			(267,563 1,632,812)
Gain on sale of manufacturing assets to				(1,032,012)			(1,032,012)
related party				6,653,153				6,653,153
Net loss attributable to noncontrolling				0,055,155				0,055,155
interest				267,634	(267,634)	J		
				,				
Loss from continuing operations	(1	2,965,622)	(14,826,512)	(2,489,539)		(3	0,281,673)
Coin on honorin much or					20 400 101	Б	2	0 400 101
Gain on bargain purchase					28,489,181	F	2	8,489,181
Consolidated net loss	(1	2,965,622)	(1	14,826,512)	25,999,642		(1,792,492)
Net loss attributable to noncontrolling								
interest					267,634	J		267,634
					,			,
Net loss attributable to common stockholders	(1	2,965,622)	(2	14,826,512)	26,267,276		(1,524,858)
Amounts per common share basic and								
diluted:								
Net loss from continuing operations	\$	(0.30)	\$	(0.34)			\$	(0.35)
Net gain on bargain purchase							\$	0.33
Net loss attributable to noncontrolling	<i>•</i>		•				<i>•</i>	
interest	\$		\$				\$	
Net loss per common share attributable to	¢	(0.00)	¢	(0.2.1)			¢	(0.02)
common stockholders	\$	(0.30)	\$	(0.34)			\$	(0.02)
Weighted average number of common shares outstanding basic and diluted	4	3,914,004	4	43,392,406	41,846,775	K	8	5,760,779

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS

Note 1 Basis of Presentation

On July 7, 2008, Inovio Biomedical Corporation (the "registrant") and VGX Pharmaceuticals, Inc., a privately-held Delaware corporation ("VGX"), executed a definitive merger agreement (the "Merger Agreement"), which provides for the issuance of the registrant's securities in exchange for all of the outstanding securities of VGX and the merger of an acquisition subsidiary with VGX. On December 5, 2008, the registrant and VGX executed an amended and restated merger agreement (the "Amended Agreement"), as approved by both the registrant's and VGX's boards of directors.

The Amended Agreement provides that at the time of closing of the merger contemplated by the Amended Agreement, VGX will merge with and into a wholly-owned acquisition subsidiary of the registrant, with that subsidiary surviving the merger (the "Merger").

Concurrent with the Merger, the registrant will issue shares of the registrant's common stock in exchange for all of the outstanding shares of VGX common stock based on an exchange ratio derived from the comparative fully diluted share capitalization of the companies, excluding the shares of VGX common stock underlying outstanding VGX convertible debt. The registrant will also assume all outstanding VGX options, VGX warrants and, on a consolidated basis, VGX convertible debt, which will become exercisable or convertible, as applicable, for the registrant's common stock; the pricing and shares into which the VGX options and VGX warrants are exercisable will be adjusted based on the exchange ratio, and the VGX convertible debt will become convertible at \$1.05 per share of the registrant's common stock.

Due to the structure of the exchange ratio calculation, it is not possible for the parties to state with certainty at this time the total number of shares of the registrant's common stock, options and warrants to be issued at closing of the Merger. However, the exchange ratio is designed to result in the legacy holders of the registrant's and VGX securities each holding on an aggregate basis 50% of the combined company's fully-diluted equity interests, excluding from the calculation the shares issuable upon the conversion of the VGX convertible debt. For purposes of determining the estimated purchase price, based on the current exchange ratio, the registrant estimated it would issue approximately 41,708,025 shares of its common stock in exchange for all the outstanding securities of VGX. The fair value of the registrants shares used to determining the purchase price was \$0.34 per share. The Agreement also provides that five significant stockholders of VGX will place 8,000,000 shares of the registrant's common stock received in the Merger into a voting trust, effective concurrent with the closing of the Merger, to be administered by an independent committee of the board of directors of the combined company. The trustees would vote the shares in accordance with the percentage of votes cast by all stockholders on any particular matter. Based on current capitalization information and the impact of the anticipated voting trust agreement, the parties anticipate that legacy registrant capital stock holders and legacy VGX common stock holders will share voting power over the combined company approximately 51.50% and 39.19%, respectively, based on the anticipated number of shares of Inovio capital stock to be outstanding, with the remainder of voting power to be allocated by the voting trust. However, the exact percentage split of the equity interests in and voting power over the combined company will depend on a number of factors, including the registrant's pre-closing capitalization, thus these projected percentages m

The determination of the purchase price and the allocation of purchase price is preliminary. The determination of the final purchase price will be determined upon consummation of the merger. The final determination of the purchase price allocation will be based on the fair values of major classes of

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

Note 1 Basis of Presentation (Continued)

assets acquired, including fair values of acquired in-process research and development and other identifiable intangibles, and the fair value of liabilities assumed as of the date that the acquisition is consummated. The excess of the fair value of assets and liabilities over the purchase price of the acquired entity is recognized as a gain from a bargain purchase in accordance with SFAS No. 141(R). SFAS No. 141(R) requires the acquirer to recognize a gain in earnings when the total acquisition-date fair value of the identifiable net assets acquired exceeds the fair value of the consideration transferred. The purchase price allocation will remain preliminary until Inovio completes a final valuation of major classes of assets acquired (including in-process research and development), evaluates the integration plan, which is to be undertaken upon the consummation of the merger, and determines the fair values of other assets and liabilities acquired. The final determination of the purchase price allocation is expected to be completed as soon as practicable after the consummation of the merger. The final amounts allocated to major classes of assets and liabilities assumed could cause material differences in the information presented in the unaudited pro forma combined financial statements.

The developed technology consists of VGX's CELLECTRA® technology and GHRH technology.

VGX has developed two applications in the CELLECTRA® device family. The first covers the intra-muscular (IM) delivery of DNA and the second covers the intra-dermal/subcutaneous delivery (ID) of DNA. Both devices have been validated, manufactured under cGMP and are ready for use in human clinical trials. In 2007, VGX filed a device master file (MAF) with the FDA covering the use of the CELLECTRA®-IM EP device in human clinical trials. The device is intended to be used in combination with a DNA plasmid product. VGX has also filed an MAF with the FDA covering the use of the CELLECTRA®-ID EP device in 2009. It is anticipated that the device will be used in combination with VGX-3100, VGX-3400 and the family of PENNVAX vaccines. VGX is also in early stage licensing discussions with other biotechnology companies for the use of the device in combination with their proprietary vaccine candidates.

The GHRH technology refers to LifeTide SW5, which was approved for use in pigs by the Australian Pesticides and Veterinary Medicines Authority (APVMA) on January 5, 2008. On September 10, 2008, VGX Animal Health, Inc., or VGXAH, a majority-owned subsidiary of VGX, signed a Marketing & Distribution Agreement with Country Vet Wholesaling Pty Ltd, an Australian proprietary company, for the sale of LifeTide SW5. In addition, VGXAH has submitted an application for marketing approval in New Zealand, and plans to seek marketing approvals in several other countries in South East Asia, including the Philippines and Indonesia. VGXAH has also initiated studies to support regulatory approval of this technology in other major markets, including the U.S. and China.

Management estimated the fair value of the VGX technologies using reasonable assumptions based on historical experience. The valuation methodology used to estimate the value of the technologies was the excess earnings method. This method reflects the present value of the operating cash flows generated by the technologies after taking into account the cost to realize the revenue, and an appropriate discount rate to reflect the time value and risk associated with the assets. First, yearly revenues for each technology were forecasted for a projected period of time of 10 years. Then, related cost of sales and operating expenses were deducted from the revenue stream. Next, taxes were applied to derive an annual net operating income for the projected period. Then, in order to value the technology, the value and required rate of return for other assets that contribute to the generation of the revenue earned by that particular technology asset were determined. The required returns on these other assets (the other asset classes identified were: net working capital, fixed assets, and assembled

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

Note 1 Basis of Presentation (Continued)

workforce) were "charged to" (or rather deducted from) the future net operating income to determine the returns specifically earned by the technology. Then, a discount rate was applied that considered the reasonable expectation of the risk profile of the proprietary technology in order to bring the future income to a present value. In the case of CELLECTRA® technology, a discount rate of 30% was used; for the GHRH technology, a 35% discount rate was utilized.

The amount allocated to acquired in-process research and development represents an estimate of the fair value of purchased in-process technology for research projects that, as of the date of the expected consummation of the merger, will not have reached technological feasibility and do not have a future alternative use. The values of the research projects will be determined based on analyses using estimated cash flows to be generated by the products that results from the in-process projects. These cash flows will be estimated by forecasting total revenues expected from these products and then deducting appropriate operating expenses, cash flow adjustments and contributory asset returns to establish a forecast of net cash flows arising from the in-process technology. These cash flows will be substantially reduced to take into account the time value of money and the risk associated with the inherent difficulties and uncertainties given the projected stage of development of these projects at closing. For purposes of the unaudited pro forma combined balance sheet as of December 31, 2008, approximately \$10.0 million of the total purchase price has been capitalized as acquired in-process research and development, which is not expected to have reached technological feasibility at the consummation date of the merger and have no future alternative use.

The acquired in-process research and development consists of VGX's drug candidates for rheumatoid arthritis (VGX-1027), cervical cancer (VGX-3100), and influenza (VGX-3400). VGX has developed all three drug candidates and they are either currently in clinical trials or INDs to begin clinical trials have been filed with the FDA; specifically:

VGX-1027. VGX's small molecule drug for rheumatoid arthritis is currently in Phase I clinical trials. A single ascending dose study was completed in 2008 and a multiple ascending dose study should be completed during the first quarter of 2009, which would mark the end of the Phase 1 trial. VGX, or if the Merger has been completed, the combined group, expects to begin a Phase II trial later in 2009. VGX hopes to license the drug to a large pharmaceutical company for a milestone based licensing fee and royalty as a percentage of sales and as a result does not expect to incur the cost of a phase III trial, as it would rely on its licensing partner to bear that portion of the cost. VGX expects the product to attain marketing approval and sales by 2016 and expects achieving such results will require approximately \$17 million of additional expenses.

VGX-3100. The VGX DNA vaccine for therapeutic treatment of cervical cancer entered Phase 1 clinical trials in the second half of 2008. The Phase 1 trial is expected to end in late 2009 and VGX anticipates initiating a Phase II trial in 2010. The Phase II trial is expected to last two years, ending in 2011. VGX hopes to license the drug to a third party after the Phase II trial, such that the cost of a Phase III trial would be borne by the third-party licensee. VGX is aiming to obtain a BLA approval and first sales of this vaccine in 2016. VGX projects expected costs from 2009 to first sales to be approximately \$6 million.

VGX-3400. VGX's DNA vaccine for influenza has completed preclinical toxicity studies and an IND has been filed with the FDA. VGX is currently working with the FDA to address some safety related questions. VGX is hoping to initiate Phase I clinical trials in 2009. Once completed, VGX

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

Note 1 Basis of Presentation (Continued)

expects to license the drug to a third party since demonstration of an immune response from Phase I study patients should be sufficient proof of concept of its drug and electroporation, and expects any additional clinical trial costs after the Phase I trial is expected to be borne by the licensee, including dose ranging studies, as well as larger population studies (Phase IIa/b; Phase III). VGX hopes to obtain a BLA approval and first sales in 2015. VGX projects its costs to be incurred from 2009 to first sales to be approximately \$2 million.

The development of these technologies remains a risk due to the remaining efforts to achieve technical viability, rapidly changing customer markets, uncertain standards for new products, and significant competitive threats from our competitors. Failure to develop these technologies into commercially viable products and/or failure to bring them to market in a timely manner could result in a loss of market share, which could have a material adverse impact on the combined group's business and operating results, could negatively impact the return on investment that we expected at the time that the merger was completed and may result in impairment charges.

VGX's non-controlling interest consists of 12% ownership interest in VGX Animal Health. The estimated fair value utilized is based on upon the last round of financing by VGX Animal Health in late 2007, in which that entity issued shares of its common stock to a third party. There have been no subsequent financing rounds. VGX has updated the valuation model to reflect current assumptions and due to the fact that there have been no additional milestone events, such as additional marketing approval, significant licensing agreements, material adverse events, or large sales contracts that would have materially changed any of the key assumptions used in the last valuation of VGX Animal Health, VGX believes that the valuation used in the last round of financing continues to reflect current fair value.

VGX's equity investment in an affiliated entity, which represents VGX's ownership interest in VGX International, is measured at fair value. The fair market value of VGX's interest in VGX International for purpose of the pro formas was determined using the closing price of VGX International's shares of common stock as listed on the Korean Stock Exchange as of April 24, 2009, the most recent date practicable.

The total purchase price of the acquisition is estimated as follows:

Value of Inovio shares issued

\$14,189,228

The fair value of the Inovio shares used in determining the purchase price was \$0.34 per share based on the closing price of Inovio common stock on March 24, 2009.

The price of Inovio common stock has historically been very volatile. The historical volatility for the year prior to March 24, 2009 is approximately 150%. The total purchase price of the acquisition could change significantly depending on the price of Inovio common stock on the date of acquisition. Based upon the expected volatility of the price of Inovio's common stock and the anticipated closing date of the transaction (prior to the end of the second quarter of 2009), Inovio believes the total purchase price for the acquisition could range from approximately \$7.1 million to \$21.3 million, based on a 50% increase or decrease in the price of Inovio's common stock from the price per share of \$0.34 used to calculate the consideration as presented in the pro forma financial statements. This increase or decrease in the total purchase price would increase or decrease the gain from bargain purchase recognized from the transaction.

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

Note 1 Basis of Presentation (Continued)

The estimated purchase price has been allocated to each major class of assets acquired and liabilities assumed based on their fair values as of December 31, 2008. Since December 31, 2008, no events have occurred that would have a significant impact on the current fair market values of the assets acquired and liabilities assumed, other than those adjustments reflected in the pro forma financial statements. The allocation to assets and liabilities is summarized below:

	Fair Value
Major assets acquired	\$ 21,819,027
Assumed liabilities	(9,478,828)
Assumed noncontrolling interest	(688,863)
Intangible assets (developed technology)	21,046,558
In-process research and development	9,980,515
Gain from bargain purchase	(28,489,181)
Total	\$ 14,189,228

The excess of the fair value of net assets acquired over the purchase price resulted in a bargain purchase gain of approximately \$28.5 million. A decline in the price of Inovio's common stock from the merger agreement price of \$1.05 per share agreed to on July 7, 2008, to our stock price as of March 24, 2009 of \$0.34 per share was the primary contributing factor to the calculation of this gain. On July 7, 2008, the terms of the merger agreement were agreed upon by both parties, including the methodology for determination of the number of shares of Inovio common stock to be exchanged for all of the outstanding shares of VGX common stock, which methodology was not tied to the market price of Inovio's common stock or the implied value of VGX's common stock, but was based instead on a merger exchange ratio derived from an adjusted comparison of the parties' projected fully-diluted capitalization at the time of closing of the transaction. In addition, since December 31, 2008, the fair value of VGX's equity investment in an affiliated entity has increased by approximately \$11.5 million, which contributed further to the gain.

Note 2 Pro Forma Adjustments

(A)

To eliminate historical goodwill of VGX of \$907,076.

(B)

To eliminate existing VGX intangible assets of \$3,101,771 and adjust identifiable intangible assets and in-process research and development to estimated fair value by \$21,046,558 and \$9,980,515, respectively.

(C)

To eliminate historical equity accounts and accumulated deficit of VGX including common stock of \$4,187, additional paid-in capital of \$73,710,837, accumulated deficit of \$68,111,842 and accumulated other comprehensive loss of \$1,416,844.

(D)

To adjust VGX's equity investment in affiliated entity, which represents its ownership interest in VGX International to fair market value. The fair value was determined using the closing price of VGX International shares as of April 24, 2009, the most recent practicable date.

(E)

To record \$41,733 to common stock and \$14,147,495 to additional paid-in capital related to the fair value of Inovio's common stock issued in connection with the merger.

(F)

To record gain from bargain purchase in accordance with SFAS No. 141(R).

INOVIO BIOMEDICAL CORPORATION

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS (Continued)

Note 2 Pro Forma Adjustments (Continued)

(G)

To amortize incremental increase in intangible assets by \$2,221,905 for the twelve months ended December 31, 2008 for the two developed technologies with estimated useful lives of eight and nine years. The estimate for the useful lives was based upon the expected remaining life based on cash flow expectations of the patents related to the two technologies, the landscape of the competing technologies, as well as the expected market acceptance.

(H)

To eliminate Inovio's equity investment in VGX of \$10,250.

(I)

To reclassify presentation of noncontrolling interest in accordance with SFAS No. 160.

(J)

To reclassify presentation of net loss attributable to noncontrolling interest for the year ended December 31, 2008 in accordance with SFAS No. 160.

(K)

Pro forma basic and diluted net loss per share is calculated by dividing the pro forma combined net loss attributable to common stockholders by the pro forma weighted average common shares outstanding. A reconciliation of the shares used to calculate Inovio's historical basic and diluted net loss per share to shares used to calculate the pro forma basic and diluted net loss per share follows:

	Year Ended December 31, 2008
Shares used to calculate Inovio's historical basic and diluted net	
loss per common share	43,914,004
Estimated shares issued in connection with the merger	41,733,025
Accelerated vesting of restricted common shares subsequent to and	
dependent upon the closing of the merger	138,750
Less shares previously owned by Inovio	(25,000)
Shares used to calculate pro forma basic and diluted net loss per	
common share	85,760,779

ANNEX A

AMENDED AND RESTATED

AGREEMENT AND PLAN OF MERGER

BY AND AMONG

INOVIO BIOMEDICAL CORPORATION,

INOVIO ACQUISITION, LLC

AND

VGX PHARMACEUTICALS, INC.

Dated as of December 5, 2008

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[Exhibits and schedules to this agreement which do not contain information material to understanding the terms of this agreement, and which are not otherwise required to be disclosed at this time are omitted from this Annex A. Those agreements listed above as exhibits to this agreement which are material to Inovio and the proposed combined group have been filed as exhibits to the registration statement of which this proxy statement/prospectus is a part.]

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AMENDED AND RESTATED AGREEMENT AND PLAN OF MERGER

This AGREEMENT AND PLAN OF MERGER (the "*Agreement*") is made and entered into as of December 5, 2008, by and among Inovio Biomedical Corporation, a Delaware corporation ("*Inovio*"), Inovio Acquisition, LLC, a Delaware limited liability company and wholly-owned subsidiary of Inovio ("*Submerger*"), and VGX Pharmaceuticals, Inc. ("*VGX*"). Certain capitalized terms that are used herein shall have the respective meanings ascribed thereto in *Article IX* hereof.

RECITALS

A. Inovio, VGX and Submerger's predecessor, Inovio Acquisition Corporation, previously entered into a certain Agreement and Plan of Merger dated as of July 7, 2008 (the "*Prior Agreement*"). The parties hereto wish by this Agreement to amend and restate the Prior Agreement.

B. Inovio Acquisition Corporation, a Delaware corporation, converted into Submerger on October 31, 2008, and Submerger is a successor to Inovio Acquisition Corporation.

C. Upon the terms and subject to the conditions of this Agreement and in accordance with the Delaware General Corporation Law (the "*DGCL*"), Inovio, Submerger and VGX will enter into a business combination pursuant to which VGX will be merged with and into Submerger (the "*Merger*") and upon consummation of the Merger, VGX will cease to exist and Submerger will continue as the surviving entity and as a wholly owned subsidiary of Inovio and change its name to VGX Pharmaceuticals, LLC.

D. The VGX Board (i) has determined that the Merger and the transactions contemplated hereby are fair to, advisable and in the best interests of, VGX and its stockholders, (ii) has approved this Agreement, the Merger and the other transactions contemplated by this Agreement and (iii) has determined, subject to the terms of this Agreement, to recommend the approval of this Agreement and the Merger by the VGX Stockholders.

E. The Inovio Board (i) has determined that the Merger and the other transactions contemplated hereby are fair to, advisable and in the best interests of, Inovio and its stockholders, (ii) has approved this Agreement, the Merger and the other transactions contemplated by this Agreement and (iii) has determined, subject to the terms of this Agreement, to recommend the approval of this Agreement and the Merger by the Inovio Stockholders.

F. As a result of the Merger, among other things, (i) all of the issued and outstanding VGX Common Stock as of the Effective Time shall be canceled and converted into the right to receive the consideration as set forth herein, (ii) all outstanding VGX Options as of the Effective Time shall be assumed by Inovio and converted into options to purchase Inovio Common Stock on the terms set forth herein, (iii) all outstanding VGX Warrants as of the Effective Time shall be assumed by Inovio and converted into and converted into warrants to purchase Inovio Common Stock on the terms set forth herein and (iv) all outstanding VGX Convertible Debt as of the Effective Time shall be assumed and converted into debt convertible into Inovio Common Stock on the terms set forth herein.

G. Promptly after the execution and delivery of this Agreement, each of the persons and entities identified in *Exhibit A* (the "*VGX Support Stockholders*") shall enter into a voting agreement substantially in the form attached hereto as *Exhibit B* (the "*Support Stockholder Voting Agreement*"), which Support Stockholder Voting Agreement shall when executed (i) become effective without any action on the part of Inovio, Submerger, VGX or the VGX Support Stockholders immediately upon the VGX Solicitation Date and (ii) bind the VGX Support Stockholders to vote their shares of VGX Common Stock for approval of the VGX Voting Proposal.



H. The Merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Code, and this Agreement is intended to constitute a "plan of reorganization" within the meaning of the regulations promulgated under Section 368 of the Code.

NOW, THEREFORE, in consideration of the covenants, promises and representations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

ARTICLE I THE PLAN OF MERGER

1.1 *The Merger.* At the Effective Time, upon the terms and subject to the conditions set forth in this Agreement and in accordance with the applicable provisions of the DGCL, VGX shall be merged with and into Submerger, the separate existence of VGX shall thereupon cease and Submerger shall continue as the surviving entity and as a wholly owned subsidiary of Inovio and shall change its name to VGX Pharmaceuticals, LLC. VGX Pharmaceuticals, LLC, as the surviving entity after the Merger, is sometimes referred to herein as the "*Surviving Entity*".

1.2 *The Closing*. Upon the terms and subject to the conditions set forth in *Article VI* of this Agreement, the closing of the transactions contemplated hereby (the "*Closing*") shall take place as promptly as practicable (but in no event later than the second business day) after the satisfaction or waiver of the conditions set forth in *Article VI* of this Agreement (other than those that by their terms are to be satisfied or waived at the Closing, which shall be satisfied or waived at the Closing), or such other date upon which the parties hereto shall mutually agree (the "*Closing Date*"), at the offices of K&L Gates LLP at 10100 Santa Monica Boulevard, 7th Floor, Los Angeles, California 90067, or such other date, time and/or location upon which the parties hereto shall mutually agree. The Closing may occur by the exchange of documents by facsimile or other electronic means.

1.3 *Effective Time of the Merger*. Subject to the provisions of this Agreement, the parties hereto shall cause the Merger to be consummated by filing a certificate of merger (the "*Certificate of Merger*") with the Secretary of State of the State of Delaware in such form as is required by, and executed and acknowledged in accordance with, the relevant provisions of the DGCL and making all other filings or recordings required under the DGCL to effect the Merger. The Certificate of Merger, when duly filed with the Secretary of State of the State of the State of Delaware in accordance with the relevant provisions of the DGCL, shall state an effective date for the Merger of the same date as the Closing Date and the effective time of the Merger shall be the same time as the time when the Closing is completed, unless the parties hereto shall mutually agree to a different date and time for filing and effectiveness. The effective time of the Merger is sometimes referred to herein as the "*Effective Time*."

1.4 *General Effects of the Merger*. From and after the Effective Time, the Merger shall have all of the effects provided in this Agreement, the Certificate of Merger and applicable law, including the provisions of the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time, all the property, rights, privileges, powers and franchises of Submerger and VGX, respectively, shall vest in the Surviving Entity, and all debts, liabilities and duties of Submerger and VGX, respectively, shall become the debts, liabilities and duties of the Surviving Entity, with the VGX Options, VGX Warrants, VGX Convertible Debt, Other VGX Rights and VGX Debt treated in accordance with *Section 1.7* hereof.

1.5 Surviving Entity Certificate of Formation and Operating Agreement.

(a) *Certificate of Formation of Surviving Entity.* Subject to the obligations of *Section 5.14*, as of the Effective Time, by virtue of the Merger and without any action on the part of VGX or Submerger, the Certificate of Formation of Submerger, as in effect immediately prior to the

Effective Time, shall be the Certificate of Formation of the Surviving Entity, but shall be amended to provide that the name of the Surviving Entity is "VGX Pharmaceuticals, LLC".

(b) *Operating Agreement of Surviving Entity.* Subject to the obligations of *Section 5.14*, as of the Effective Time, by virtue of the Merger and without any action on the part of VGX or Submerger, the Operating Agreement of Submerger, as in effect immediately prior to the Effective Time, shall be the Operating Agreement of the Surviving Entity, until thereafter amended in accordance with the DGCL and as provided in such By-Laws.

1.6 Manager, Directors and Officers.

(a) *Manager of Surviving Entity*. As of the Effective Time, by virtue of the Merger and without any action on the part of VGX or Submerger, Inovio shall continue as the Manager of the Surviving Entity.

(b) Officers of Surviving Entity. As of the Effective Time, by virtue of the Merger and without any action on the part of VGX or Submerger, the officers of the Surviving Entity shall be the same as the individuals designated as officers of Inovio pursuant to Section 1.6(d) hereof.

(c) *Directors of Inovio*. As of the Effective Time, by virtue of the Merger and without any further action on the part of Inovio, the Inovio Stockholders, VGX or the VGX Stockholders, the directors of Inovio shall be the individuals designated by Inovio and VGX pursuant to *Section 5.21* hereof, until their respective successors are duly elected or appointed and qualified or such individuals earlier resign or are removed.

(d) Officers of Inovio. As of the Effective Time, by virtue of the Merger and without any further action on the part of Inovio, the Inovio Stockholders, VGX or the VGX Stockholders, the officers of Inovio shall be the individuals designated by Inovio and VGX on Schedule 1.6(d) hereto, provided, however, that if a designated individual on such Schedule is no longer an employee of either Inovio or VGX immediately prior to the Effective Time, the designated position shall remain vacant until filled by action of the Inovio Board subsequent to the Closing.

1.7 Effect of Merger on VGX Securities.

(a) VGX Common Stock. Subject to the terms and conditions of this Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any shares of VGX Common Stock, each share of VGX Common Stock issued and outstanding immediately prior to the Effective Time (other than any shares to be canceled pursuant to Section 1.7(e) and any Dissenting Shares) will be canceled and extinguished and automatically converted into the right to receive the Common Per Share Stock Consideration. Any fraction of a share of Inovio Common Stock that would otherwise be received by a holder of VGX Common Stock as Common Per Share Stock Consideration shall be aggregated and shall be rounded up to the nearest whole share.

(b) *VGX Options.* Subject to the terms and conditions of this Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any VGX Option, all VGX Options outstanding immediately prior to the Effective Time, whether or not then exercisable or vested, shall be assumed by Inovio. As of the Effective Time, each such VGX Option shall cease to represent an option to acquire shares of VGX Common Stock and shall be converted automatically into an option to purchase shares of Inovio Common Stock in an amount, at an exercise price and subject to such terms and conditions determined as provided below. Each such VGX Option so assumed by Inovio shall be subject to, and shall become exercisable and vested upon, the same terms and conditions as are currently applicable to such VGX Option, except that (i) each assumed VGX Option shall be exercisable for, and represent the right to acquire, that number of shares of Inovio Common Stock (rounded up to the nearest whole share)

equal to: (A) the number of shares of VGX Common Stock subject to such VGX Option immediately prior to the Effective Time multiplied by (B) the Merger Exchange Ratio and (ii) the exercise price per share of Inovio Common Stock subject to each assumed VGX Option shall be an amount equal to: (A) the exercise price per share of VGX Common Stock subject to such VGX Option in effect immediately prior to the Effective Time, divided by (B) the Merger Exchange Ratio (rounded up to the nearest whole cent). The conversion of VGX Options provided for in this *Section 1.7(b)* (whether or not intended to be "incentive stock options" as defined in Section 422 of the Code) shall be effected in a manner consistent with Section 424(a) of the Code.

(c) *VGX Warrants.* Subject to the terms and conditions of this Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any VGX Warrant, all VGX Warrants outstanding immediately prior to the Effective Time, whether or not then exercisable, shall be assumed by Inovio. As of the Effective Time, each such VGX Warrant shall cease to represent a warrant to acquire shares of VGX Common Stock and shall be converted automatically into a warrant to purchase shares of Inovio Common Stock in an amount, at an exercise price and subject to such terms and conditions determined as provided below. Each such VGX Warrant so assumed by Inovio shall be subject to, and shall become exercisable upon, the same terms and conditions as are currently applicable to such VGX Warrant, except that (i) each assumed VGX Warrant shall be exercisable for, and represent the right to acquire, that number of shares of Inovio Common Stock (rounded up to the nearest whole share) equal to: (A) the number of shares of VGX Common Stock subject to such VGX Warrant immediately prior to the Effective Time multiplied by (B) the Merger Exchange Ratio and (ii) the exercise price per share of Inovio Common Stock subject to such VGX Warrant in effect immediately prior to the Effective Time divided by (B) the Merger Exchange Ratio (rounded up to the nearest whole cent).

(d) VGX Debt and VGX Convertible Debt.

(i) Subject to the terms and conditions of this Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any VGX Debt, as of the Effective Time each note evidencing outstanding VGX Debt shall be assumed by the Surviving Entity and shall continue to represent a right to receive repayment of principal and interest thereon.

(ii) Subject to the terms and conditions of this Agreement, as a result of the Merger, and without any action on the part of Inovio, Submerger, VGX or the holder of any VGX Convertible Debt, as of the Effective Time each note evidencing outstanding VGX Convertible Debt listed on *Schedule 1.7(d)(ii)*, shall be assumed by the Surviving Entity and shall continue to represent a right to receive repayment of principal and interest thereon, however shall cease to represent a right to acquire shares of VGX Common Stock in satisfaction thereof and shall be converted automatically, in accordance with its existing terms and conditions, into a right to acquire that number of shares of Inovio Common Stock (rounded up to the nearest whole share) equal to (i) the principal amount of the assumed note, plus the accrued and unpaid interest thereon if provided for by the terms of such note, as of the Effective Time divided by (ii) \$1.05.

(e) *Cancellation of Inovio and VGX-Owned VGX Securities.* Each share of VGX Common Stock, or any VGX Option or VGX Warrant or note evidencing VGX Debt or VGX Convertible Debt, held by VGX or owned by Inovio or Submerger or any direct or indirect wholly owned or majority owned Subsidiary of VGX or of Inovio immediately prior to the Effective Time shall be canceled and extinguished without any conversion thereof.

(f) *Membership Interests of Submerger*. The issued and outstanding membership interest held by Inovio in Submerger immediately prior to the Effective Time shall be remain issued and outstanding, unaltered, as membership interest in the Surviving Entity.

(g) *Fractional Shares*. No fraction of a share of Inovio Common Stock will be issued or paid by virtue of the Merger. Adjustments for fractional shares issuable upon exchange of Inovio Common Stock for VGX Common Stock or issuable pursuant to assumed and converted VGX Options, VGX Warrants and VGX Convertible Debt will be made pursuant to the terms and conditions for such assumption and conversion set forth in *Section 1.7* hereof.

(h) Lock Up Arrangement; Legend and Stop Order.

(i) Shares of Inovio Common Stock held at the Effective Time, received pursuant to the Merger, or received upon exercise of VGX Options or VGX Warrants or conversion of VGX Convertible Debt assumed in the Merger (the "*Restricted Securities*") held by any of the following Persons shall be subject to the Lock-Up Restrictions set forth in *Section 1.7(h)(ii)*: (a) those holders of Restricted Securities listed on *Schedule 1.7(h)* hereto, (b) directors, executive officers and employees of VGX immediately prior to the Effective Time, (c) holders of VGX Convertible Debt immediately prior to the Effective Time, and (d) directors, executive officers, and employees of Inovio at the Effective Time (each a "*Restricted Party*" and together, the "*Restricted Parties*").

(ii) Except transfer to the Voting Trust pursuant to *Section 1.7(i)*, if applicable, for the duration of the applicable Lock-Up Period(s) as set forth in this *Section 1.7(h)*, each Restricted Party shall not (a) sell, assign, exchange, transfer, pledge, hypothecate, distribute or otherwise dispose of (other than by operation of law where the transferee remains subject to and bound by the provisions of this Agreement applicable during the Lock-Up Period) (i) any Restricted Securities, or (ii) any interest (including, without limitation, an option to buy or sell) in any Restricted Securities, in whole or in part, and no such attempted transfer shall be treated as effective for any purpose, or (b) engage in any transaction in respect to Restricted Securities or any interest therein, the intent or effect of which is the effective economic disposition of such shares (including, but not limited to, engaging in put, call, short-sale, straddle or similar market transactions) (the foregoing restrictions are referred to herein as the "*Lock-Up Restrictions*").

(iii) The Lock-Up Restrictions shall apply to Restricted Securities held by the Restricted Parties, except with respect to shares of Inovio Common Stock issued upon assumption and conversion of the VGX Convertible Debt, from the Closing Date until the date that is twenty-four (24) months after the Closing Date, *provided, however*, that the Lock-Up Restrictions shall lapse as to twenty-five percent (25%) of the shares of Inovio Common Stock (held directly or underlying other Restricted Securities) initially subject to such Lock-Up Restrictions (as of the Closing Date) upon each six-month anniversary of the Closing Date, and *further provided*, that, if the Restricted Party is an employee and/or director of Inovio, VGX or any of their subsidiaries at the Effective Time, the Lock-Up Restrictions shall no longer apply upon the termination of the Restricted Party's employment or directorship with the Surviving Entity or Inovio or any of their subsidiaries (the "*Primary Lock-up Period*").

(iv) The Lock-Up Restrictions shall apply to the shares of Inovio Common Stock issuable upon assumption and conversion of the VGX Convertible Debt from the Closing Date until the date that is six (6) months after the Closing Date, *provided, however*, that the Lock-Up Restrictions shall lapse as to fifty percent (50%) of the shares of Inovio Common Stock issuable upon assumption and conversion of the VGX Convertible Debt upon the three-month anniversary of the Closing Date (the "*Debt Lock-up Period*", and with the Primary Lock-Up Period, as applicable when referenced, the "*Lock-Up Period*(s)").

(v) To effect the Lock-up Restrictions as set forth in this *Section 1.7(h)*, upon Closing, Inovio will issue a stop order to its transfer agent with respect to the shares of Inovio Common Stock held by or issuable to the Restricted Parties, and the shares of Inovio Common Stock issued to the Restricted Parties in the Merger and thereafter during the Lock-Up Period shall bear the legend set forth below:

PURSUANT TO SECTION 1.7(h) OF THAT CERTAIN AMENDED AND RESTATED AGREEMENT AND PLAN OF MERGER BY AND AMONG INOVIO BIOMEDICAL CORPORATION, INOVIO ACQUISITION, LLC, AND VGX PHARMACEUTICALS, INC. DATED AS OF DECEMBER 5, 2008 (THE "MERGER AGREEMENT"), THE SHARES REPRESENTED BY THIS CERTIFICATE MAY NOT BE SOLD, ASSIGNED, EXCHANGED, TRANSFERRED, ENCUMBERED, PLEDGED, DISTRIBUTED OR OTHERWISE DISPOSED OF (OTHER THAN BY OPERATION OF LAW WHERE THE TRANSFEREE REMAINS SUBJECT TO AND BOUND BY THE PROVISIONS OF THE MERGER AGREEMENT APPLICABLE DURING THE LOCK-UP PERIOD) (THE "LOCK-UP RESTRICTIONS") PRIOR TO THE EXPIRATION OF THE APPLICABLE LOCK-UP PERIOD AS DEFINED IN THE MERGER AGREEMENT. UPON THE EXPIRATION OF THE LOCK-UP PERIOD THIS LEGEND SHALL BE VOID AND OF NO FURTHER EFFECT. THE ISSUER AGREES TO REMOVE THIS RESTRICTIVE LEGEND (AND ANY STOP ORDER PLACED WITH ITS TRANSFER AGENT) UPON THE EXPIRATION OF THE LOCK-UP PERIOD. A COPY OF THE MERGER AGREEMENT IS AVAILABLE FOR REVIEW AT THE PRINCIPAL EXECUTIVE OFFICE OF THE ISSUER.

Prior to the Closing Date, Inovio shall also obtain from the Chief Executive Officer of Inovio and shall, unless otherwise consented to by VGX, which consent shall not be unreasonably withheld, use its best efforts to obtain from all other Restricted Parties designated in *Section 1.7(h)(i)(d)* lock-up agreements in customary form detailing the Lock-Up Restrictions consistent with this *Section 1.7(h)*. Prior to the Closing Date, VGX shall also obtain from the Chief Executive Officer of VGX and shall, unless otherwise consented to by Inovio, which consent shall not be unreasonably withheld, use its best efforts to obtain from all other Restricted Parties designated in *Section 1.7(h)(i)(a)*. (c), except those who will hold Restricted Securities consisting of solely of shares of Inovio Common Stock issued at the Effective Time pursuant to the Merger, lock-up agreements in customary form detailing the Lock-Up Restrictions consistent with this *Section 1.7(h)*.

(vi) Inovio shall instruct its transfer agent to remove the stop order with respect to the shares of Inovio Common Stock issued upon assumption and conversion of the VGX Convertible Debt upon the expiration of the Debt Lock-Up Period, and shall instruct its transfer agent to remove the stop order with respect to all Restricted Securities held by the Restricted Parties upon the expiration of the Primary Lock-Up Period. Inovio shall also notify its transfer agent regarding the lapsed Lock-Up Restrictions as to Restricted Securities held by the Restricted Parties within five (5) business days of each of the anniversaries of the Closing Date referenced in *Sections 1.7(h)(iii) and (iv)*.

(vii) In no event shall any of the lock-up restrictions contained in this *Section 1.7(h)* restrict the transfer of the Restricted Securities pursuant to a tender offer, exchange offer or merger transaction relating to any shares of Inovio Common Stock subsequent to the Merger.

(i) *Voting Trust Agreement*. At the Effective Time, a total of 8,000,000 shares of Inovio Common Stock issued pursuant to *Sections 1.7(a)* shall be deposited into a voting trust to be



established concurrent with the Effective Time and maintained for a period of ten (10) years pursuant to a voting trust agreement in the form provided as *Exhibit C* hereto.

(j) Other Rights to VGX Common Stock. Inovio and VGX agree that at the Effective Time any contractual rights to receive shares of VGX Common Stock, other than the VGX Options, VGX Warrants and VGX Convertible Debt (which shall be assumed and converted in accordance with Sections 1.7(b) and (c) hereof) ("Other VGX Rights"), shall cease to represent a right to receive shares of VGX Common Stock in accordance with the terms and conditions of the contract providing such Other VGX Right and shall be converted into a right to receive a number of shares of Inovio Common Stock equal to (A) the number of shares of VGX Common Stock subject to such Other VGX Right immediately prior to the Effective Time multiplied by (B) the Merger Exchange Ratio, in accordance with the terms and conditions of the contract providing such Other VGX Right.

1.8 Dissenting Shares.

(a) If any VGX Stockholder entitled to appraisal rights under DGCL with respect to the Merger has properly exercised and perfected such appraisal rights pursuant to and in accordance with Section 262 of the DGCL, such holder shall, to the extent allowed under applicable Legal Requirements, be entitled to an appraisal by the Delaware Court of Chancery of the fair value of such VGX Stockholder's VGX Common Stock as provided in Section 262 of the DGCL, *provided* that such VGX Stockholder acts in accordance with and meets all the requirements of Section 262 of the DGCL. Prior to the Closing, Inovio, Submerger and VGX shall comply, and after the Closing, Inovio and the Surviving Entity shall comply, with the information delivery and other requirements pursuant to Section 262 of the DGCL and applicable Delaware law.

(b) Notwithstanding any other provision of this Agreement to the contrary, shares of VGX Common Stock that have not consented to or been voted for approval of, as applicable, the Merger and with respect to which such stockholders become entitled to, and do properly exercise dissenters' rights in accordance with Section 262 of DGCL ("*Dissenting Shares*"), will not be converted into or represent a right to receive consideration in connection with the Merger pursuant to *Section 1.7*, but will instead be converted into the right to receive such consideration as may be determined to be due with respect to such Dissenting Shares pursuant to the DGCL.

(c) If a holder of Dissenting Shares (a "*Dissenting Stockholder*") withdraws such holder's demand for such payment and appraisal or becomes ineligible for such payment and appraisal, then, as of the Effective Time or the occurrence of such event of withdrawal or ineligibility, whichever last occurs, such holder's Dissenting Shares will cease to be Dissenting Shares and will be converted into the right to receive, and will be exchangeable for, that portion of the Merger Consideration, without interest thereon, into which such Dissenting Shares would have been converted pursuant to *Section 1.7*.

(d) VGX will give Inovio and Submerger prompt notice of any written demands or withdrawals of dissenters' rights with regard to VGX Common Stock received prior to the Effective Time, and shall keep Inovio and Submerger reasonably apprised of the status of all negotiations and proceedings with respect to any such demands. VGX agrees that, except with the prior written consent of Inovio and Submerger (which consent shall not be unreasonably withheld or delayed), or as required under the DGCL, it will not make any payment with respect to, or settle or offer or agree to settle, any such demand for appraisal. Each Dissenting Stockholder who, pursuant to Section 262 of the DGCL, becomes entitled to payment of the fair value of the Dissenting Shares, will receive payment therefor from the Surviving Entity (but only after the value therefor has been agreed upon or finally determined pursuant to such provisions).

1.9 Exchange Procedures; Surrender of Certificates.

(a) *Exchange Agent*. Inovio's transfer agent, Computershare Trust Company, shall act as the exchange agent for the Merger (the "*Exchange Agent*").

(b) Inovio to Provide Merger Consideration.

(i) On or prior to the Effective Time, Inovio shall authorize the Exchange Agent to issue the Merger Shares in exchange for the outstanding shares of VGX Common Stock in accordance with this *Article I* upon the Effective Time, such shares to be held by the Exchange Agent in a fund (the "*Exchange Fund*") to be distributed in accordance with this *Section 1.9*.

(c) *Exchange Procedures.* Within three (3) business days following the Effective Time, Inovio shall cause the Exchange Agent to mail to each holder of record (as of the Effective Time) of a certificate or certificates (the "*Certificates*"), which immediately prior to the Effective Time represented outstanding shares of VGX Common Stock and which shares were converted into the right to receive the per share applicable consideration, pursuant to *Section 1.7*: (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Certificates shall pass, only upon delivery of the Certificates to the Exchange Agent and shall be in such form and have such other provisions as the Exchange Agent, VGX and Inovio may reasonably specify) and (ii) instructions for use in effecting the surrender of the Certificates (including a means of hand-delivery) in exchange for the applicable consideration as set forth in *Section 1.7*. In addition, at the Closing, Inovio shall make available to VGX Stockholders the documents set forth in clauses (i) and (ii) of the preceding sentence. Promptly after surrender of Certificates for cancellation to the Exchange Agent, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto and such other documents as may be reasonably specified in the letter of transmittal, the holder of record of such Certificates shall receive in exchange therefor the applicable consideration as set forth in *Section 1.7* in respect of each share of VGX Common Stock represented thereby, and the Certificates so surrendered shall forthwith be canceled. Until so surrendered, outstanding Certificates will be deemed from and after the Effective Time, for all corporate purposes, to evidence the ownership of the applicable consideration as set forth in *Section 1.7*, into which such shares of VGX Common Stock shall have been so converted.

(d) *Required Withholding.* Each of the Exchange Agent and the Surviving Entity shall be entitled to deduct and withhold from any consideration payable or otherwise deliverable pursuant to this Agreement to any holder or former holder of VGX Common Stock such amounts as may be required to be deducted or withheld there from under the Code or under any provision of state, local or foreign Tax law or under any other applicable legal requirement. To the extent such amounts are so deducted or withheld, the amount of such consideration shall be treated for all purposes under this Agreement as having been paid to the Person to whom such consideration would otherwise have been paid.

(e) *No Liability*. Notwithstanding anything to the contrary in this *Section 1.9*, neither the Exchange Agent, the Surviving Entity nor any party hereto shall be liable to a holder of shares of VGX Common Stock for any shares properly distributed to a public official pursuant to any applicable abandoned property, escheat or similar law.

(f) *Distributions With Respect to Unexchanged Shares*. No dividends or other distributions declared or made after the date of this Agreement with respect to Inovio Common Stock with a record date after the Effective Time will be paid to the holders of any unsurrendered Certificates with respect to the shares of Inovio Common Stock represented thereby until the holders of record of such Certificates shall surrender such Certificates. Subject to applicable Legal Requirements, following surrender of any such Certificates, the Exchange Agent shall deliver to the record

holders thereof, in exchange therefor, without interest, certificates representing whole shares of Inovio Common Stock issued, and the amount of any such dividends or other distributions with a record date after the Effective Time payable with respect to such whole shares of Inovio Common Stock.

(g) *Transfers of Ownership.* If certificates representing Merger Shares are to be issued in a name other than that in which the Certificates surrendered in exchange therefor are registered, it will be a condition of the issuance and payment thereof that the Certificates so surrendered will be properly endorsed and otherwise in proper form for transfer and that the Persons requesting such exchange will have paid to Inovio or any agent designated by it any transfer or other Taxes required by reason of the issuance of certificates representing Merger Shares in any name other than that of the registered holder of the Certificates surrendered, or established to the satisfaction of Inovio or any agent designated by it that such Tax has been paid or is not payable.

(h) *Termination of Exchange Fund.* Any portion of the Exchange Fund that remains undistributed to the holders of Certificates eighteen (18) months after the Closing, at the request of Inovio, shall be delivered to Inovio, and any holders of the Certificates who have not surrendered such Certificates in compliance with this *Section 1.9* shall after such delivery to Inovio look only to Inovio for the shares of Inovio Common Stock issuable pursuant to *Section 1.7* hereof, cash in lieu of any fractional shares and any dividends or other distributions pursuant to *Section 1.9(f)* with respect to the shares of VGX Common Stock formerly represented thereby, and Inovio shall be responsible for such payment. Any such portion of the Exchange Fund remaining unclaimed by holders of shares of VGX Common Stock immediately prior to such time as such amounts would otherwise escheat to or become property of any Governmental Entity shall, to the extent required by applicable Legal Requirements, so escheat to or become property of such Governmental Entity.

1.10 No Further Ownership Rights in VGX Common Stock or Interest in Surviving Entity. The Merger Consideration paid pursuant to the Merger upon the surrender for exchange of shares of VGX Common Stock in accordance with the terms hereof shall be deemed to have been paid in full satisfaction of all rights pertaining to such shares of VGX Common Stock, and there shall be no further registration of transfers on the records of the Surviving Entity of shares of VGX Common Stock that were outstanding immediately prior to the Effective Time nor any allocation of membership interests in the Surviving Entity with respect to such shares of VGX Common Stock. If, after the Effective Time, Certificates are presented to the Surviving Entity for any reason, they shall be canceled and exchanged as provided in this Article I.

1.11 Lost, Stolen or Destroyed Certificates. In the event any Certificates evidencing shares of VGX Common Stock shall have been lost, stolen or destroyed, the Exchange Agent shall deliver in exchange for such lost, stolen or destroyed Certificates, upon receiving notice from the holder thereof and upon the making of an affidavit of that fact by such holder, such amount as may be required pursuant to Section 1.7 hereof; provided, however, that Inovio may, in its discretion and, as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed Certificates to deliver an agreement of indemnity against any claim that may be made against Inovio, the Exchange Agent or the Surviving Entity with respect to the Certificates alleged to have been lost, stolen or destroyed.

1.12 *Further Action.* At and after the Effective Time, the officers and directors of Inovio and the Surviving Entity will be authorized to execute and deliver, in the name and on behalf of VGX and the Submerger, as the case may be, any deeds, bills of sale, assignments or assurances and to take and do, in the name and on behalf of VGX and the Submerger, any other actions and things to vest, perfect or confirm of record or otherwise in the Surviving Entity any and all right, title and interest in, to and

under any of the rights, properties or assets acquired or to be acquired by the Surviving Entity as a result of, or in connection with, the Merger.

1.13 *Effect of Merger on Inovio Securities.* The Closing shall not have any effect on the Inovio Securities outstanding prior to the Effective Time, *except* that the Closing shall constitute a "Change of Control" or "Change in Control" as such terms are used in the Inovio Incentive Plans and related agreement, in the Inovio Charter Documents and in the Inovio Warrants, resulting in:

(a) Subsequent to the 2000 Plan Amendment as contemplated by Section 5.2(a)(i) hereof, the acceleration of vesting for the Inovio Options;

(b) As disclosed in *Section 3.2(a)* of the Inovio Disclosure Letter, the potential redemption or conversion of some or all of the shares of outstanding Inovio Series C Cumulative Convertible Preferred Stock pursuant to the terms and conditions set forth in the Certificate of Designations, Rights and Preferences of the Inovio Series C Cumulative Convertible Preferred Stock; at the discretion of each holder of shares of the Inovio Series C Cumulative Convertible Preferred Stock; and

(c) As disclosed in Section 3.2(c) of the Inovio Disclosure Letter, the potential redemption of certain of the Inovio Warrants.

ARTICLE II REPRESENTATIONS AND WARRANTIES OF VGX

VGX represents and warrants to Inovio and Submerger, subject to such exceptions and disclosures as set forth in the disclosure letter supplied by VGX to Inovio and Submerger dated as of the date of the Prior Agreement and an updated disclosure letter as of the date hereof (together, the "*VGX Disclosure Letter*"), as follows:

2.1 Organization; Standing and Power; Charter Documents; Subsidiaries.

(a) Organization; Standing and Power. VGX and each of its Subsidiaries (as defined below) (i) is a corporation or other organization duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization (except, in the case of good standing, for entities organized under the laws of any jurisdiction that does not recognize such concept), (ii) has the requisite power and authority to own, lease and operate its properties and to carry on its business as now being conducted, and (iii) is duly qualified or licensed and in good standing to do business and is in good standing (where applicable) in each jurisdiction in which the nature of its business or the ownership or leasing of its properties makes such qualification or licensing necessary, other than in such jurisdictions where the failure to be so qualified or licensed or to be in good standing, would, individually or in the aggregate, not reasonably be expected to have a Material Adverse Effect on VGX. For purposes of this Agreement, "Subsidiary," when used with respect to any party, shall mean any corporation or other organization, whether incorporated or unincorporated or domestic or foreign to the United States, of which either (i) at least a majority of the securities or other interests having by their terms ordinary voting power to elect a majority of the Board of Directors or others performing similar functions with respect to such corporation or other organization is, directly or indirectly, owned or controlled by such party or by any one or more of its Subsidiaries, or (ii) would qualify as a "significant subsidiary" pursuant to Rule 405 promulgated under the Securities Act.

(b) *Charter Documents.* VGX has delivered or made available to Inovio: (i) a true and correct copy of the Certificate of Incorporation and By-Laws of VGX, each as amended to date (collectively, the "*VGX Charter Documents*") and (ii) true and correct copies of the Certificate of Incorporation and By-Laws, or like organizational documents (collectively, "*VGX Subsidiary Charter Documents*"), of each of its Subsidiaries each as amended to date, and each such instrument is in full force and effect. VGX is not in violation of any of the provisions of the VGX Charter Documents and each Subsidiary is not in violation of its respective VGX Subsidiary Charter Documents.

(c) Subsidiaries. Section 2.1(c) of the VGX Disclosure Letter sets forth each Subsidiary of VGX as of the date hereof, and lists the directors and officers of each such Subsidiary as of the date hereof. All the outstanding shares of capital stock of, or other equity or voting interests in, each such Subsidiary have been duly authorized, validly issued and are fully paid and nonassessable, and are owned by VGX, a wholly-owned Subsidiary of VGX, or VGX and another wholly-owned Subsidiary of VGX, free and clear of all pledges, claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever (collectively, "Liens"), other than liens for taxes not yet due and payable, except for restrictions imposed by applicable securities laws. Other than the Subsidiaries of VGX, neither VGX nor any of its Subsidiaries owns any capital stock of, or other equity or voting interests of any nature in, or any interest convertible, exchangeable or exercisable for, capital stock of, or other equity or voting interests of any nature in, any other Person.

2.2 Capital Structure.

(a) *Capital Stock.* The authorized capital stock of VGX consists of: (i) 100,000,000 shares of VGX Common Stock, par value \$0.0001 per share and (ii) 1,000,000 shares of VGX Preferred Stock, par value \$0.0001 per share. At the close of business on the date hereof: (i) 41,670,239 shares of VGX Common Stock were issued and outstanding; (ii) no shares of VGX Preferred Stock were issued and outstanding; (iii) 9,816,674 shares of VGX Common Stock were reserved for issuance upon exercise of outstanding options granted pursuant to the VGX Option Plan; (iv) 5,017,733 shares of VGX Common Stock were reserved for issuance upon conversion of outstanding notes evidencing the VGX Convertible Debt. No shares of VGX Common Stock are owned or held by any Subsidiary of VGX. All of the outstanding shares of capital stock of VGX are, and all shares of capital stock of VGX which may be issued pursuant to the VGX Options, the VGX Warrants or the VGX Convertible Debt will be, when issued in accordance with the respective terms thereof, duly authorized and validly issued, fully paid and nonassessable and not subject to any preemptive rights. No outstanding shares of VGX Preferred Stock are to a repurchase option or risk of forfeiture in favor of VGX. VGX has no obligation to issue any shares of the VGX Preferred Stock and the VGX Preferred Stock is not subject to any demand rights.

(b) *Stock Options.* Except for the VGX Option Plan, VGX does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity or equity-based compensation for any Person. VGX has a current reserve of 450,826 shares of VGX Common Stock available for issuance under the VGX Option Plan, 9,816,674 shares are subject to outstanding VGX Options, and VGX has made available to Inovio accurate and complete copies of the VGX Option Plan and all amendments thereto, and the forms of all notices and agreements related thereto. *Section 2.2(b)* of the VGX Disclosure Letter sets forth a true, complete and correct list of all persons who, at the close of business on the date hereof, hold outstanding VGX Options under the VGX Option Plan indicating, with respect to each VGX Option then outstanding number of shares of VGX Common Stock subject to such VGX Option, and the exercise price, date of grant and vesting schedule thereof. The vesting of the VGX Options will

not be accelerated in any way by the consummation of the transactions contemplated by this Agreement or by the termination of employment or engagement or change in position of any holder thereof following or in connection with the Merger.

(c) *Warrants.* 5,017,733 shares are reserved for issuance upon exercise of the VGX Warrants outstanding as of the date of this Agreement and VGX has made available to Inovio accurate and complete copies of all of the VGX Warrants outstanding as of the date hereof. *Section* 2.2(c) of the VGX Disclosure Letter sets forth a true, complete and correct list of all persons who, at the close of business on the date hereof, hold outstanding VGX Warrants indicating, with respect to each VGX Warrant then outstanding, the number of shares of VGX Common Stock subject to such VGX Warrant, and the exercise price, date of grant and expiration date thereof. There is no vesting schedule applicable to any VGX Warrant.

(d) *VGX Debt and VGX Convertible Debt.* As of the date of this Agreement, VGX has made available to Inovio accurate and complete copies of all of the notes evidencing the VGX Debt and VGX Convertible Debt outstanding as of the date hereof. *Section 2.2(d)* of the VGX Disclosure Letter sets forth a true, complete and correct list of all persons who, at the close of business on the date hereof, hold outstanding VGX Debt and VGX Convertible Debt indicating, with respect to each note evidencing such VGX Debt and VGX Convertible Debt then outstanding, the date of issuance, the amount of interest accrued to date, the maturity date thereof, whether and to what extent the notes will be subject to repayment in full prior to or mandatory conversion in relation to the consummation of the transactions contemplated by this Agreement, and, with respect to the VGX Convertible Debt, the number of shares issuable upon conversion of such note. The VGX Debt is not convertible into VGX Common Stock or other securities, of VGX or any other party, on its terms and requires repayment on or prior to the stated maturity dates for satisfaction of the debt owed. 4,190,476 shares are reserved for issuance upon conversion of the VGX Convertible Debt outstanding as of the date of this Agreement.

(e) Other Securities. Except as otherwise set forth above in this Section 2.2, as of the date hereof, there are no securities, options, warrants, calls, rights, contracts, commitments, agreements, instruments, arrangements, understandings, obligations or undertakings of any kind to which VGX or any of its Subsidiaries other than VGX International, Inc. ("VGXI"), or to the Knowledge of VGX, to which VGXI, is a party or by which any of them is bound obligating VGX or any of its Subsidiaries to (including on a deferred basis) issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock or other voting securities of VGX or any of its Subsidiaries, or obligating VGX or any of its Subsidiaries to issue, grant, extend or enter into any such security, option, warrant, call, right, commitment, agreement, instrument, arrangement, understanding, obligation or undertaking. All outstanding shares of VGX Common Stock, all outstanding VGX Options, outstanding VGX Warrants, outstanding VGX Debt, outstanding VGX Convertible Debt and all outstanding shares of capital stock of each Subsidiary of VGX other than VGXI, and to the Knowledge of VGX, of VGXI, have been issued and granted in compliance in all material respects with (i) all applicable corporate and securities laws and (ii) all requirements set forth in applicable material Contracts. There are not any outstanding Contracts of VGX or any of its Subsidiaries other than VGXI, or to the Knowledge of VGX, of VGXI, to (i) repurchase, redeem or otherwise acquire any shares of capital stock of, or other equity or voting interests in, VGX or any of its Subsidiaries or (ii) dispose of any shares of the capital stock of, or other equity or voting interests in, any of its Subsidiaries. VGX is not a party to any voting agreement with respect to shares of the VGX Capital Stock of, or other equity or voting interests in, VGX or any of its Subsidiaries and, there are no irrevocable proxies and no voting agreements, voting trusts, rights plans or anti-takeover plans with respect to any shares of the capital stock of, or other equity or voting interests in, VGX or any of its Subsidiaries other than VGXI, or to the Knowledge of VGX, of or in VGXI.

2.3 Authority; Non-Contravention; Necessary Consents.

(a) *Authority.* VGX has all requisite corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby by VGX has been duly authorized by all necessary corporate action on the part of VGX and no other corporate proceedings on the part of VGX are necessary to authorize the execution and delivery of this Agreement or to consummate the Merger and the other transactions contemplated hereby. The affirmative vote of the holders of a majority of the outstanding shares of VGX Common Stock to approve and adopt this Agreement are the only votes of the holders of any class or series of VGX Capital Stock necessary to approve and adopt this Agreement, approve the Merger and consummate the Merger and the other transactions contemplated hereby. This Agreement has been duly executed and delivered by VGX and, assuming due execution and delivery by Inovio and Submerger, constitutes a valid and binding obligation of VGX, enforceable against VGX in accordance with its terms, except to the extent that enforceability may be limited by the effect of (i) any applicable Legal Requirement with respect to bankruptcy, insolvency, reorganization, moratorium, or other similar Legal Requirement, and (ii) general equitable principles, regardless of whether such enforceability is considered in a proceeding at law or equity.

(b) Non-Contravention. The execution and delivery of this Agreement by VGX does not, and performance of this Agreement by VGX will not: (i) conflict with or violate VGX Charter Documents or any VGX Subsidiary Charter Documents, (ii) subject to obtaining the approval and adoption of this Agreement by the VGX Stockholders as contemplated in *Section 2.3(a)* and compliance with the requirements set forth in *Section 2.3(c)*, conflict with or violate any material Legal Requirement applicable to VGX or any of its Subsidiaries or by which VGX or any of its Subsidiaries or any of their respective properties is bound or affected, or (iii) require VGX to obtain any consent, approval, or notice under, or result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair VGX's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of VGX or any of its Subsidiaries pursuant to any VGX Scheduled Contract (as defined in *Section 2.14(a)*), other than, in the case of (iii) above, such breaches, defaults, impairments, rights of termination, amendment, acceleration or cancellation, or Liens that would not be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect on VGX or any of its Subsidiaries or, in the case of Liens, that constitute Permitted Liens.

(c) *Necessary Consents.* Other than obtaining the approval and adoption of this Agreement by the VGX Stockholders as contemplated in *Section 2.3(a)*, no consent, approval, order or authorization of, or registration, declaration or filing with any Governmental Entity or any other Person is required to be obtained by VGX in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated thereby, except for (i) the filing of the Certificate of Merger with the Secretary of State of Delaware, (ii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities laws and the Hart Scott Rodino Antitrust Improvements Act of 1976, as amended (the "*HSR Act*"), if any, and (iii) such other consents, authorizations, filings, approvals and registrations which, if not obtained or made, would not reasonably be expected to be material to VGX or any of its Subsidiaries or have a Material Adverse Effect on the ability of the parties to consummate the Merger.

2.4 Records; Financial Information.

(a) VGX's books of account and related records accurately reflect, in all material respects, VGX's assets, liabilities, revenues, expenses and other transactions. The books of account of VGX

represent bona fide transactions and have been maintained in accordance with what VGX commercially reasonably believes to be sound business practices.

(b) The minute books of VGX contain accurate and complete records of all meetings held of, and material corporate action taken by, the stockholders, the Board of Directors of VGX, and committees of the Board of Directors of VGX. All minute books of VGX have been made available to Inovio and, at Closing, will be in the possession of the Surviving Entity.

(c) VGX has made available or will, pursuant to Section 5.19 hereof, make available to Inovio true and complete copies of (i) consolidated balance sheets for VGX at December 31, 2005, 2006 and 2007, and the related consolidated statements of operations, changes in stockholders equity and cash flows for each of the fiscal years then ended, (ii) the unaudited consolidated balance sheets of VGX at the end of each quarter since January 1, 2007 and 2008 and at the end of each month since January 1, 2008 through the date of this Agreement, and the related unaudited consolidated statements of operations, changes in stockholders equity and cash flows for each of the fiscal quarters then ended, which interim quarterly financial statements since January 1, 2007 shall have been reviewed by VGX's independent accountants in accordance with Statement of Accounting Standards No. 71 (collectively, the "VGX Financials"). The VGX Financials (i) have been prepared in accordance with United States generally accepted accounting principles ("US GAAP") (except that unaudited financial statements do not have notes thereto) applied on a consistent basis throughout the periods indicated and (ii) present fairly, in all material respects, the consolidated financial condition and results of operations of VGX and its Subsidiaries at the dates and for the relevant periods indicated, subject to normal and recurring year-end audit adjustments which have not been and are not expected to be material in scope or amount, individually or in the aggregate. The VGX Financials have been prepared from, and are in accordance with, the accounting records of VGX. VGX has also delivered to Inovio copies of all letters from VGX's auditors to the VGX Board or the audit committee thereof during the thirty-six (36) months preceding the execution of this Agreement, together with copies of all responses thereto. No financial statements of any Person other than VGX and its Subsidiaries are required under US GAAP to be included in the VGX Financials. VGX maintains a standard system of accounting established and administered in accordance with US GAAP. VGX's consolidated unaudited balance sheet as of April 30, 2008 is referred to as the "VGX Balance Sheet."

(d) VGX and its Subsidiaries maintain a system of internal accounting controls and disclosure controls and procedures sufficient to provide reasonable assurance that (i) transactions are executed with management's authorization, where such authorization is required by the company's policies and procedures (ii) transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with US GAAP, and (iii) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

2.5 Absence of Certain Changes or Events. Since the date of VGX Balance Sheet, VGX and each of its Subsidiaries has conducted its business in the ordinary course consistent with past practice and, since such date, (i) with respect to VGX and its Subsidiaries other than VGXI there has not been or (ii) with respect to VGXI only, to the Knowledge of VGX, there has not been nor has VGX been asked to act in any management or stockholder capacity to allow for or approve:

- (a) any Material Adverse Effect on VGX on any of its Subsidiaries;
- (b) any resignation or termination by VGX or any of its Subsidiaries of any executive officer or director;

(c) any written notice of any actual or threatened termination by any material customer, supplier, partner, licensor, licensee or other third party having business relations with VGX or any of its Subsidiaries;

(d) any damage, destruction or loss (whether or not covered by insurance) materially and adversely affecting any of the material assets, or any material portion of the assets, of VGX or any of its Subsidiaries or materially and adversely affecting the business of VGX or any of its Subsidiaries;

(e) any commencement of Legal Proceedings against VGX or any of its Subsidiaries, and no Person has notified VGX or any of its Subsidiaries in writing that it, and there is no reason to reasonably believe that any Person, intends to commence a Legal Proceeding;

(f) any material increase in the compensation payable to any officer or director of VGX (other than increases in each case in connection with general performance reviews and annual salary increases in each case in the ordinary course of business and consistent with past practices, or pursuant to existing contractual commitments), including the making of any loan to such person (other than advancement of routine travel, entertainment and other business expenses);

(g) any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the Securities and Exchange Commission (the "SEC");

(h) any sale, lease, license, assignment or exclusive license of any properties or assets, tangible or intangible (including, without limitation, Intellectual Property), or any encumbrance (excluding Permitted Liens) of any properties or assets, tangible or intangible (including, without limitation, Intellectual Property), other than sales or licenses in the ordinary course of VGX's business or the business of any of its Subsidiaries and other than with respect to tangible assets transactions involving less than \$500,000 in any one case or \$1,000,000 in the aggregate;

(i) any material change by VGX or any of its Subsidiaries in its accounting methods, principles or practices, except as required by concurrent changes in US GAAP;

(j) any material revaluation by VGX or any of its Subsidiaries of any of its assets, including writing down the value of capitalized inventory or writing off notes or accounts receivable other than in the ordinary course of business;

(k) any establishment, termination or amendment of any VGX Employee Plan;

(l) any material increase of severance or termination pay to any employee of VGX or any Subsidiary of VGX;

(m) any declaration, setting aside or payment of any dividend on, or other distribution (whether in cash, stock, equity securities or property) in respect of, any of VGX Capital Stock or any capital stock of its Subsidiaries;

(n) any purchase, redemption or other acquisition by VGX or any of its Subsidiaries of any of VGX Capital Stock or any other securities of VGX or its Subsidiaries or any options, warrants, calls or rights to acquire any such shares or other securities except for repurchases from VGX Employees following their termination pursuant to the terms of their pre-existing stock option or purchase agreements;

(o) any issuance or reservation for issuance by VGX or any of its Subsidiaries of, or commitment of it to issue or reserve for issuance, or the pledge or other encumbrance (excluding Permitted Liens) by it of, any shares of capital stock or other securities or obligations or securities convertible into or exchangeable for shares of capital stock or other securities, or issuance, sale or authorization by it of any subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into capital stock, other than (i) the issuance, delivery and/or

sale of shares of VGX Common Stock pursuant to the exercise of VGX Options, (ii) the granting of options to purchase VGX Common Stock in the ordinary course of business under the VGX Option Plan, and (iii) issuances upon exercise of VGX Warrants or other rights disclosed pursuant to *Section 2.2*;

(p) any split, combination or reclassification of any of VGX Capital Stock or the capital stock of any of its Subsidiaries' or issuance or authorization of issuance of any other securities in respect of, in lieu of or in substitution for any VGX Capital Stock or the capital stock of any of its Subsidiaries;

(q) any amendment of the Certificate of Incorporation or By-Laws of VGX;

(r) any capital expenditure or execution of any lease by VGX involving remaining payments or obligations in excess of \$500,000 individually or \$1,000,000 in the aggregate;

(s) any cancellation by VGX or any of its Subsidiaries of any indebtedness or waiver of any rights material to VGX, except in the ordinary course of business;

(t) any indebtedness incurred or guaranteed by VGX or any of its Subsidiaries for borrowed money or any commitment to borrow money entered into by VGX or any of its Subsidiaries in excess of \$500,000, or any loans made or agreed to be made by VGX or any of its Subsidiaries, other than reasonable travel and entertainment expense advances and trade accounts receivable in the ordinary course of business;

- (u) any commencement of Legal Proceedings by VGX or any of its Subsidiaries;
- (v) any acquisition or disposition of any equity interest in any other Person; or
- (w) any agreement by VGX or any of its Subsidiaries to do any of the foregoing.

2.6 Taxes.

(a) *Definition.* For the purposes of this Agreement, the term "*Tax*" or, collectively, "*Taxes*" shall mean any and all federal, state, local and foreign taxes and other like governmental charges, including taxes based upon or measured by gross receipts, income, profits, sales, use and occupation, and value added, ad valorem, transfer, franchise, withholding, payroll, recapture, employment, excise and property taxes, together with all interest, penalties and additions imposed with respect to such amounts.

(b) Tax Returns and Audits.

(i) VGX and each of its Subsidiaries have prepared and timely filed all required federal, state, local and foreign returns, estimates, information statements and reports ("*Tax Returns*") relating to any and all Taxes concerning or attributable to VGX or its Subsidiaries and such Tax Returns are accurate and complete in all material respects. VGX and/or its Subsidiaries have paid or accrued all Taxes shown on such Tax Returns.

(ii) VGX and each of its Subsidiaries have paid all Taxes required to be paid and withheld with respect to their employees (and paid over to the appropriate Taxing authority) all federal and state income taxes, Federal Insurance Contribution Act, Federal Unemployment Tax Act and other Taxes required to be withheld.

(iii) There is no Tax deficiency outstanding, assessed or proposed against VGX or any of its Subsidiaries, and neither VGX nor any Subsidiary is a party to any action or proceeding for the assessment or collection of Taxes, nor has VGX or any of its Subsidiaries executed any outstanding waiver of any statute of limitations on or outstanding extension of the period for the assessment or collection of any Tax.

(iv) No audit or other examination of any Tax Return of VGX or any of its Subsidiaries is presently in progress, nor has VGX or any of its Subsidiaries been notified (in writing) that any Taxing authority is threatening or planning to initiate such an audit or other examination. No written claim has ever been asserted by a Governmental Entity in a jurisdiction where VGX or any Subsidiary does not file Tax Returns that such entity is or may be subject to taxation by that jurisdiction.

(v) As of the date of the VGX Balance Sheet, neither VGX nor any of its Subsidiaries has any material liabilities for unpaid Taxes, which have not been accrued or reserved on the VGX Balance Sheet in accordance with US GAAP, and since the date of the VGX Balance Sheet, neither VGX nor any of its Subsidiaries has incurred any liability for Taxes other than in the ordinary course of business.

(vi) There are no Liens (except for Permitted Liens) on the assets of VGX or any of its Subsidiaries relating to or attributable to Taxes.

(vii) Neither VGX nor any of its Subsidiaries is, nor has been at any time, a "United States Real Property Holding Corporation" within the meaning of Section 897(c)(2) of the Code.

(viii) Neither VGX nor any of its Subsidiaries (A) has ever been a member of an affiliated group (within the meaning of Code Section 1504(a)) filing a consolidated federal income Tax Return (other than a group the common parent of which was VGX), (B) owes any amount under, or is a party to, any Tax sharing, indemnification or allocation agreement (other then between or among VGX and any of its Subsidiaries), (C) has any liability for the Taxes of any person (other than VGX or any of its Subsidiaries) under Treas. Reg. § 1.1502-6 (or any similar provision of state, local or foreign law), as a transferee or successor, by contract, or otherwise.

(ix) Neither VGX nor any of its Subsidiaries has constituted either a "distributing corporation" or a "controlled corporation" in a distribution of stock intended to qualify for tax-free treatment under Section 355 of the Code (A) in the two years prior to the date of this Agreement or (B) in a distribution which could otherwise constitute part of a "plan" or "series of related transactions" (within the meaning of Section 355(e) of the Code) in conjunction with the Merger.

(x) VGX has made available to Inovio true and complete copies of (i) income and sales tax audit reports, statements of deficiencies, and closing or other agreements relating to VGX's or any Subsidiary's Taxes, and (ii) all federal, state and local income or franchise tax returns for VGX and all its Subsidiaries for all periods ending on or before the date of this Agreement.

(xi) There are no Tax-sharing agreements or similar arrangements (including Tax indemnity arrangements) with respect to or involving VGX or any Subsidiaries other than this Agreement.

(xii) Neither VGX nor any Subsidiary has participated in (i) any "tax shelter" within the meaning of Section 6111 (as in effect prior to the enactment of P.L. 108-357 or any comparable laws of jurisdictions other than the United States), or (ii) a reportable transaction as described in U.S. treasury regulations promulgated under Section 6011 of the Code or any comparable laws of jurisdictions other than the United States.

(xiii) Based on good faith interpretations of Code Section 409A and IRS guidance thereunder, to VGX's Knowledge, neither VGX nor any Subsidiary has, since October 3, 2004, (i) granted to any person an interest in a nonqualified deferred compensation plan (as

defined in Code Section 409A(d)(1)) which interest has been or, upon the lapse of a substantial risk of forfeiture with respect to such interest, will be subject to the Tax imposed by Code Sections 409A(a)(1)(B) or (b)(4)(A), or (ii) modified the terms of any nonqualified deferred compensation plan in a manner that could cause an interest previously granted under such plan to become subject to the Tax imposed by Code Sections 409A(a)(1)(B) or (b)(4).

(xiv) Neither VGX nor any Subsidiary will be required to include any material item of income in, or exclude any material item of deduction from, its taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (i) adjustment under Code Section 481 with respect to a change in method of accounting for a taxable period ending on prior to the Closing Date, (ii) "closing agreement" as described in Code Section 7121 (or any corresponding state, local or foreign Legal Requirement), (iii) intercompany transactions or any excess loss account described in the United States Treasury Regulations under Code Section 1502 (or any corresponding state, local or foreign Legal Requirements, in either case, is attributable to transactions or other events occurring prior to the Closing Date), (iv) installment sale or open transaction disposition made on or prior to the Closing Date or (v) prepaid amount received on or prior to the Closing Date.

2.7 Intellectual Property.

(a) Definitions. For the purposes of this Agreement, the following terms have the following meanings:

(i) "Intellectual Property" means any or all of the following intellectual property rights in, arising out of, or associated therewith: (A) all United States, international and foreign patents and applications, including petty patents and utility models and applications therefor and all reissues, divisions, renewals, extensions, re-examinations, provisionals, continuations and continuations-in-part thereof; (B) all inventions (whether patentable or not), invention disclosures, improvements, trade secrets, proprietary information, know how, technology, technical data and customer lists, confidential communications with Governmental Entities, and all documentation relating to any of the foregoing; (C) all copyrights, whether registered or unregistered, copyright applications, and all derivative works, and all other rights corresponding thereto throughout the world; (D) all biological materials, bioassays, cell lines, clones, molecules, protocols, reagents, experiments, lab results, clinical trial results, tests and all other tangible or intangible proprietary information; (E) all computer programs, operating systems, applications systems, firmware or software of any nature, whether operational, under development or inactive including all object code, source code, comment code, algorithms, design tools, user interfaces, application programming interfaces (APIs), protocols, formats, prototypes, menu structures or arrangements, icons, operational instructions, scripts, commands, syntax, screen designs, reports, designs, concepts, technical manuals, test scripts, user manuals and other documentation therefor, whether in machine-readable form, programming language or any other language or symbols, and whether stored, encoded, recorded or written on disk, tape, film, memory device, paper or other media of any nature and all data bases necessary or appropriate to operate any such computer program, operating system, applications system, firmware or software.; (F) all industrial designs and any registrations and applications therefor throughout the world; (G) any name, corporate name, domain name, fictitious name, trademark, trademark application, service mark, service mark application, trade name, brand name, product name, logo, product right, design, slogan, all common law rights relating thereto, and all goodwill associated therewith throughout the world; (H) any invention, technology or other intangible asset of any nature, whether in use, under development or design, or inactive; (I) all databases and data collections and all rights therein throughout the world; (J) all mask work rights and registrations and applications



thereof throughout the world; (K) all moral and economic rights of authors and inventors, however denominated, throughout the world; and (L) any similar or equivalent rights to any of the foregoing anywhere in the world.

(ii) "*VGX Intellectual Property*" means all Intellectual Property that is owned in whole or in part by, or licensed, exclusively or nonexclusively, to VGX or any of its Subsidiaries, including VGX Registered Intellectual Property, *except* for Intellectual Property owned by or licensed to VGXI not used, or contemplated for use, in the business of VGX or its other Subsidiaries.

(iii) "*Registered Intellectual Property*" means all United States, international and foreign: (A) patents and patent applications (including provisional applications); (B) registered trademarks and service marks, applications to register trademarks and service marks, intent-to-use applications, or other registrations or applications related to trademarks and service marks; (C) registered copyrights and applications for copyright registration; and (D) any other Intellectual Property that is the subject of an application, certificate, filing, registration or other document issued, filed with, or recorded by any Governmental Entity.

(iv) "*VGX Registered Intellectual Property*" means all of the Registered Intellectual Property owned in whole or in part by, or licensed exclusively or nonexclusively to, or filed in the name of, VGX or any of its Subsidiaries, *except* for Registered Intellectual Property owned by or licensed to VGXI not used, or contemplated for use, in the business of VGX or its other Subsidiaries.

(v) "*Open Source Software*" means any software that (A) contains, or is derived in any manner (in whole or in part) from, any software that is distributed as free software, public source, shareware, open source software (*e.g.*, Linux) or (B) requires as a condition of its use, modification or distribution that it be disclosed or distributed in source code form or made available at no charge. "Open Source Software" includes software licensed under or distributed pursuant to the GNU's General Public License (GPL) or Lesser/Library GPL, the Mozilla Public License, the Netscape Public License, the Sun Community Source License, the Sun Industry Standards License, the Artistic License (*e.g.* PERL), the BSD License, the OpenSSL License, and the Apache License, or any license or distribution model similar to any of the foregoing.

(b) VGX Intellectual Property. Section 2.7(b) of the VGX Disclosure Letter contains an accurate and complete list and description of all VGX Intellectual Property. The VGX Intellectual Property constitutes all Intellectual Property that is necessary for or used in the operation of VGX's business or the business of any of its Subsidiaries as conducted as of the date hereof or as anticipated to be conducted prior to and at the Effective Time. Section 2.7(b)(i) of the VGX Disclosure Letter contains a list of VGX Intellectual Property corresponding to a specific subset of items contemplated by subparagraphs (A), (B), (C), (G) and (J) of Section 2.7(a)(i), and further contains correct and complete data regarding Contracts, documentation, and/or records pertaining thereto, including without limitation correct and complete data evidencing ownership and status of each recited item as of the date hereof.

(c) *Registered Intellectual Property; Proceedings.* Section 2.7(c) of the VGX Disclosure Letter sets forth as of the date hereof (i) all VGX Registered Intellectual Property and specifies, where applicable, the jurisdictions in which each such item of VGX Registered Intellectual Property has been issued or registered and (ii) to the Knowledge of VGX, all proceedings or actions before any court, tribunal or inventorship contest before any administrative body (including the United States Patent and Trademark Office (the "**PTO**") or equivalent authority anywhere else in the world) related to any of VGX Registered Intellectual Property.

(d) *No Order; Transferability.* No VGX Intellectual Property that is owned by VGX or any of its Subsidiaries, and to the Knowledge of VGX, no VGX Intellectual Property that is licensed by VGX or any of its Subsidiaries, is subject to any proceeding or outstanding order, Contract, Legal Requirement or stipulation restricting in any manner the use, transfer (including, without limitation, as contemplated by this Agreement), enforceability or licensing thereof by VGX or any of its Subsidiaries, or which may affect the validity thereof.

(e) Registration; Validity. Each item of VGX Registered Intellectual Property that is owned by VGX or any of its Subsidiaries and that is not an application is subsisting and all necessary registration, maintenance and renewal fees currently due in connection with such VGX Registered Intellectual Property have been made and all necessary assignments, documents, recordations and certificates currently due in connection with such VGX Registered Intellectual Property have been filed with the relevant patent, copyright, trademark or other authorities in the United States or foreign jurisdictions, as the case may be, for the purposes of prosecuting, maintaining or perfecting such VGX Registered Intellectual Property, except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on VGX or any of its Subsidiaries. To the Knowledge of VGX, there is no defect in the validity of any patent included in the VGX Registered Intellectual Property. To the Knowledge of VGX, there is no information regarding prior art, prior use in commerce, failure to join an inventor, or another basis on which to conclude that any invention disclosed in a patent application included in the Registered VGX Intellectual Property is not patentable. To the Knowledge of VGX, there is no defect in the validity of any registered trademark or registered copyright included in the Registered VGX Intellectual Property. To the Knowledge of VGX, each item of VGX Intellectual Property licensed to VGX that is not an application is valid and subsisting, and all necessary registration, maintenance and renewal fees currently due in connection with such licensed VGX Intellectual Property have been made and all necessary assignments, documents, recordations and certificates currently due in connection with such licensed VGX Intellectual Property have been filed with the relevant patent, copyright, trademark or other authorities in the United States or foreign jurisdictions, as the case may be, for the purposes of prosecuting, maintaining or perfecting such licensed VGX Intellectual Property, except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on VGX.

(f) Absence of Liens. VGX owns and has good and exclusive title to each item of VGX Intellectual Property owned by it, free and clear of any Liens (excluding Permitted Liens and non-exclusive licenses and related restrictions granted in the ordinary course of business). To the Knowledge of VGX, VGX Intellectual Property licensed to VGX is owned by each respective licensor free and clear of any Liens (excluding Permitted Liens and non-exclusive licenses and related restrictions granted in the ordinary course of business).

(g) *Third-Party Development*. To the Knowledge of VGX, *Section 2.7(g)* of the VGX Disclosure Letter sets forth all third-party Intellectual Property used in connection with, or necessary to market, license, make, use, sell, offer for sale, import, modify, update, practice, and/or create derivative works of the VGX Intellectual Property, indicating whether or not such third party proprietary information or processes, or any portion thereof, is or has been embedded in and/or used to practice VGX's Intellectual Property, except where an inability to use, rely on or integrate such third-party Intellectual Property, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on VGX. To the Knowledge of VGX, no rights of any other third party are necessary for or used in the operation of VGX's business, or the business of any of its Subsidiaries other than VGXI, or, with respect to VGXI, VGXI's business solely within the pharmaceuticals and biotechnology industries, as all are conducted as of the date hereof, as anticipated to be conducted prior to and at the Effective Time, and as anticipated to be conducted after the Effective Time by the Surviving Entity and its Subsidiaries

other than VGXI, and, with respect to VGXI, VGXI solely within the pharmaceuticals and biotechnology industries. To the extent that any technology, software, biological product or Intellectual Property has been developed or created, independently or jointly, for VGX or any of its Subsidiaries by a third party, including, but not limited to, an academic or not-for-profit entity, VGX or such Subsidiary has a written agreement with such third party with respect thereto and VGX or such Subsidiary thereby either (i) has obtained irrevocable ownership of, and are the exclusive owners of, or (ii) to the extent permitted under applicable Legal Requirements, has obtained a valid license sufficient for the conduct of its business, as conducted as of the date hereof or as anticipated to be conducted prior to and at the Effective Time, to all such third party's Intellectual Property, including such product, software, work, material or invention, except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on VGX.

(h) *Open Source.* Section 2.7(h) of the VGX Disclosure Letter sets forth as of the date hereof a list of all VGX Intellectual Property made available under an Open Source Software license and the name or title of such license. No computer software that is Open Source Software, or any modification or derivative thereof, including, but not limited to, any version of any computer software licensed pursuant to any GNU general public license or limited general public license, is used in, incorporated into, or integrated or bundled with any VGX Intellectual Property owned by VGX or any of its Subsidiaries, and to the Knowledge of VGX, with any VGX Intellectual Property licensed by VGX or any of its Subsidiaries, including the VGX Products and services, sold, distributed, leased, licensed, transferred, or disposed of in any way by VGX. No software incorporated in any of the VGX Products, services, or technology or covered by or embodying any VGX Intellectual Property owned or purported to be owned by VGX or any of its Subsidiaries has been sold in whole or in part or used, or is being used in conjunction with, any Open Source Software in a manner that would require that such software be disclosed or distributed in source code form or made available for free or at no charge or cost. VGX and its Subsidiaries have complied in all material respects with all terms applicable to VGX and/or its Subsidiaries related to any license for any such Open Source Software used in conjunction with any of the VGX Products, services, or technology, or covered by or embodying any Of the VGX Products, services, or technology, or covered by or embody in all material respects with all terms applicable to VGX and/or its Subsidiaries related to any license for any such Open Source Software used in conjunction with any of the VGX Products, services, or technology, or covered by or embodying any of the VGX Intellectual Property.

(i) *Transfers.* Except as disclosed in *Section 2.7(i)* of the VGX Disclosure Letter, neither VGX nor any of its Subsidiaries has transferred ownership of, or granted any exclusive licenses with respect to, any VGX Intellectual Property that is owned by VGX or any of its Subsidiaries and incorporated in any product currently or previously sold by VGX or any of its Subsidiaries, to any third party, or to the Knowledge of VGX, permitted VGX's rights or the rights of any of its Subsidiaries in such VGX Intellectual Property to lapse or enter the public domain.

(j) *Licenses.* Other than "shrink wrap" and similar widely available commercial end-user software licenses with a cost of less than \$25,000, *Section 2.7(j)* of the VGX Disclosure Letter sets forth a list as of the date hereof of all Contracts or other permissions to which VGX or any of its Subsidiaries is a party (i) with respect to VGX Intellectual Property licensed or transferred to any third party ("*Outbound Licenses*") or (ii) pursuant to which a third party has licensed or transferred any Intellectual Property to VGX or to any of its Subsidiaries, which Intellectual Property is included in the VGX Products or VGX's services ("*Inbound Licenses*"). Without limiting the generality of *Sections 2.7(g)*, (i) and (k), each Inbound License: (i) is fully transferable to Inovio; (ii) to the Knowledge of VGX, the underlying Intellectual Property of such Inbound License is not subject to any proceeding, outstanding order, claim, Contract, or stipulation challenging the legality or validity thereof; and (iii) except as disclosed in *Section 2.7(j)* of the VGX Disclosure Letter, VGX has not granted any sublicense, or similar right, to a third party under any Inbound License.

(k) No Conflict. All Contracts listed in Section 2.7 of the VGX Disclosure Letter relating to either (i) VGX Intellectual Property owned by VGX or any of its Subsidiaries, or (ii) Inbound Licenses, are in full force and effect. This Agreement will neither violate nor result in the material breach, material modification, cancellation, termination, suspension of, or material acceleration of any payments with respect to, such Contracts. VGX or its Subsidiaries, as the case may be, is in material compliance with, and has not materially breached any term of any such Contracts and, to the Knowledge of VGX, all other parties to such Contracts are in compliance with, and have not materially breached any term of, such Contracts. Following the Closing Date, the Surviving Entity will be permitted to exercise all of VGX's rights or the rights of any of VGX's Subsidiaries, as the case may be, under such Contracts and all rights with respect to VGX Intellectual Property under such Contracts to the same extent VGX or any of its Subsidiaries, as the case may be, would have been able to had the Merger not occurred and without the payment of any material additional amounts or consideration other than ongoing fees, royalties or payments that VGX or any of its Subsidiaries would otherwise be required to pay. Neither this Agreement nor the Merger, will result in (A) VGX or any of its Subsidiaries, or after the Effective Time Inovio or the Surviving Entity, granting to any third party any right to or with respect to any material VGX Intellectual Property right not already so licensed by VGX or any of its Subsidiaries, (B) Inovio or the Surviving Entity being bound by, or subject to, any non-compete or other material restriction on the operation or scope or their respective businesses, or (C) Inovio or the Surviving Entity being obligated to pay any royalties or other material amounts to any third party in excess of those payable by VGX of any of its Subsidiaries, as the case may be, prior to the Closing.

(1) *No Infringement.* To the Knowledge of VGX, neither (i) the use, reproduction, modification, manufacturing, distribution, licensing, sublicensing, sale, offering for sale, import, or any other exercise of rights in VGX Intellectual Property, (ii) the operation of VGX's business, including VGX's provision of the VGX Products or its services, the business of its Subsidiaries other than VGXI, including their provision of products or services, and the business of VGXI within the pharmaceuticals and related biotechnology industries, nor (iii) the use, reproduction, modification, manufacture, distribution, licensing, sublicensing, sale, offering for sale, or other exploitation of any of the VGX Products, VGX's services, or technology, infringes any Intellectual Property, or any other proprietary or personal right, of any Person under the Legal Requirements of the applicable jurisdiction, or constitute unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction except for such infringements and activities that would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect on VGX. To the Knowledge of VGX, the conduct of business by VGX has not and does not misappropriate the Intellectual Property of any third party nor constitute unfair trade practices under the Legal Requirements of any jurisdiction.

(m) *No Notice of Infringement.* VGX has not received notice from any third party (i) that the operation of VGX's business, including the business of its Subsidiaries, or any act, product or service of VGX or any of its Subsidiaries, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction, or (ii) challenging the ownership, validity, enforceability or registerability of any VGX Intellectual Property licensed to VGX has not been challenged by a third party and none of its licensors have received notice from any third party (i) that the operation of VGX's business or any act, product or service of VGX, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade protection of VGX's business or any act, product or service of VGX, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade protection of VGX.

(n) *No Third Party Infringement.* To the Knowledge of VGX, no Person is infringing or misappropriating any VGX Intellectual Property in a manner that would have a Material Adverse

Effect on VGX or any of its Subsidiaries. Except as set forth in *Section* 2.7(n) of the VGX Disclosure Letter, VGX has not provided notice to any third party (i) that the operation of the business of the third party or any act, product or service of the third party infringes or misappropriates VGX Intellectual Property or constitutes unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction, or (ii) challenging the ownership, validity, enforceability or registerability of any third party Intellectual Property.

(o) *Use of Technology.* With respect to each item of Intellectual Property listed in *Section 2.7* of the VGX Disclosure Letter which consists of a computer program, software, electronic process or related process, procedure or technology, (i) VGX maintains machine-readable master-reproducible copies, source code listings, technical documentation and user manuals, to the extent applicable, for the most current releases or versions thereof and for all earlier releases or versions thereof currently being, or which by contract for the benefit of any customer is to be, supported by each of them; (ii) in each case, the machine-readable copy substantially conforms to the corresponding source code listing; (iii) it is written in the language set forth in *Section 2.7* of the VGX Disclosure Letter for use on the hardware set forth in *Section 2.7* of the VGX Disclosure Letter or with standard operating systems; (iv) it can be maintained and modified by reasonably competent programmers familiar with such language, hardware and operating systems without incurring material costs, disbursements, and person hours; and (v) in each case, it operates in accordance with the user manual therefore without material operating defects or known, reproducible errors. Except with respect to demonstration or trial copies, no portion of any VGX Intellectual Property contains any "back door," "time bomb," "Trojan horse," "worm," "drop dead device," "virus" or other software routines or hardware components designed to permit unauthorized access or to disable or erase software, hardware, or data without the consent of the user.

(p) *No Affiliate Ownership.* None of the Intellectual Property listed or required to be listed on *Section 2.7* of the VGX Disclosure Letter is owned by or registered in the name of any stockholder, or any current or former owner, stockholder, partner, director, executive, officer, employee, salesman, agent, customer, representative or contractor of VGX or any of its Subsidiaries nor does any such Person have any interest therein or right thereto, including the right to royalty payments.

(q) Domain Names. Section 2.7(q) of the VGX Disclosure Letter lists all internet domain names related to VGX's or its Subsidiaries' business ("**Domain Names**"). All Domain Names are in good standing until such dates as set forth in Section 2.7(q) of the VGX Disclosure Letter. To the Knowledge of VGX, no action has been taken or is pending to challenge VGX's rights or the rights of any of its Subsidiaries to or to suspend, cancel or disable any Domain Name, registration therefore or the right of VGX or any of its Subsidiaries to use a Domain Name. VGX and its Subsidiaries, as the case may be, has all right, title and interest in and to, and rights to use on the internet and otherwise as a service mark, trademark and trade name, the Domain Names.

(r) *No Export.* Since December 1, 2003, neither VGX nor any Affiliate thereof has exported or re-exported, directly or indirectly (including via remote access) any part of any VGX Intellectual Property to any country to which a license is required under Legal Requirements relating to the control of imports and exports of commodities and technical data, use and remote use of software and related property, and registration of customer agreements, including the Export Administration Regulations of the U.S. Department of Commerce, the International Traffic in Arms Regulations of the U.S. Department of State, and the Enhanced Proliferation Control Initiative in the U.S. without first obtaining all applicable licenses.

(s) *Websites.* Since December 1, 2003, VGX has maintained in connection with their operations, activity, conduct, and business on the World Wide Web ("*Web*") and any and all other

applicable internet operations, activity, conduct, and business, at all times during such operations, activity, conduct, and business, a written privacy statement or policy governing the collection, maintenance, and use of data and information collected from users of Web sites owned, operated, or maintained by, on behalf of, or for the benefit of VGX in connection with or related to VGX's business, including the business of its Subsidiaries ("*VGX Web Sites*"). Since December 1, 2003, VGX's privacy statement or policy has been conspicuously made available to users of VGX Web Sites. Such statement or policy, along with VGX's collection, maintenance, and use of user data and information and transfer thereof to Inovio under this Agreement, complies in all material respects with all applicable Legal Requirements, including laws of the U.S. Federal Trade Commission. VGX's privacy statement or policy does not in any manner restrict or limit any right of VGX or any successors' rights to use, sell, license, distribute, and disclose such collected data.

(t) *Proprietary Information Agreements.* VGX and its Subsidiaries have taken commercially reasonable steps to protect VGX's rights and the rights of its Subsidiaries in the confidential information and trade secrets of VGX and its Subsidiaries that it wishes to protect or any trade secrets or confidential information of third parties provided to VGX or any of its Subsidiaries, and, without limiting the foregoing, VGX and its Subsidiaries have and enforce a policy requiring each employee, to execute a proprietary information/confidentiality agreement which requires the employee to assign all Intellectual Property rights to VGX or its Subsidiary, as the case may be, and requires the employee to keep confidential all trade secrets of VGX and its Subsidiaries, and all employees of VGX and its Subsidiaries have executed such an agreement, except where the failure to do so would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on VGX or any of its Subsidiaries. Except where the failure to do so would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on VGX or any of its Subsidiaries. Except where the failure to do so would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on VGX or any of its Subsidiaries, there has been no disclosure by VGX or any of its Subsidiaries to any third party of confidential information or trade secrets of VGX or any of its Subsidiaries, except pursuant to a Contract that requires such third party to keep such confidential information or trade secrets confidential.

(u) Data Privacy. VGX and its Subsidiaries have not used and does not currently use any of the patient information or other individuals' personal information that it has received or currently receives through their clinical studies or otherwise in an unlawful manner, such that criminal or civil liability would result, or in a manner that violates any privacy rights of its customers. VGX and its Subsidiaries have not collected any information through its websites, products, services, studies or technology in an unlawful manner. VGX and its Subsidiaries have commercially reasonable security measures in place to protect the customer information it receives through its website or otherwise and which it stores in its computer systems from illegal use by third parties or use by third parties in a manner that violates the rights of privacy of its customers, patients in its studies or other individuals with whom VGX and its Subsidiaries do business. VGX and its Subsidiaries are and have been in compliance with all applicable Legal Requirements relating to the collection, storage, and onward transfer of all personally identifiable information collected by VGX and its Subsidiaries or, to the Knowledge of VGX, by third parties having authorized access to VGX's (including its Subsidiaries') databases or other records.

(v) Source Code and Formulas. No Persons other than VGX possess any current or contingent rights of any kind to any source code or proprietary formulas included in the VGX Intellectual Property. No event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time) will, or could reasonably be expected to, result in the disclosure or delivery to any Person of any source code owned by VGX or any of its Subsidiaries, formula or the release from any escrow of any other VGX Intellectual Property. Neither VGX not any of its Subsidiaries has granted any licenses or rights to distribute the source code of, or to use the source code to create derivative works of, any product or service marketed (at and any time prior to the

Effective Time) by, commercially available from or under development by VGX or any of its Subsidiaries.

2.8 Regulatory Compliance; Permits.

(a) *Compliance.* Without limiting the generality of the representations and warranties provided elsewhere in this *Section 2.8*, neither VGX nor any of its Subsidiaries is in conflict with, or in default or in violation of, any Legal Requirement applicable to VGX or any of its Subsidiaries other than VGXI, or with respect to VGXI, applicable to its activities in the pharmaceuticals and biotechnology industries, or by which VGX or any of its Subsidiaries or any of their respective businesses or properties is bound or affected (as limited to the pharmaceuticals and biotechnology industries, with respect to VGXI solely), except for those conflicts, defaults or violations that, individually or in the aggregate, would not reasonably be expected to cause VGX or any of its Subsidiaries to lose any material benefit or incur any material liability. To the Knowledge of VGX, no investigation or review by any Governmental Entity is pending or has been threatened against VGX or any of its Subsidiaries. There is no judgment, injunction, order or decree binding upon VGX or any of its Subsidiaries which has, or would reasonably be expected to have, the effect of prohibiting or materially impairing any material business practice of VGX or any of its Subsidiaries, any acquisition of material property by VGX or any of its Subsidiaries or the conduct of business by VGX and its Subsidiaries as currently conducted.

(b) *Permits*. Without limiting the generality of the representations and warranties provided elsewhere in this *Section 2.8*, VGX and its Subsidiaries hold, to the extent legally required, all permits, licenses, variances, clearances, consents, commissions, franchises, exemptions, orders, investigational new drug applications ("INDs"), and approvals from Governmental Entities ("*Permits*") that are material to the operation of the business of VGX taken as a whole (collectively, "*VGX Permits*"). As of the date hereof, to the Knowledge of VGX, no suspension or cancellation of any of the VGX Permits is pending or threatened. VGX and its Subsidiaries are in compliance in all material respects with the terms of VGX Permits. *Section 2.8(b)* of the VGX Disclosure Letter sets forth as of the date hereof each of the VGX Permits and lists all regulatory filing requirements that are required to be filed within six months after the Closing Date in order to maintain the Permits.

(c) FDA and Global Regulatory Compliance.

(i) The operation of VGX, including the manufacture, import, export, testing, development, processing, packaging, labeling, storage, marketing, and distribution of the VGX Products, is, and at all times since May 1, 2005, has been in material compliance with all applicable Legal Requirements, Permits, and orders of Governmental Entities including those administered by the FDA and USDA for products manufactured, marketed and sold in the United States and that are subject to FDA and USDA jurisdiction. There is no actual or, to the Knowledge of VGX, threatened material action or investigation against VGX by the FDA or any other Governmental Entity which has jurisdiction over the manufacturing, operations, properties, products or processes of VGX or those of any third parties acting on VGX's behalf. VGX has no Knowledge that any Governmental Entity is considering such action or of any facts or circumstances that are reasonably likely to give rise to any such action or investigation.

(ii) Neither VGX, nor to the Knowledge of VGX, any third party acting on VGX's behalf with respect to services conducted for VGX or any of its Subsidiaries, has had any product or manufacturing site subject to a Governmental Entity (including FDA) shutdown or import or export prohibition, nor received any FDA Form 483 or other notice from a Governmental Entity of inspectional observations, "warning letters," "untitled letters" or, to the Knowledge of VGX, requests or requirements to make changes to the operations of VGX

(including its Subsidiaries) or the VGX Products that if not complied with would reasonably be expected to result in a Material Adverse Effect on VGX or any of its Subsidiaries, or similar correspondence or written notice from the FDA or other Governmental Entity in respect of VGX or any of its Subsidiaries, or to the Knowledge of VGX, any third party acting on VGX's behalf with respect to services conducted for VGX or any of its Subsidiaries, and alleging or asserting material noncompliance with any applicable Legal Requirements, Permits or such requests or requirements of a Governmental Entity, and, to the Knowledge of the VGX, neither the FDA nor any Governmental Entity is considering such action. No vigilance report or adverse event report with respect to the VGX Products, except for a Serious Adverse Event Report received from a patient participating in Study VT003 for the investigational product VGX-410C (IND 72,963), has been reported to VGX, or, to the Knowledge of VGX, any third party acting on VGX's behalf with respect to services conducted for VGX or any of its Subsidiaries, and to the Knowledge of VGX, no vigilance report or adverse event report is under investigation by any Governmental Entity with respect to the VGX Products, VGX or any of its Subsidiaries.

(iii) All studies, tests and preclinical and clinical trials being conducted by or on behalf of VGX or any of its Subsidiaries that have been or will be submitted to any Governmental Entity, including the FDA and its counterparts worldwide, including in the European Union, in connection with any Permit, are being or have been conducted by VGX or, to the knowledge of VGX, are being or have been conducted on behalf of VGX, in compliance in all material respects with the required experimental protocols, procedures and controls pursuant to accepted professional scientific standards and applicable local, state, federal and foreign Legal Requirements, rules and regulations, including the applicable requirements of Good Laboratory Practices, Good Clinical Practices, Good Manufacturing Practices, Human Subject Protections and the U.S. Food, Drug and Cosmetic Act of 1938 and its implementing regulations, including 21 CFR Parts 50, 54, 56, 58, 210, and 211. VGX has not received any notices, correspondence or other communication in respect of VGX from the FDA or any other Governmental Entity requiring the termination or suspension of any clinical trials conducted by, or on behalf of, VGX or any of its Subsidiaries or in which VGX or any of its Subsidiaries has participated, and to the Knowledge of VGX neither the FDA nor any other Governmental Entity is considering such action, except for the Clinical Holds issued by FDA with respect to the clinical studies conducted for IND 74-494 (VGX-410, Pictovir) and IND 13-634 (VGX-3200, SynCon). Following receipt of a Clinical Hold, neither VGX itself, its Subsidiaries nor any third party acting on its behalf, has continued or will continue to provide investigational drug products to any of the human subjects enrolled in the study for which the Clinical Hold was received. VGX has not received specific written notification from a Governmental Entity of the rejection of data obtained from any clinical trials conducted by, or on behalf of, VGX or any of its Subsidiaries or in which VGX or any of its Subsidiaries has participated with respect to VGX, its Subsidiaries or the VGX Products, which data was submitted to the Governmental Authority and which was necessary to obtain regulatory approval of a particular VGX Product.

(iv) The manufacture of products by, or, to the Knowledge of VGX, on behalf of, VGX is being conducted in compliance in all material respects with all applicable Legal Requirements including the FDA's Good Manufacturing Practices at 21 CFR §§210-211 and applicable guidelines for products sold in the United States, and the respective counterparts thereof promulgated by Governmental Entities in countries outside the United States.

(v) VGX is not the subject of any pending or, to the Knowledge of VGX, threatened investigation in respect of VGX or any of its Subsidiaries by the FDA pursuant to its "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy set forth in

56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. Neither VGX nor any of its Subsidiaries has committed any act, made any statement, or failed to make any statement, in each case in respect of VGX or its Subsidiaries and that would provide a basis for the FDA to invoke its policy with respect to "Fraud, Untrue Statements of Material Facts, Bribery and Illegal Gratuities" and any amendments thereto. Neither VGX nor any of its officers or, to the Knowledge of VGX, employees or agents has been convicted of any crime or engaged in any conduct that could result in a debarment or exclusion (i) under 21 U.S.C. Section 335a, or (ii) any similar applicable Legal Requirement. No debarment or exclusionary claims, actions, proceedings or investigations in respect of VGX are pending or, to the Knowledge of VGX, threatened against VGX, its Subsidiaries or any of their respective officers, employees or agents.

(vi) Besides the commercial marketing and sale of Life Tide SW5, a DNA-based porcine therapy, in Australia, VGX currently does not market and sell any other approved human or veterinary drug product or biologics. Currently, VGX does not market or sell any approved human or veterinary products in the U.S.

2.9 *Litigation.* There are no claims, suits, actions or proceedings ("*Legal Proceedings*") pending or, to the Knowledge of VGX, threatened against VGX or any of its Subsidiaries or any of their respective properties or relating to any of the executive officers and directors of VGX or any of its Subsidiaries in their capacity as such, before any court, Governmental Entity, or any arbitrator that seeks to restrain, enjoin or prevent the consummation of the transactions contemplated hereby or which, if adversely decided, would reasonably be expected, either individually or in the aggregate with all such claims, actions or proceedings, to be material to VGX or any of its Subsidiaries. *Section 2.9* of VGX Disclosure Letter further sets forth a list as of the date hereof of all litigation settlement agreements to which VGX or any of its Subsidiaries is a party.

2.10 *Brokers' and Finders' Fees; Fees and Expenses.* VGX has not incurred, nor will it incur, directly or indirectly, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement or the transactions contemplated hereby.

2.11 Employee Matters and Benefit Plans.

(a) Definitions. For purposes of this Agreement, the following terms shall have the meanings set forth below:

(i) "*COBRA*" shall mean the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended and as codified in Section 4980B of the Code and Section 601 et. seq. of ERISA.

- (ii) "Code" shall mean the Internal Revenue Code of 1986, as amended.
- (iii) "DOL" shall mean the Department of Labor.
- (iv) "ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended.
- (v) "IRS" shall mean the Internal Revenue Service.

(vi) "*Multiemployer Plan*" shall mean any "Pension Plan" which is a "multiemployer plan," as defined in Section 3(37) of ERISA.

(vii) "VGX Employee" shall mean any current or former or retired employee, consultant or director of VGX or any of its Subsidiaries, excluding any individual employed solely by VGXI and from whom VGX or its other Subsidiaries did not receive any services.



(viii) "*VGX Employee Plan*" shall mean any plan, program, policy, practice, contract, agreement or other arrangement providing for compensation, severance, termination pay, deferred compensation, performance awards, stock or stock-related awards, fringe benefits or other employee benefits or remuneration of any kind, whether written or unwritten or otherwise, funded or unfunded, including without limitation, each "employee benefit plan," within the meaning of Section 3(3) of ERISA which is or has been maintained, contributed to, or required to be contributed to, by VGX or any VGX ERISA Affiliate for the benefit of any employee, or with respect to which VGX or any VGX ERISA Affiliate has or may have any liability or obligation, excluding any such plan or other arrangement maintained by VGXI which does not benefit any VGX Employees.

(ix) "*VGX ERISA Affiliate*" shall mean each Subsidiary of VGX and any other person or entity under common control with VGX or any of its Subsidiaries within the meaning of Section 414(b), (c), (m) or (o) of the Code and the regulations issued thereunder.

(x) "*VGX Pension Plan*" shall mean each VGX Employee Plan which is an "employee pension benefit plan," within the meaning of Section 3(2) of ERISA.

(b) *VGX Employee Plans.* Section 2.11(b) of the VGX Disclosure Letter contains an accurate and complete list of each VGX Employee Plan. Neither VGX nor any Subsidiary has any plan or commitment to establish any new VGX Employee Plan, to modify any VGX Employee Plan (except to the extent required by law or to conform any such VGX Employee Plan to applicable Legal Requirements), or to adopt or enter into any VGX Employee Plan.

(c) Documents. VGX has delivered or made available to Inovio correct and complete copies of, to the extent applicable,:
(i) each VGX Employee Plan together with all amendments thereto; (ii) the most recent annual actuarial valuations, if any, prepared for each VGX Employee Plan; (iii) the two (2) most recent annual reports (Form Series 5500 and all schedules and financial statements attached thereto), if any, required under ERISA or the Code in connection with each VGX Employee Plan; (iv) if the VGX Employee Plan is funded, the most recent annual and periodic accounting of VGX Employee Plan assets; (v) the most recent summary plan description together with the summary(ies) of material modifications thereto, if any; (vi) all IRS correspondence, including determination, opinion, notification and advisory letters; and (vii) all related agreements, insurance contracts and other agreements by which such VGX Employee Plan is established, operated, administered or funded.

(d) *Employee Plan Compliance.* VGX and the VGX ERISA Affiliates have performed in all material respects all obligations required to be performed by them under, are not in default or violation of, and have no Knowledge of any default or violation by any other party to each VGX Employee Plan, and each VGX Employee Plan has been established and maintained in all material respects in accordance with its terms and in compliance with all applicable Legal Requirements, including but not limited to ERISA or the Code. Any VGX Employee Plan intended to be qualified under Section 401(a) of the Code and each trust intended to qualify under Section 501(a) of the Code (i) has either applied for, prior to the expiration of the requisite period under applicable Treasury Regulations or IRS pronouncements, or obtained a favorable determination, notification, advisory and/or opinion letter, as applicable, as to its qualified status from the IRS or still has a remaining period of time under applicable Treasury Regulations or IRS pronouncements in which to apply for such letter and to make any amendments necessary to obtain a favorable determination, and (ii) incorporates or has been amended to incorporate all provisions required to comply with the Tax Reform Act of 1986 and subsequent legislation. The remedial amendment period under Section 401(b) of the Code has not expired with respect to any amendment to any such VGX Employee Plan adopted after the date of the most recent such determination, notification, advisory and/or opinion letter. For each VGX Employee Plan that is intended to be qualified under Section 401(a) of the Code, to the Knowledge of VGX, there has been no event,

condition or circumstance that has adversely affected or is likely to adversely affect such qualified status. No "prohibited transaction," within the meaning of Section 4975 of the Code or Sections 406 and 407 of ERISA, and not otherwise exempt under Section 408 of ERISA, has occurred with respect to any VGX Employee Plan, which would individually or in the aggregate result in material liability to VGX or any of its Subsidiaries. There are no material actions, suits or claims pending, or, to the Knowledge of VGX, threatened or reasonably anticipated (other than routine claims for benefits) against any VGX Employee Plan or against the assets of any VGX Employee Plan. Neither VGX nor any VGX ERISA Affiliate has received any written notice that any VGX Employee Plan or any fiduciary thereof is presently the direct or indirect subject of an audit, investigation or examination by any governmental or quasi-governmental agency, and no such action has been threatened. Neither VGX nor any VGX ERISA Affiliate has incurred any liability or civil penalty under ERISA or liability for any tax or excise tax arising under the Code with respect to any VGX Employee Plan, and no event has occurred and no condition or circumstance exists that could reasonably be expected to give rise to any such liability with respect to any such VGX Employee Plan.

(e) No Pension or Welfare Plans. Neither VGX nor any VGX ERISA Affiliate has ever maintained, established, sponsored, participated in, or contributed to, any (i) Pension Plan which is subject to Title IV of ERISA or Section 412 of the Code,
(ii) Multiemployer Plan, (iii) "multiple employer plan" as defined in ERISA or the Code, or (iv) a "funded welfare plan" within the meaning of Section 419 of the Code. No VGX Employee Plan provides health benefits that are not fully insured through an insurance contract.

(f) *No Post-Employment Obligations.* No VGX Employee Plan provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by COBRA or other applicable statute, and neither VGX nor any Subsidiary has ever represented, promised or contracted (whether in oral or written form) to any VGX Employee (either individually or to employees as a group) or any other person that such VGX Employee(s) or other person would be provided with post-termination or retiree welfare benefits, except to the extent required by statute.

(g) Effect of Transaction.

(i) The execution of this Agreement and the consummation of the transactions contemplated hereby will not (either alone or upon the occurrence of any additional or subsequent events) constitute an event under any VGX Employee Plan that will or may result in any payment, acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any VGX Employee.

(ii) No payment or benefit which will or may be made by VGX or its Subsidiaries with respect any "disqualified individual" (as defined in Code Section 280G and the regulations thereunder) will be characterized as a "parachute payment," within the meaning of Section 280G(b)(2) of the Code.

(h) *Employment Matters.* VGX and its Subsidiaries are in compliance in all material respects with all applicable foreign, federal, state and local laws, rules and regulations respecting employment, employment practices, terms and conditions of employment and wages and hours, in each case, with respect to each VGX Employee and have made all reportings, registrations, filings, contributions, withholdings or other payments with respect to each VGX Employee.

(i) *Labor.* No work stoppage or labor strike against VGX or any Subsidiary is pending, or to the Knowledge of VGX, threatened or reasonably anticipated. To the Knowledge of VGX, there are no activities or proceedings of any labor union to organize any VGX Employees. There are no actions, suits, claims, labor disputes or grievances pending, or, to the Knowledge of VGX, threatened or reasonably anticipated relating to any labor, safety or discrimination matters

involving any employee, which, if adversely determined, would, individually or in the aggregate, result in any material liability to VGX or any of its Subsidiaries. Neither VGX nor any of its Subsidiaries has engaged in any unfair labor practices within the meaning of the National Labor Relations Act. Neither VGX nor any of its Subsidiaries is presently, nor has it been in the past, a party to, or bound by, any collective bargaining agreement or union contract with respect to employees and no collective bargaining agreement is being negotiated with respect to VGX Employees.

2.12 Title to Properties.

(a) Real Properties. VGX does not own any real property.

(b) Leased Properties. Section 2.12(b) of the VGX Disclosure Letter sets forth a true, complete and correct list as of the date hereof of all real property currently leased by VGX or any of its Subsidiaries (each a "VGX Facility", and collectively, the "VGX Facilities"). All such current leases (the "VGX Leases") are legal, valid and binding agreements, enforceable against VGX in accordance with its terms, on VGX or the Subsidiary of VGX party thereto and, to the Knowledge of VGX, of each other Person party thereto, except as such enforcement may be limited by applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other general principles of equity (regardless of whether enforceability is considered in a proceeding in equity or at law). All such current leases are in full force and effect, and there is not, under any of such leases, any existing material default of VGX or its Subsidiaries or, to the Knowledge of VGX, any event, which with notice or lapse of time, or both, would constitute a material default of VGX or its Subsidiaries thereunder.

(c) *No Subleases.* VGX has not entered into any sublease, license, option, right, concession or other agreement or arrangement, written or oral, granting to any person the right to use or occupy any VGX Facility or any portion thereof or interest therein.

(d) *Valid Title.* VGX and each of its Subsidiaries has good and valid title to, or, in the case of leased properties and tangible assets, valid leasehold interests in, all of its tangible properties and assets (real, personal, tangible and mixed, including all VGX Facilities) used or held for use in its business, free and clear of any Liens except Permitted Liens, and except for such tangible properties and assets, no other material tangible property or asset is necessary for or used in the operation of VGX's business or the business of any of its Subsidiaries as conducted as of the date hereof (other than VGX Intellectual Property, the sufficiency of which is addressed in *Section 2.7*).

2.13 Environmental Matters.

(a) *Hazardous Material*. As of the Closing, to the Knowledge of VGX, and except as would not be reasonably likely to result in material liability to VGX or any of its Subsidiaries, no Hazardous Materials have been disposed of, dumped, injected, pumped, deposited, spilled, leaked, emitted or released at, on or under any VGX Facilities, nor have any Hazardous Materials been manufactured or transported by VGX or its Subsidiaries in violation of any applicable Legal Requirement.

(b) *Environmental Claims*. There are no Legal Proceedings pending or, to the Knowledge of VGX, threatened against VGX or any of its Subsidiaries which allege a violation of Environmental Laws. To the Knowledge of VGX, neither VGX nor any of its Subsidiaries have received any written or oral notification alleging any violation of Environmental Laws, disposal, release or threatened release of any Hazardous Material generated or transported by VGX or any of its Subsidiaries.

2.14 Contracts.

(a) Scheduled Contracts. For purposes of this Agreement, "VGX Scheduled Contract" shall mean:

(i) any employment, consulting or other compensatory or services-related Contract with any executive officer or other employee of VGX earning an annual salary in excess of \$75,000 or member of the VGX Board, *except* those that are terminable by VGX or any of its Subsidiaries on no more than thirty (30) days notice without liability or financial obligation by VGX and which contain no severance, "change in control" or similar provisions;

(ii) any Contract containing any covenant (A) limiting in any respect the right of VGX or any of its Subsidiaries to engage in any line of business or compete with any Person in any material line of business or in any geographic area,
(B) granting any exclusive distribution, use or development rights, (C) agreeing to purchase a minimum amount of goods or services in excess of \$500,000 in the aggregate in any consecutive twelve (12) month period, (D) agreeing to purchase goods or services exclusively from a certain party or (E) requiring VGX or any of its Subsidiaries to give "most favored nation" pricing to any customers, potential customers or any class of customers or to provide exclusive or "most favored nation" access to any product or service features, excluding standard customizations, to any customers, potential customers or any class of customers;

(iii) any Contract relating to the disposition or acquisition by VGX or any of its Subsidiaries after the date of this Agreement of a material amount of assets not in the ordinary course of business or pursuant to which VGX or any of its Subsidiaries has any material ownership interest in any other Person or other business enterprise other than VGX's Subsidiaries;

(iv) any distributor, joint marketing, partnership, development, collaborator, manufacturer or similar agreement (including such agreements under which the other party has the right to manufacture or reproduce the VGX Products) under which VGX or any of its Subsidiaries have continuing material obligations to jointly develop or market any product, technology or service;

(v) any Contract relating to the development, use or protection of any material VGX Intellectual Property, including, but not limited to (A) any agreement pursuant to which VGX or any of its Subsidiaries have continuing material obligations to jointly develop any material Intellectual Property that will not be owned, in whole or in part, by VGX or any of its Subsidiaries, and (B) any agreement pursuant to which VGX or any of its Subsidiaries has agreed to warrant, indemnify, hold harmless, reimburse guaranty or otherwise assume or incur any material obligation or liability or provide a right of rescission with respect to the infringement or misappropriation by VGX or such other person of its rights with respect to any material Intellectual Property;

(vi) any Contract (excluding the VGX Leases) containing any support, maintenance or service obligation on the part of VGX or any of its Subsidiaries, other than those obligations that have a term of one year or less or involving annual revenues to VGX of under \$1,000,000 in any individual case;

(vii) any mortgages, indentures, guarantees, loans or credit agreements, security agreements or other Contracts relating to the borrowing of money or extension of credit in a principal amount in excess of \$500,000 that is outstanding or may be incurred on the terms thereof, other than accounts receivables and payables in the ordinary course of business;

(viii) any other individual agreement, contract or commitment that involves future expenditures or obligations by or of VGX in excess of \$500,000 in the aggregate during any consecutive twelve month period;

(ix) any Contract with the United States federal, state or local government or any department thereof; and

(x) any Contract or other arrangement with an Affiliate, other than (A) advance or reimbursement for travel and entertainment expenses, (B) any standard form of invention assignment and confidentiality agreement, (C) employee benefits generally available to VGX Employees (including stock options), and (D) "at will" employment offer letters;

provided, however, with respect to VGXI, the definition of VGX Scheduled Contracts shall include only those items noted in (i) -(x) above (i) to which VGX or another of its Subsidiaries is a party, (ii) to which a director, officer, employee or Affiliate of VGX or another of its Subsidiaries is a party, or (iii) otherwise related to VGXI's business and activities in the pharmaceuticals and biotechnology industries.

(b) Schedule. Section 2.14(b) of the VGX Disclosure Letter sets forth a list of all VGX Scheduled Contracts to which VGX or any of its Subsidiaries is a party or is bound by as of the date hereof. VGX has made available to Inovio true, complete and correct copies of each contract listed in Section 2.14(b) of the VGX Disclosure Letter.

(c) *No Breach.* All VGX Scheduled Contracts are legal, valid and binding agreements, enforceable in accordance with their terms, of VGX and/or a Subsidiary of VGX party thereto and, to the Knowledge of VGX, of each other Person party thereto, except as such enforcement may be limited by (i) applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws now or hereinafter in effect relating to or affecting creditors' rights generally and (ii) general principles of equity (regardless of whether enforceability is considered in a proceeding in equity or at law). All VGX Scheduled Contracts are in full force and effect except to the extent they have previously expired in accordance with their terms or if the failure to be in full force and effect, individually or in the aggregate, would not reasonably be expected to be material to VGX. Neither VGX nor any of its Subsidiaries has violated any provision of, or committed or failed to perform any act which, with or without notice, lapse of time or both would constitute a material default under the provisions of, any VGX Scheduled Contract.

2.15 *Board Approval.* As of the date hereof, the VGX Board has, by resolutions duly adopted at a meeting duly called and held and not subsequently rescinded or modified in any way, (i) determined the Merger to be advisable, (ii) approved this Agreement and the transactions contemplated thereby, including the Merger, and (iii) recommended that the VGX Stockholders approve this Agreement and the Mergers and directed that such matters be submitted to the VGX Stockholders for approval.

2.16 *Transactions with Related Parties.* As of the date hereof, VGX is not a party to any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC.

2.17 Insurance.

(a) Section 2.17 of the VGX Disclosure Letter sets forth a list of each currently effective insurance policy or binder of insurance (including policies providing property, casualty, liability, and workers' compensation coverage, bond and surety arrangements, clinical trials or contract research insurance, or intellectual property infringement insurance, but excluding policies related to Employee Plans) to which VGX is currently a party, a named insured, or otherwise the beneficiary of coverage as of the date hereof:

(i) the name and address of the agent;

(ii) the name of the insurer, the name of the policyholder, and the name of each covered insured;

(iii) the policy number and the period of coverage; and

(iv) the scope (including an indication of whether the coverage was on a claims made, occurrence or other basis) and amount of coverage.

(b) With respect to each such insurance policy or binder: (i) VGX has timely paid all premiums when due, (ii) the applications therefor completed by VGX do not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements or facts contained therein not misleading where such misstatement or omission would constitute a basis for denial of coverage under the terms of such policy or binder, (iii) VGX is not in material breach or material default (including with respect to the giving of notices), and no event has occurred or, by reason of the consummation of the transaction contemplated by this Agreement, will occur which, with notice or the lapse of time, would constitute such a material breach or material default, or permit termination, modification, or acceleration, under the policy and (iv) the policies are in full force and effect. There are no outstanding unpaid claims made by VGX or its Subsidiaries under any such policies or binders.

2.18 *Liabilities.* Neither VGX nor any of its Subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required by US GAAP to be disclosed on a consolidated balance sheet or in the related notes thereto, or any off-balance sheet liabilities, other than (a) any liabilities which did not have or would not have had, individually or in the aggregate, a Material Adverse Effect on VGX or any of its Subsidiaries, and (b) liabilities incurred in connection with the transactions contemplated hereby.

2.19 *Product Claims.* To the Knowledge of VGX, there has not been any claim under any contractual warranty, guaranty or other indemnity, or any claims of product liability arising from allegations of personal injury, property damage, or medical malpractice, with respect to the VGX Products or services of VGX or its Subsidiaries through the date hereof.

2.20 Accounts Receivable. As of the date hereof, VGX does not reasonably expect that the collections rate of its currently outstanding accounts receivable will be materially worse than its historical collection rate.

2.21 Anti-Takeover Statute Not Applicable. No "business combination," "fair price," "moratorium," "control share acquisition" or other similar anti-takeover statute or regulation under the laws of the State of Delaware is applicable to VGX, the shares of VGX Common Stock or other VGX Securities, the Merger or any of the other transactions contemplated by this Agreement.

2.22 *Foreign Corrupt Practices.* Neither VGX nor any of its Subsidiaries nor, to the knowledge of VGX, any director, officer, agent, employee or other Person acting on behalf of VGX or any of its Subsidiaries has, in the course of its actions for, or on behalf of, VGX or its Subsidiaries (a) used any corporate funds of VGX or any of its Subsidiaries for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (b) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (c) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (d) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

ARTICLE III REPRESENTATIONS AND WARRANTIES OF INOVIO AND SUBMERGER

Inovio and Submerger represent and warrant to VGX, subject to such exceptions and disclosures as set forth in the disclosure letter supplied by Inovio to VGX dated as of the date of the Prior

Agreement and an updated disclosure letter as of the date hereof (together, the "Inovio Disclosure Letter"), as follows:

3.1 Organization; Standing and Power; Charter Documents; Subsidiaries.

(a) Organization; Standing and Power. Inovio and each of its Subsidiaries (i) is a corporation or other organization duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization (except, in the case of good standing, for entities organized under the laws of any jurisdiction that does not recognize such concept), (ii) has the requisite power and authority to own, lease and operate its properties and to carry on its business as now being conducted, and (iii) is duly qualified or licensed and in good standing to do business and is in good standing (where applicable) in each jurisdiction in which the nature of its business or the ownership or leasing of its properties makes such qualification or licensing necessary, other than in such jurisdictions where the failure to be so qualified or licensed or to be in good standing, would, individually or in the aggregate, not reasonably be expected to be material to Inovio.

(b) *Charter Documents.* Inovio has delivered or made available to VGX: (i) a true and correct copy of the Certificate of Incorporation and By-Laws of Inovio, each as amended to date (collectively, the "*Inovio Charter Documents*") and (ii) true and correct copies of the Certificate of Incorporation and By-Laws, Certificate of Formation and Operating Agreement or like organizational documents (collectively, "*Inovio Subsidiary Charter Documents*"), of each of its Subsidiaries, including Submerger, each as amended to date, and each such instrument is in full force and effect. Inovio is not in violation of any of the provisions of the Inovio Charter Documents and each Subsidiary is not in violation of its respective Inovio Subsidiary Charter Documents.

(c) Subsidiaries. Section 3.1(c) of the Inovio Disclosure Letter sets forth each Subsidiary of Inovio as of the date hereof, and lists the directors and officers of each such Subsidiary as of the date hereof. All the outstanding shares of capital stock of, or other equity or voting interests in, each such Subsidiary have been duly authorized, validly issued and are fully paid and nonassessable, and are owned by Inovio, a wholly-owned Subsidiary of Inovio, or Inovio and another wholly-owned Subsidiary of Inovio, free and clear of all Liens, except for restrictions imposed by applicable securities laws. Other than the Subsidiaries of Inovio, neither Inovio nor any of its Subsidiaries owns any capital stock of, or other equity or voting interests of any nature in, or any interest convertible, exchangeable or exercisable for, capital stock of, or other equity or voting interests of any nature in, any other Person.

3.2 Capital Structure.

(a) *Capital Stock.* The authorized capital stock of Inovio consists of: (i) 300,000,000 shares of Inovio Common Stock, par value \$0.001 per share and (ii) 10,000,000 shares of Inovio Preferred Stock, par value \$0.001 per share. At the close of business on the date hereof: (i) 44,011,800 shares of Inovio Common Stock were issued and outstanding; (ii) 71 shares of Inovio Preferred Stock were issued and outstanding, of which 71 were Inovio Series C Cumulative Convertible Preferred Stock; (iii) 4,858,527 shares of Inovio Common Stock were reserved for issuance upon exercise of outstanding options granted pursuant to the Inovio Incentive Plans; and (iv) 6,890,448 shares of Inovio Common Stock were reserved for issuance upon exercise of outstanding shares of capital stock of Inovio are, and all shares of capital stock of Inovio which may be issued pursuant to the Inovio Options or the Inovio Warrants will be, when issued, duly authorized and validly issued, fully paid and nonassessable and not subject to any preemptive rights. No outstanding shares of Inovio Common Stock are subject to a repurchase option or risk of forfeiture in favor of Inovio. Inovio has no obligation to issue any shares of the Inovio Preferred Stock and the Inovio Preferred Stock is not subject to any demand rights.

(b) *Stock Options.* Except for the Inovio Incentive Plans, Inovio does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity or equity-based compensation for any Person. Inovio has a current available reserve of 42,375 shares of Inovio Common Stock for issuance under the Inovio Incentive Plans, 4,858,527 shares are subject to outstanding Inovio Options, and Inovio has made available to VGX accurate and complete copies of the Inovio Incentive Plans and all amendments thereto, and the forms of all notices and agreements related thereto. *Section 3.2(b)* of the Inovio Disclosure Letter sets forth a true, complete and correct list of all persons who, at the close of business on the date hereof, hold outstanding Inovio Options under the Inovio Incentive Plans indicating, with respect to each Inovio Option then outstanding number of shares of Inovio Common Stock subject to such Inovio Option, and the exercise price, date of grant, vesting schedule and expiration date thereof, including the extent to which any vesting had occurred as of the date of this Agreement and whether and to what extent the vesting of such Inovio Option will be accelerated in any way by the consummation of the transactions contemplated by this Agreement or by the termination of employment or engagement or change in position of any holder thereof following or in connection with the Merger.

(c) *Warrants.* 6,890,448 shares are reserved for issuance upon exercise of the Inovio Warrants outstanding as of the date of this Agreement and Inovio has made available to VGX accurate and complete copies of all of the Inovio Warrants outstanding as of the date hereof. *Section 3.2(c)* of the Inovio Disclosure Letter sets forth a true, complete and correct list of all persons who, at the close of business on the date hereof, hold outstanding Inovio Warrants indicating, with respect to each Inovio Warrant then outstanding, the number of shares of Inovio Common Stock subject to such Inovio Warrant, and the exercise price, date of grant, vesting schedule and expiration date thereof, including the extent to which any vesting had occurred as of the date of this Agreement and whether and to what extent the terms of the Inovio Warrant will be impacted by the consummation of the transactions contemplated by this Agreement. There is no vesting schedule applicable to any Inovio Warrant.

(d) Other Securities. Except as otherwise set forth above in this Section 3.2, as of the date hereof, there are no securities, options, warrants, calls, rights, contracts, commitments, agreements, instruments, arrangements, understandings, obligations or undertakings of any kind to which Inovio or any of its Subsidiaries is a party or by which any of them is bound obligating Inovio or any of its Subsidiaries to (including on a deferred basis) issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock or other voting securities of Inovio or any of its Subsidiaries, or obligating Inovio or any of its Subsidiaries to issue, grant, extend or enter into any such security, option, warrant, call, right, commitment, agreement, instrument, arrangement, understanding, obligation or undertaking. All outstanding shares of Inovio Common Stock, all outstanding Inovio Options, and outstanding Inovio Warrants and all outstanding shares of capital stock of each Subsidiaries to (i) all requirements set forth in applicable material Contracts. There are not any outstanding Contracts of Inovio or any of its Subsidiaries to (i) repurchase, redeem or otherwise acquire any shares of capital stock of, or other equity or voting interests in, Inovio or any of its Subsidiaries or (ii) dispose of any shares of the capital stock of, or other equity or voting interests in, Inovio is not a party to any voting agreement with respect to shares of the Inovio Capital Stock of, or other equity or voting interests in, Inovio is not a party to any voting shares of the capital stock of, or other equity or voting agreements, indicates, indicates, indicates, or (ii) dispose of any shares of the capital stock of, or other equity or voting interests in, Inovio or any of its Subsidiaries and, there are no irrevocable proxies and no voting agreements, voting trusts, rights plans or anti-takeover plans with respect to any shares of the capital stock of, or other equity or voting interests in, Inovio or any of its Su

3.3 Authority; Non-Contravention; Necessary Consents.

(a) *Authority*. Inovio has all requisite corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby has been duly authorized by all necessary corporate action on the part of Inovio and no other corporate proceedings on the part of Inovio are necessary to authorize the execution and delivery of this Agreement or to consummate the Merger and the other transactions contemplated hereby. The affirmative vote of the holders of a majority of the outstanding shares of Inovio Capital Stock (with shares of Inovio Preferred Stock voting on an as-converted basis) to approve and adopt this Agreement, approve the Merger and consummate the Merger and the other transactions contemplated hereby. This Agreement, approve the Merger and consummate the Merger and the other transactions contemplated hereby. This Agreement has been duly executed and delivered by Inovio and Submerger and, assuming due execution and delivery by VGX, constitutes a valid and binding obligation of Inovio, enforceable against Inovio in accordance with its terms, except to the extent that enforceability may be limited by the effect of (i) any applicable Legal Requirement with respect to bankruptcy, insolvency, reorganization, moratorium, or other similar Legal Requirement, and (ii) general equitable principles, regardless of whether such enforceability is considered in a proceeding at law or equity.

(b) *Non-Contravention.* The execution and delivery of this Agreement by Inovio does not, and performance of this Agreement by Inovio will not: (i) conflict with or violate Inovio Charter Documents or any Inovio Subsidiary Charter Documents, (ii) subject to obtaining the approval and adoption of this Agreement by the Inovio Stockholders as contemplated in *Section 3.3(a)* and compliance with the requirements set forth in *Section 3.3(c)*, conflict with or violate any material Legal Requirement applicable to Inovio or any of its Subsidiaries or by which Inovio or any of its Subsidiaries or any of their respective properties is bound or affected, or (iii) require Inovio to obtain any consent, approval, or notice under, or result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair Inovio's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of Inovio or any of its Subsidiaries pursuant to any Inovio Scheduled Contract (as defined in *Section 3.14(a)*), other than, in the case of (iii) above, such breaches, defaults, impairments, rights of termination, amendment, acceleration or cancellation, or Liens that would not be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect on Inovio or any of its Subsidiaries or, in the case of Liens, that constitute Permitted Liens.

(c) *Necessary Consents.* Other than obtaining the approval and adoption of this Agreement by the Inovio Stockholders as contemplated in *Section 3.3(a)*, no consent, approval, order or authorization of, or registration, declaration or filing with any Governmental Entity or any other Person is required to be obtained by Inovio or Submerger in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated thereby, except for (i) the registration of the Merger Consideration under the Securities Act as contemplated by *Section 5.1* hereof, (ii) the filing of the Certificate of Merger with the Secretary of State of Delaware, (iii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities laws and the HSR Act, if any, (iv) the listing or quotation of the shares of Inovio Common Stock to be issued pursuant to *Section 1.7* hereof on the NYSE Alternext or an Alternate Exchange, respectively, subject to official notice of issuance, and (vi) such other consents, authorizations, filings, approvals and registrations which, if not obtained or made, would not reasonably be expected to be material to Inovio or any of its Subsidiaries or have a Material Adverse Effect on the ability of the parties to consummate the Merger.

3.4 Records; SEC Reports; Financial Statements; Controls.

(a) The minute books of Inovio contain accurate and complete records of all meetings held of, and material corporate action taken by, the stockholders, the Board of Directors of Inovio, and committees of the Boards of Directors of Inovio.

(b) Inovio has filed all reports required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the 12 months preceding the date hereof on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension, and has filed all reports required to be filed by it under the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof. Such reports required to be filed by Inovio under the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, together with any materials filed or furnished by Inovio under the Securities Act and the Exchange Act, whether or not any such reports were required being collectively referred to herein as the "SEC Reports". As of their respective dates, the SEC Reports filed by Inovio complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the SEC promulgated thereunder, and none of the SEC Reports, when filed by Inovio, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of Inovio included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with US GAAP, except as may be otherwise specified in such financial statements, the notes thereto and except that unaudited financial statements may not contain all footnotes required by US GAAP or may be condensed or summary statements, and fairly present in all material respects the consolidated financial position of Inovio and its consolidated subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, year-end audit adjustments. All material agreements to which Inovio or any Subsidiary is a party or to which the property or assets of Inovio or any Subsidiary are subject are included as part of or identified in the SEC Reports, to the extent such agreements are required to be included or identified pursuant to the rules and regulations of the SEC.

(c) Inovio and its Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with US GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(d) Inovio is in compliance in all material respects with applicable requirements of the Sarbanes-Oxley Act and applicable rules and regulations promulgated by the SEC thereunder, except where such noncompliance would not have, individually or in the aggregate, a Material Adverse Effect on Inovio or any of its Subsidiaries. There are no pending internal investigations (including investigations by any committee of Inovio's Board of Directors) relating to any accounting or internal controls matters, including, without limitation, stock option pricing and grant procedures.



3.5 *Absence of Certain Changes or Events.* Since the date of the most recent SEC Report, Inovio has conducted its business in the ordinary course consistent with past practice and, since such date, there has not been:

(a) any Material Adverse Effect on Inovio or any of its Subsidiaries;

(b) any resignation by or termination by Inovio or any of its Subsidiaries of any executive officer or director;

(c) any written notice of any actual or threatened termination by any material customer, supplier, partner, licensor, licensee or other third party having business relations with Inovio or any of its Subsidiaries;

(d) any damage, destruction or loss (whether or not covered by insurance) materially and adversely affecting any of the material assets, or any material portion of the assets, of Inovio or any of its Subsidiaries or materially and adversely affecting the business of Inovio or any of its Subsidiaries

(e) any commencement of Legal Proceedings against Inovio or any of its Subsidiaries, and no Person has notified Inovio or any of its Subsidiaries in writing that it, and there is no reason to reasonably believe that any Person, intends to commence a Legal Proceeding;

(f) any material increase in the compensation payable to any Inovio officer or director (other than increases in each case in connection with general performance reviews and annual salary increases in each case in the ordinary course of business and consistent with past practices, or pursuant to existing contractual commitments), including the making of any loan to such person (other than advancement of routine travel, entertainment and other business expenses);

(g) any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC;

(h) any sale, lease, license, assignment or exclusive license of any properties or assets, tangible or intangible (including, without limitation, Intellectual Property), or any encumbrance (excluding Permitted Liens) of any properties or assets, tangible or intangible (including, without limitation, Intellectual Property), other than sales or licenses in the ordinary course of Inovio's business or the business of any of its Subsidiaries and other than with respect to tangible assets transactions involving less than \$500,000 in any one case or \$1,000,000 in the aggregate;

(i) any material change by Inovio or any of its Subsidiaries in its accounting methods, principles or practices, except as required by concurrent changes in US GAAP;

(j) any material revaluation by Inovio or any of its Subsidiaries of any of its assets, including writing down the value of capitalized inventory or writing off notes or accounts receivable other than in the ordinary course of business;

(k) any establishment, termination or amendment of any Inovio Employee Plan;

(1) any material increase of severance or termination pay to any employee of Inovio or any Subsidiary of Inovio;

(m) any declaration, setting aside or payment of any dividend on, or other distribution (whether in cash, stock, equity securities or property) in respect of, any of Inovio Capital Stock or any capital stock of its Subsidiaries;

(n) any purchase, redemption or other acquisition by Inovio or any of its Subsidiaries of any of Inovio Capital Stock or any other securities of Inovio or its Subsidiaries or any options, warrants, calls or rights to acquire any such shares or other securities except for repurchases from

Inovio Employees following their termination pursuant to the terms of their pre-existing stock option or purchase agreements;

(o) any issuance or reservation for issuance by Inovio of, or commitment of it to issue or reserve for issuance, or the pledge or other encumbrance (excluding Permitted Liens) by it of, any shares of capital stock or other securities or obligations or securities convertible into or exchangeable for shares of capital stock or other securities, or issuance, sale or authorization by it of any subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into capital stock, other than (i) the issuance, delivery and/or sale of shares of Inovio Common Stock pursuant to the exercise of Inovio Options, (ii) the granting of options to purchase Inovio Common Stock in the ordinary course of business under the Inovio Incentive Plans, and (iii) issuances upon exercise of Inovio Warrants or other rights disclosed pursuant to *Section 3.2*;

(p) any split, combination or reclassification of any of Inovio Capital Stock or the capital stock of any of its Subsidiaries' or issuance or authorization of issuance of any other securities in respect of, in lieu of or in substitution for any Inovio Capital Stock or the capital stock of any of its Subsidiaries;

(q) any amendment of the Certificate of Incorporation or By-Laws of Inovio;

(r) any capital expenditure or execution of any lease by Inovio involving remaining payments or obligations in excess of \$500,000 individually or \$1,000,000 in the aggregate;

(s) any cancellation by Inovio nor any of its Subsidiaries of any indebtedness or waiver of any rights material to Inovio, except in the ordinary course of business;

(t) any indebtedness incurred or guaranteed by Inovio or any of its Subsidiaries for borrowed money or any commitment to borrow money entered into by Inovio or any of its Subsidiaries in excess of \$500,000, or any loans made or agreed to be made by Inovio or any of its Subsidiaries, other than reasonable travel and entertainment expense advances and trade accounts receivable in the ordinary course of business;

- (u) any commencement of Legal Proceedings by Inovio or any of its Subsidiaries;
- (v) any acquisition or disposition of any equity interest in any other Person; or
- (w) any agreement by Inovio or any of its Subsidiaries to do any of the foregoing.

3.6 Tax Returns and Audits.

(a) Inovio and each of its Subsidiaries have prepared and timely filed all required Tax Returns relating to any and all Taxes concerning or attributable to Inovio or its Subsidiaries and such Tax Returns are accurate and complete in all material respects. Inovio and/or its Subsidiaries have paid or accrued all Taxes shown on such Tax Returns.

(b) Inovio and each of its Subsidiaries have paid all Taxes required to be paid and withheld with respect to their employees (and paid over to the appropriate Taxing authority) all federal and state income taxes, Federal Insurance Contribution Act, Federal Unemployment Tax Act and other Taxes required to be withheld.

(c) There is no Tax deficiency outstanding, assessed or proposed against Inovio or any of its Subsidiaries, and neither Inovio nor any Subsidiary is a party to any action or proceeding for the assessment or collection of Taxes, nor has Inovio or any of its Subsidiaries executed any outstanding waiver of any statute of limitations on or outstanding extension of the period for the assessment or collection of any Tax.

(d) No audit or other examination of any Tax Return of Inovio or any of its Subsidiaries is presently in progress, nor has Inovio or any of its Subsidiaries been notified (in writing) that any Taxing authority is threatening or planning to initiate such an audit or other examination. No written claim has ever been asserted by a Governmental Entity in a jurisdiction where Inovio or any Subsidiary does not file Tax Returns that such entity is or may be subject to taxation by that jurisdiction.

(e) As of the date of the Inovio Balance Sheet, neither Inovio nor any of its Subsidiaries has any material liabilities for unpaid Taxes, which have not been accrued or reserved on the Inovio Balance Sheet in accordance with US GAAP, and since the date of the Inovio Balance Sheet, neither Inovio nor any of its Subsidiaries has incurred any liability for Taxes other than in the ordinary course of business.

(f) There are no Liens (except for Permitted Liens) on the assets of Inovio or any of its Subsidiaries relating to or attributable to Taxes.

(g) Neither Inovio nor any of its Subsidiaries is, nor has been at any time, a "United States Real Property Holding Corporation" within the meaning of Section 897(c)(2) of the Code.

(h) Neither Inovio nor any of its Subsidiaries (a) has ever been a member of an affiliated group (within the meaning of Code Section 1504(a)) filing a consolidated federal income Tax Return (other than a group the common parent of which was Inovio),
(b) owes any amount under, or is a party to, any Tax sharing, indemnification or allocation agreement (other then between or among Inovio and any of its Subsidiaries), (c) has any liability for the Taxes of any person (other than Inovio or any of its Subsidiaries) under Treas. Reg. § 1.1502-6 (or any similar provision of state, local or foreign law), as a transferee or successor, by contract, or otherwise.

(i) Neither Inovio nor any of its Subsidiaries has constituted either a "distributing corporation" or a "controlled corporation" in a distribution of stock intended to qualify for tax-free treatment under Section 355 of the Code (a) in the two years prior to the date of this Agreement or (b) in a distribution which could otherwise constitute part of a "plan" or "series of related transactions" (within the meaning of Section 355(e) of the Code) in conjunction with the Merger.

(j) Inovio has made available to VGX true and complete copies of (i) income and sales tax audit reports, statements of deficiencies, and closing or other agreements relating to Inovio's or any Subsidiary's Taxes, and (ii) all federal, state and local income or franchise tax returns for Inovio and all its Subsidiaries for all periods ending on or before the date of this Agreement.

(k) There are no Tax-sharing agreements or similar arrangements (including Tax indemnity arrangements) with respect to or involving Inovio or any Subsidiaries other than this Agreement.

(1) Neither Inovio nor any Subsidiary has participated in (i) any "tax shelter" within the meaning of Section 6111 (as in effect prior to the enactment of P.L. 108-357 or any comparable laws of jurisdictions other than the United States, or (ii) a reportable transaction as described in U.S. treasury regulations promulgated under Section 6011 of the Code or any comparable laws of jurisdictions other than the United States.

(m) Based on good faith interpretations of Code Section 409A and IRS guidance thereunder, to Inovio's Knowledge, neither Inovio nor any Subsidiary has, since October 3, 2004, (i) granted to any person an interest in a nonqualified deferred compensation plan (as defined in Code Section 409A(d)(1)) which interest has been or, upon the lapse of a substantial risk of forfeiture with respect to such interest, will be subject to the Tax imposed by Code Sections 409A(a)(1)(B) or (b)(4)(A), or (ii) modified the terms of any nonqualified deferred compensation plan in a manner that could cause an interest previously granted under such plan to become subject to the Tax imposed by Code Sections 409A(a)(1)(B) or (b)(4).

(n) Neither Inovio nor any Subsidiary will be required to include any material item of income in, or exclude any material item of deduction from, its taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any:

(i) adjustment under Code Section 481 with respect to a change in method of accounting for a taxable period ending on prior to the Closing Date,
(ii) "closing agreement" as described in Code Section 7121 (or any corresponding state, local or foreign Legal Requirement),
(iii) intercompany transactions or any excess loss account described in the United States Treasury Regulations under Code Section 1502 (or any corresponding state, local or foreign Legal Requirements that, in either case, is attributable to transactions or other events occurring prior to the Closing Date),
(iv) installment sale or open transaction disposition made on or prior to the Closing Date or (v) prepaid amount received on or prior to the Closing Date.

3.7 Intellectual Property.

(a) Definitions. For the purposes of this Agreement, the following terms have the following meanings:

(i) "Inovio Intellectual Property" means all Intellectual Property that is owned by, or licensed to, Inovio.

(ii) "*Inovio Registered Intellectual Property*" means all of the Registered Intellectual Property owned by, or filed in the name of, Inovio.

(b) Inovio Intellectual Property. Section 3.7(b) of the Inovio Disclosure Letter contains an accurate and complete list and description of all Inovio Intellectual Property. Section 3.7(b)(i) of the Inovio Disclosure Letter contains a list of Inovio Intellectual Property corresponding to a specific subset of items contemplated by subparagraphs (A), (B), (C), (G) and (J) of Section 2.7(a)(i), and further contains correct and complete data regarding Contracts, documentation, and/or records pertaining thereto, including without limitation correct and complete data evidencing ownership and status of each recited item as of the date hereof.

(c) *Registered Intellectual Property; Proceedings.* Section 3.7(c) of the Inovio Disclosure Letter sets forth as of the date hereof (i) all Inovio Registered Intellectual Property and specifies, where applicable, the jurisdictions in which each such item of Inovio Registered Intellectual Property has been issued or registered and (ii) to the Knowledge of Inovio, all proceedings or actions before any court, tribunal or inventorship contest before any administrative body (including the PTO or equivalent authority anywhere else in the world) related to any of Inovio Registered Intellectual Property.

(d) *No Order; Transferability.* No Inovio Intellectual Property that is owned by Inovio or any of its Subsidiaries, and to the Knowledge of Inovio, no Inovio Intellectual Property that is licensed by Inovio or any of its Subsidiaries, is subject to any proceeding or outstanding order, Contract, Legal Requirement or stipulation restricting in any manner the use, transfer (including, without limitation, as contemplated by this Agreement), enforceability or licensing thereof by Inovio or any of its Subsidiaries, or which may affect the validity thereof.

(e) *Registration; Validity.* Each item of Inovio Registered Intellectual Property that is owned by Inovio or any of its Subsidiaries and that is not an application is subsisting and all necessary registration, maintenance and renewal fees currently due in connection with such Inovio Registered Intellectual Property have been made and all necessary assignments, documents, recordations and certificates currently due in connection with such Inovio Registered Intellectual Property have been filed with the relevant patent, copyright, trademark or other authorities in the United States or foreign jurisdictions, as the case may be, for the purposes of prosecuting, maintaining or perfecting such Inovio Registered Intellectual Property, except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on Inovio or



any of its Subsidiaries. To the Knowledge of Inovio, there is no defect in the validity of any patent included in the Inovio Registered Intellectual Property. To the Knowledge of Inovio, there is no information regarding prior art, prior use in commerce, failure to join an inventor, or another basis on which to conclude that any invention disclosed in a patent application included in the Registered Inovio Intellectual Property is not patentable. To the Knowledge of Inovio, there is no defect in the validity of any registered trademark or registered copyright included in the Registered Inovio Intellectual Property. To the Knowledge of Inovio, each item of Inovio Intellectual Property licensed to Inovio that is not an application is valid and subsisting, and all necessary registration, maintenance and renewal fees currently due in connection with such licensed Inovio Intellectual Property have been made and all necessary assignments, documents, recordations and certificates currently due in connection with such licensed Inovio Intellectual Property have been filed with the relevant patent, copyright, trademark or other authorities in the United States or foreign jurisdictions, as the case may be, for the purposes of prosecuting, maintaining or perfecting such licensed Inovio Intellectual Property, except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on Inovio.

(f) Absence of Liens. Inovio owns and has good and exclusive title to each material item of Inovio Intellectual Property owned by it, free and clear of any Liens (excluding Permitted Liens and non-exclusive licenses and related restrictions granted in the ordinary course of business). To the Knowledge of Inovio, Inovio Intellectual Property licensed to Inovio is owned by each respective licensor free and clear of any Liens (excluding Permitted Liens and non-exclusive licenses and related restrictions granted in the ordinary course of business).

(g) Third-Party Development. To the Knowledge of Inovio, Section 3.7(g) of the Inovio Disclosure Letter sets forth all third-party Intellectual Property used in connection with, or necessary to market, license, make, use, sell, offer for sale, import, modify, update, practice, and/or create derivative works of the Inovio Intellectual Property, indicating whether or not such third party proprietary information or processes, or any portion thereof, is or has been embedded in and/or used to practice Inovio's Intellectual Property, except where an inability to use, rely on or integrate such third-party Intellectual Property, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on Inovio. To the Knowledge of Inovio, no rights of any other third party are necessary for or used in the operation of Inovio's business, or the business of any of its Subsidiaries, as all are conducted as of the date hereof, as anticipated to be conducted prior to and at the Effective Time, and as anticipated to be conducted after the Effective Time by Inovio and its Subsidiaries. To the extent that any technology, software, biological product or Intellectual Property has been developed or created independently or jointly for Inovio or any of its Subsidiaries by a third party including but not limited to an academic or not-for-profit entity, Inovio or such Subsidiary has a written agreement with such third party with respect thereto and Inovio or such Subsidiary thereby either (i) has obtained irrevocable ownership of, and are the exclusive owners of, or (ii) to the extent permitted under applicable Legal Requirements, has obtained a valid license sufficient for the conduct of its business as of the date hereof or as anticipated to be conducted prior to and at the Effective Time, to all such third party's Intellectual Property, including such product, software, work, material or invention except where such failure, individually or in the aggregate, would not be reasonably expected to result in a Material Adverse Effect on Inovio.

(h) *Open Source*. As of the date hereof there is no Inovio Intellectual Property made available under an Open Source Software license. No computer software that is Open Source Software, or any modification or derivative thereof, including, but not limited to, any version of any computer software licensed pursuant to any GNU general public license or limited general public license, is used in, incorporated into, or integrated or bundled with any Inovio Intellectual Property owned by Inovio or any of its Subsidiaries, and to the Knowledge of Inovio, with any

Inovio Intellectual Property licensed by Inovio or any of its Subsidiaries, including Inovio's products and services, sold, distributed, leased, licensed, transferred, or disposed of in any way by Inovio. No software incorporated in any of Inovio's products, services, or technology or covered by or embodying any Inovio Intellectual Property owned or purported to be owned by Inovio or any of its Subsidiaries has been sold in whole or in part or used, or is being used in conjunction with, any Open Source Software in a manner that would require that such software be disclosed or distributed in source code form or made available for free or at no charge or cost. Inovio and each of its Subsidiaries have complied in all material respects with all terms related to any license for any such Open Source Software used in conjunction with any products, services, or technology, or covered by or embodying any of the Inovio Intellectual Property.

(i) *Transfers.* Inovio has not transferred ownership of, or granted any exclusive licenses with respect to, any Inovio Intellectual Property that is owned by Inovio or any of its Subsidiaries and incorporated in any product currently or previously sold by Inovio or any of its Subsidiaries, to any third party, or to the Knowledge of Inovio, permitted Inovio's rights or the rights of any of its Subsidiaries in such Inovio Intellectual Property to lapse or enter the public domain.

(j) *Licenses.* Other than "shrink wrap" and similar widely available commercial end-user software licenses with a cost of less than 25,000, *Section 3.7(j)* of the Inovio Disclosure Letter sets forth a list as of the date hereof of all Contracts or other permissions to which Inovio or any of its Subsidiaries is a party (i) to Outbound Licenses or (ii) to Inbound Licenses. Without limiting the generality of *Sections 3.7(g)*, (i) and (k), each Inbound License: (i) is fully transferable to Inovio; (ii) to the Knowledge of Inovio, the underlying Intellectual Property of such Inbound License is not subject to any proceeding, outstanding order, claim, Contract, or stipulation challenging the legality or validity thereof; and (iii) Inovio has not granted any sublicense, or similar right, to a third party under such Inbound License, except as disclosed in *Section 3.7(j)* of the Inovio Disclosure Letter.

(k) No Conflict. All Contracts listed in Section 3.7 of the Inovio Disclosure Letter relating to either (i) Inovio Intellectual Property owned by Inovio or any of its Subsidiaries, or (ii) Inbound Licenses, are in full force and effect. This Agreement will neither violate nor result in the material breach, material modification, cancellation, termination, suspension of, or material acceleration of any payments with respect to, such Contracts. Inovio or its Subsidiaries, as the case may be, is in material compliance with, and has not materially breached any term of any such Contracts and, to the Knowledge of Inovio, all other parties to such Contracts are in compliance with, and have not materially breached any term of, such Contracts. Following the Closing Date, Inovio will be permitted to exercise all of Inovio's rights or the rights of any of Inovio's Subsidiaries, as the case may be, under such Contracts and all rights with respect to Inovio Intellectual Property under such Contracts to the same extent Inovio or any of its Subsidiaries, as the case may be, would have been able to had the Merger not occurred and without the payment of any material additional amounts or consideration other than ongoing fees, royalties or payments that Inovio or any of its Subsidiaries would otherwise be required to pay. Neither this Agreement nor the Merger, will result in (A) Inovio or any of its Subsidiaries, or after the Effective Time Inovio or the Surviving Entity, granting to any third party any right to or with respect to any material Inovio Intellectual Property right not already so licensed by Inovio or any of its Subsidiaries, (B) Inovio or the Surviving Entity being bound by, or subject to, any non-compete or other material restriction on the operation or scope or their respective businesses, or (C) Inovio or the Surviving Entity being obligated to pay any royalties or other material amounts to any third party in excess of those payable by Inovio of any of its Subsidiaries, as the case may be, prior to the Closing.

(l) *No Infringement.* To the Knowledge of Inovio, neither (i) the use, reproduction, modification, manufacturing, distribution, licensing, sublicensing, sale, offering for sale, import, or any other exercise of rights in Inovio Intellectual Property, (ii) the operation of Inovio's business,

including Inovio's provision of products or services and the business of its Subsidiaries, including their provision of products or services, nor (iii) the use, reproduction, modification, manufacture, distribution, licensing, sublicensing, sale, offering for sale, or other exploitation of any of the Inovio Products, Inovio's services, or technology, infringes any Intellectual Property, or any other intellectual property right, proprietary, or personal right, of any Person under the Legal Requirements of the applicable jurisdiction, or constitute unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction except for such infringements and activities that would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect on Inovio. To the Knowledge of Inovio, the conduct of business by Inovio has not and does not misappropriate the Intellectual Property of any third party nor constitute unfair competition nor constitute unfair trade practices under the trade practices under the Legal Requirements of any jurisdiction.

(m) No Notice of Infringemen. Inovio has not received notice from any third party (i) that the operation of Inovio's business, including the business of its Subsidiaries, or any act, product or service of Inovio or any of its Subsidiaries, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction, or (ii) challenging the ownership, validity, enforceability or registerability of any Inovio Intellectual Property licensed to Inovio has not been challenged by a third party and none of its licensors have received notice from any third party (i) that the operation of Inovio's business or any act, product or service of Inovio, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade property of any third party or service of Inovio, infringes or misappropriates the Intellectual Property of any third party or constitutes unfair competition or unfair trade property of any third party or constitutes unfair competition or unfair trade property of any third party or constitutes unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction.

(n) *No Third Party Infringement.* To the Knowledge of Inovio, no Person is infringing or misappropriating any Inovio Intellectual Property in a manner that would have a Material Adverse Effect on Inovio or any of its Subsidiaries. Inovio has not provided notice to any third party (i) that the operation of the business of the third party or any act, product or service of the third party infringes or misappropriates Inovio Intellectual Property or constitutes unfair competition or unfair trade practices under the Legal Requirements of any jurisdiction, or (ii) challenging the ownership, validity, enforceability or registerability of any third party Intellectual Property.

(o) Use of Technology. With respect to each item of Intellectual Property listed in Section 3.7 of the Inovio Disclosure Letter which consists of a computer program, software, electronic process or related process, procedure or technology, (i) Inovio maintains machine-readable master-reproducible copies, source code listings, technical documentation and user manuals, to the extent applicable, for the most current releases or versions thereof and for all earlier releases or versions thereof currently being, or which by contract for the benefit of any customer is to be, supported by each of them; (ii) in each case, the machine-readable copy substantially conforms to the corresponding source code listing; (iii) it is written in the language set forth in Section 3.7 of the Inovio Disclosure Letter for use on the hardware set forth in Section 3.7 of the Inovio Disclosure Letter or with standard operating systems; (iv) it can be maintained and modified by reasonably competent programmers familiar with such language, hardware and operating systems without incurring material costs, disbursements, and person hours; and (v) in each case, it operates in accordance with the user manual therefore without material operating defects or known, reproducible errors. Except with respect to demonstration or trial copies, no portion of any Inovio Intellectual Property contains any "back door," "time bomb," "Trojan horse," "worm," "drop dead device," "virus" or other software routines or hardware components designed to permit unauthorized access or to disable or erase software, hardware, or data without the consent of the user.

(p) *No Affiliate Ownership.* None of the Intellectual Property listed or required to be listed on *Section 3.7* of the Inovio Disclosure Letter is owned by or registered in the name of any stockholder, or any current or former owner, stockholder, partner, director, executive, officer, employee, salesman, agent, customer, representative or contractor of Inovio or any of its Subsidiaries nor does any such Person have any interest therein or right thereto, including the right to royalty payments.

(q) Domain Names. Section 3.7(q) of the Inovio Disclosure Letter lists all Domain Names related to the business of Inovio and its Subsidiaries. All Domain Names are in good standing until such dates as set forth in Section 3.7(q) of the Inovio Disclosure Letter. To the Knowledge of Inovio, no action has been taken or is pending to challenge Inovio's rights or the rights of any of its Subsidiaries to or to suspend, cancel or disable any Domain Name, registration therefore or the right of Inovio or any of its Subsidiaries to use a Domain Name. Inovio and its Subsidiaries, as the case may be, has all right, title and interest in and to, and rights to use on the internet and otherwise as a service mark, trademark and trade name, the Domain Names.

(r) *No Export.* Since December 1, 2003, neither Inovio nor any Affiliate thereof has exported or re-exported, directly or indirectly (including via remote access) any part of any Inovio Intellectual Property to any country to which a license is required under Legal Requirements relating to the control of imports and exports of commodities and technical data, use and remote use of software and related property, and registration of customer agreements, including the Export Administration Regulations of the U.S. Department of Commerce, the International Traffic in Arms Regulations of the U.S. Department of State, and the Enhanced Proliferation Control Initiative in the U.S. without first obtaining all applicable licenses.

(s) Websites. Since December 1, 2003, Inovio has maintained in connection with their operations, activity, conduct, and business on the Web and any and all other applicable internet operations, activity, conduct, and business, at all times during such operations, activity, conduct, and business, a written privacy statement or policy governing the collection, maintenance, and use of data and information collected from users of Web sites owned, operated, or maintained by, on behalf of, or for the benefit of Inovio in connection with or related to Inovio's business, including the business of any of its Subsidiaries ("Inovio Web Sites"). Since December 1, 2003, Inovio's privacy statement or policy has been conspicuously made available to users of Inovio Web Sites. Such statement or policy, along with Inovio's collection, maintenance, and use of user data and information and transfer thereof to VGX under this Agreement, complies in all material respects with all applicable Legal Requirements, including laws of the U.S. Federal Trade Commission. Inovio's privacy statement or policy does not in any manner restrict or limit any right of Inovio or any successors' rights to use, sell, license, distribute, and disclose such collected data.

(t) *Proprietary Information Agreements.* Inovio and its Subsidiaries have taken commercially reasonable steps to protect Inovio's rights and the rights of its Subsidiaries in the confidential information and trade secrets of Inovio and its Subsidiaries that it wishes to protect or any trade secrets or confidential information of third parties provided to Inovio or any of its Subsidiaries, and, without limiting the foregoing, Inovio and its Subsidiaries have and enforce a policy requiring each employee, to execute a proprietary information/confidentiality agreement which requires the employee to assign all Intellectual Property rights to Inovio or its Subsidiary, as the case may be, and requires the employee to keep confidential all trade secrets of Inovio and its Subsidiaries, and all employees of Inovio and its Subsidiaries have executed such an agreement, except where the failure to do so would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on Inovio or any of its Subsidiaries. Except where the failure to do so would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect on Inovio or any of its Subsidiaries, there has been no disclosure by Inovio or any of its Subsidiaries to any third party of confidential information or trade secrets of Inovio or any of its

Subsidiaries, except pursuant to a Contract that requires such third party to keep such confidential information or trade secrets confidential.

(u) Data Privacy. Inovio and its Subsidiaries have not used and does not currently use any of the patient information or other individuals' personal information that it has received or currently receives through their clinical studies or otherwise in an unlawful manner, such that criminal or civil liability would result, or in a manner that violates any privacy rights of its customers. Inovio and its Subsidiaries have not collected any information through its websites, products, services, studies or technology in an unlawful manner. Inovio and its Subsidiaries have commercially reasonable security measures in place to protect the customer information it receives through its website or otherwise and which it stores in its computer systems from illegal use by third parties or use by third parties in a manner that violates the rights of privacy of its customers, patients in its studies or other individuals with whom Inovio and its Subsidiaries do business. Inovio and its Subsidiaries are and have been in compliance with all applicable Legal Requirements relating to the collection, storage, and onward transfer of all personally identifiable information collected by Inovio and its Subsidiaries or, to the Knowledge of Inovio, by third parties having authorized access to Inovio's (including its Subsidiaries') databases or other records.

(v) *Source Code and Formulas.* No Persons other than Inovio possess any current or contingent rights of any kind to any source code or proprietary formulas included in the Inovio Intellectual Property. No event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time) will, or could reasonably be expected to, result in the disclosure or delivery to any Person of any source code owned by Inovio or any of its Subsidiaries, formula or the release from any escrow of any other Inovio Intellectual Property. Neither Inovio nor any of its Subsidiaries has granted any licenses or rights to distribute the source code of, or to use the source code to create derivative works of, any product or service marketed (at and at any time prior to the Effective Time) by, commercially available from or under development by Inovio or any of its Subsidiaries.

3.8 Regulatory Compliance; Permits.

(a) *Compliance.* Without limiting the generality of the representations and warranties provided elsewhere in this *Section 3.8*, neither Inovio nor any of its Subsidiaries is in conflict with, or in default or in violation of, any Legal Requirement applicable to Inovio or any of its Subsidiaries or by which Inovio or any of its Subsidiaries or any of their respective businesses or properties is bound or affected, except for those conflicts, defaults or violations that, individually or in the aggregate, would not reasonably be expected to cause Inovio or any of its Subsidiaries to lose any material benefit or incur any material liability. To the Knowledge of Inovio, no investigation or review by any Governmental Entity is pending or, to the Knowledge of Inovio, has been threatened, against Inovio or any of its Subsidiaries. There is no judgment, injunction, order or decree binding upon Inovio or any of its Subsidiaries which has, or would reasonably be expected to have, the effect of prohibiting or materially impairing any material business practice of Inovio or any of its Subsidiaries, any acquisition of material property by Inovio or any of its Subsidiaries or the conduct of business by Inovio and its Subsidiaries as currently conducted.

(b) *Permits*. Without limiting the generality of the representations and warranties provided elsewhere in this *Section 3.8*, Inovio and its Subsidiaries hold, to the extent legally required, all Permits that are material to the operation of the business of Inovio taken as a whole (collectively, "*Inovio Permits*"). As of the date hereof, to the Knowledge of Inovio, no suspension or cancellation of any of Inovio Permits is pending or threatened. Inovio and its Subsidiaries are in compliance in all material respects with the terms of Inovio Permits. *Section 3.8(b)* of the Inovio Disclosure Letter sets forth as of the date hereof each of the Inovio Permits and lists all regulatory filing requirements that are required to be filed within six months after the Closing Date in order to maintain the Permits.

(c) FDA and Global Regulatory Compliance.

(i) The operation of Inovio, including the manufacture, import, export, testing, development, processing, packaging, labeling, storage, marketing, and distribution of all products, is and at all times has been in material compliance with all applicable Legal Requirements, Permits, and orders of Governmental Entities including those administered by the FDA and USDA for products manufactured, marketed and sold in the United States and that are subject to FDA and USDA jurisdiction. There is no actual or, to the Knowledge of Inovio, threatened material action or investigation against Inovio by the FDA or any other Governmental Entity which has jurisdiction over the manufacturing, operations, properties, products or processes of Inovio or those of any third parties acting on Inovio's behalf. Inovio has no Knowledge that any Governmental Entity is considering such action or of any facts or circumstances that are reasonably likely to give rise to any such action or investigation.

(ii) Except as set forth in *Section 3.8(c)* of the Inovio Disclosure Letter, neither Inovio, nor to the Knowledge of Inovio, any third party acting on Inovio's behalf with respect to services conducted for Inovio or any of its Subsidiaries, has had any product or manufacturing site subject to a Governmental Entity (including FDA) shutdown or import or export prohibition, nor received any FDA Form 483 or other notice from a Governmental Entity of inspectional observations, "warning letters," "untitled letters" or, to the Knowledge of Inovio, requests or requirements to make changes to the operations of Inovio (or any of its Subsidiaries) or Inovio's products that if not complied with would reasonably be expected to result in a Material Adverse Effect on Inovio or any of its Subsidiaries, or similar correspondence or written notice from the FDA or other Governmental Entity in respect to services conducted for Inovio, and alleging or asserting noncompliance with any Legal Requirements, Permits or such requests or requirements of a Governmental Entity, and, to the Knowledge of Inovio, neither the FDA nor any Governmental Entity is considering such action. Except as set forth in *Section 3.8(c)* of Inovio Disclosure Letter, no vigilance report or adverse event report with respect to the products, or, to the Knowledge of Inovio, any third party acting on Inovio's behalf with respect to services conducted for Inovio, and to the Knowledge of Inovio, no vigilance report or adverse event report with respect to the products, or, to the Knowledge of Inovio, any third party acting on Inovio's behalf with respect to services conducted for Inovio, and to the Knowledge of Inovio, no vigilance report or adverse event report with respect to the products, or, to the Knowledge of Inovio, no vigilance report or adverse event report is under investigation by any Governmental Entity with respect to Inovio's products or Inovio or any of its Subsidiaries.

(iii) All studies, tests and preclinical and clinical trials being conducted by or on behalf of Inovio or any of its Subsidiaries that have been or will be submitted to any Governmental Entity, including the FDA and its counterparts worldwide, including in the European Union, in connection with any Permit, are being or have been conducted by Inovio or, to the knowledge of Inovio, are being or have been conducted on behalf of Inovio, in compliance in all material respects with the required experimental protocols, procedures and controls pursuant to accepted professional scientific standards and applicable local, state, federal and foreign Legal Requirements, rules and regulations, including the applicable requirements of Good Laboratory Practices, Good Clinical Practices, Good Manufacturing Practices, Human Subject Protections and the U.S. Food, Drug and Cosmetic Act of 1938 and its implementing regulations, including 21 CFR Parts 50, 54, 56, 58, 210, and 211. Inovio has not received any notices, correspondence or other communication in respect of Inovio from the FDA or any other Governmental Entity requiring the termination or suspension of any clinical trials conducted by, or on behalf of, Inovio or any of its Subsidiaries or in which Inovio or any of its Subsidiaries has participated, and to the Knowledge of Inovio neither the FDA nor any other Governmental Entity is considering such action. Inovio has not received specific written notification from a Governmental Entity of the rejection of data obtained from any clinical

trials conducted by, or on behalf of, Inovio or any of its Subsidiaries or in which Inovio or any of its Subsidiaries has participated with respect to Inovio, its Subsidiaries or its products, which data was submitted to the Governmental Authority and which was necessary to obtain regulatory approval of a particular product.

(iv) The manufacture of products by, or, to the Knowledge of Inovio, on behalf of, Inovio is being conducted in compliance in all material respects with all applicable Legal Requirements including the FDA's Good Manufacturing Practices at 21 CFR §§210-211 and applicable guidelines for products sold in the United States, and the respective counterparts thereof promulgated by Governmental Entities in countries outside the United States.

(v) Inovio is not the subject of any pending or, to the Knowledge of Inovio, threatened investigation in respect of Inovio or any of its Subsidiaries by the FDA pursuant to its "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. Neither Inovio nor any of its Subsidiaries has committed any act, made any statement, or failed to make any statement, in each case in respect of Inovio or its Subsidiaries and that would provide a basis for the FDA to invoke its policy with respect to "Fraud, Untrue Statements of Material Facts, Bribery and Illegal Gratuities" and any amendments thereto. Neither Inovio nor any of its officers or, to the Knowledge of Inovio, employees or agents has been convicted of any crime or engaged in any conduct that could result in a debarment or exclusion (i) under 21 U.S.C. Section 335a, or (ii) any similar applicable Legal Requirement. No debarment or exclusionary claims, actions, proceedings or investigations in respect of Inovio are pending or, to the Knowledge of Inovio, threatened against Inovio, its Subsidiaries or any of their respective officers, employees or agents.

3.9 *Litigation.* There are no Legal Proceedings pending or, to the Knowledge of Inovio, threatened against Inovio or any of its Subsidiaries or any of their respective properties or relating to any of the executive officers and directors of Inovio or any of its Subsidiaries in their capacity as such, before any court, Governmental Entity, or any arbitrator that seeks to restrain, enjoin or prevent the consummation of the transactions contemplated hereby or which, if adversely decided, would reasonably be expected, either individually or in the aggregate with all such claims, actions or proceedings, to be material to Inovio or any of its Subsidiaries. *Section 3.9* of Inovio Disclosure Letter further sets forth a list as of the date hereof of all litigation settlement agreements to which Inovio or any of its Subsidiaries is a party.

3.10 Brokers' and Finders' Fees; Fees and Expenses. Inovio has not incurred, nor will it incur, directly or indirectly, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement or the transactions contemplated hereby.

- 3.11 Employee Matters and Benefit Plans.
 - (a) Definitions. For purposes of this Agreement, the following terms shall have the meanings set forth below:

(i) "*Inovio Employee*" shall mean any current or former or retired employee, consultant or director of Inovio or any of its Subsidiaries.

(ii) "*Inovio Employee Plan*" shall mean any plan, program, policy, practice, contract, agreement or other arrangement providing for compensation, severance, termination pay, deferred compensation, performance awards, stock or stock-related awards, fringe benefits or other employee benefits or remuneration of any kind, whether written or unwritten or otherwise, funded or unfunded, including without limitation, each "employee benefit plan," within the meaning of Section 3(3) of ERISA which is or has been maintained, contributed to, or required to be contributed to, by Inovio or any Inovio ERISA Affiliate for the benefit of

any employee, or with respect to which Inovio or any Inovio ERISA Affiliate has or may have any liability or obligation.

(iii) "*Inovio ERISA Affiliate*" shall mean each Subsidiary of Inovio and any other person or entity under common control with Inovio or any of its Subsidiaries within the meaning of Section 414(b), (c), (m) or (o) of the Code and the regulations issued thereunder.

(iv) "*Inovio Pension Plan*" shall mean each Inovio Employee Plan which is an "employee pension benefit plan," within the meaning of Section 3(2) of ERISA.

(b) *Inovio Employee Plans. Section 3.11(b)* of the Inovio Disclosure Letter contains an accurate and complete list of each Inovio Employee Plan. Neither Inovio nor any Subsidiary has any plan or commitment to establish any new Inovio Employee Plan, to modify any Inovio Employee Plan (except to the extent required by law or to conform any such Inovio Employee Plan to applicable Legal Requirements), or to adopt or enter into any Inovio Employee Plan.

(c) Documents. Inovio has delivered or made available to VGX correct and complete copies of, to the extent applicable,:
(i) each Inovio Employee Plan together with all amendments thereto; (ii) the most recent annual actuarial valuations, if any, prepared for each Inovio Employee Plan; (iii) the two (2) most recent annual reports (Form Series 5500 and all schedules and financial statements attached thereto), if any, required under ERISA or the Code in connection with each Inovio Employee Plan; (iv) if the Inovio Employee Plan is funded, the most recent annual and periodic accounting of Inovio Employee Plan assets; (v) the most recent summary plan description together with the summary(ies) of material modifications thereto, if any; (vi) all IRS correspondence, including determination, opinion, notification and advisory letters; and (vii) all related agreements, insurance contracts and other agreements by which such Inovio Employee Plan is established, operated, administered or funded.

(d) Employee Plan Compliance. Inovio and the Inovio ERISA Affiliates have performed in all material respects all obligations required to be performed by them under, are not in default or violation of, and have no Knowledge of any default or violation by any other party to each Inovio Employee Plan, and each Inovio Employee Plan has been established and maintained in all material respects in accordance with its terms and in compliance with all applicable Legal Requirements, including but not limited to ERISA or the Code. Any Inovio Employee Plan intended to be qualified under Section 401(a) of the Code and each trust intended to qualify under Section 501(a) of the Code (i) has either applied for, prior to the expiration of the requisite period under applicable Treasury Regulations or IRS pronouncements, or obtained a favorable determination, notification, advisory and/or opinion letter, as applicable, as to its qualified status from the IRS or still has a remaining period of time under applicable Treasury Regulations or IRS pronouncements in which to apply for such letter and to make any amendments necessary to obtain a favorable determination, and (ii) incorporates or has been amended to incorporate all provisions required to comply with the Tax Reform Act of 1986 and subsequent legislation. The remedial amendment period under Section 401(b) of the Code has not expired with respect to any amendment to any such Inovio Employee Plan adopted after the date of the most recent such determination, notification, advisory and/or opinion letter. For each Inovio Employee Plan that is intended to be qualified under Section 401(a) of the Code, to the Knowledge of Inovio, there has been no event, condition or circumstance that has adversely affected or is likely to adversely affect such qualified status. No "prohibited transaction," within the meaning of Section 4975 of the Code or Sections 406 and 407 of ERISA, and not otherwise exempt under Section 408 of ERISA, has occurred with respect to any Inovio Employee Plan, which would individually or in the aggregate result in material liability to Inovio. There are no material actions, suits or claims pending, or, to the Knowledge of Inovio, threatened or reasonably anticipated (other than routine claims for benefits) against any Inovio Employee Plan or against the assets of any Inovio Employee Plan.

Neither Inovio nor any Inovio ERISA Affiliate has received any written notice that any Inovio Employee Plan or any fiduciary thereof is presently the direct or indirect subject of an audit, investigation or examination by any governmental or quasi-governmental agency, and no such action has been threatened. Neither Inovio nor any Inovio ERISA Affiliate has incurred any liability or civil penalty under ERISA or liability for any tax or excise tax arising under the Code with respect to any Inovio Employee Plan, and no event has occurred and no condition or circumstance exists that could reasonably be expected to give rise to any such liability with respect to any such Inovio Employee Plan.

(e) No Pension or Welfare Plans. Neither Inovio nor any Inovio ERISA Affiliate has ever maintained, established, sponsored, participated in, or contributed to, any (i) Pension Plan which is subject to Title IV of ERISA or Section 412 of the Code, (ii) Multiemployer Plan, (iii) "multiple employer plan" as defined in ERISA or the Code, or (iv) a "funded welfare plan" within the meaning of Section 419 of the Code. No Inovio Employee Plan provides health benefits that are not fully insured through an insurance contract.

(f) No Post-Employment Obligations. Except as set forth in Section 3.11(f) of the Inovio Disclosure Letter, no Inovio Employee Plan provides, or reflects or represents any liability to provide post-termination or retiree welfare benefits to any person for any reason, except as may be required by COBRA or other applicable statute, and neither Inovio nor any Subsidiary has ever represented, promised or contracted (whether in oral or written form) to any employee (either individually or to employees as a group) or any other person that such employee(s) or other person would be provided with post-termination or retiree welfare benefits, except to the extent required by statute.

(g) Effect of Transaction.

(i) Except as set forth in Section 3.11(g) of the Inovio Disclosure Letter, the execution of this Agreement and the consummation of the transactions contemplated hereby will not (either alone or upon the occurrence of any additional or subsequent events) constitute an event under any Inovio Employee Plan that will or may result in any payment, acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any Inovio Employee.

(ii) No payment or benefit which will or may be made by Inovio or its Subsidiaries with respect any "disqualified individual" (as defined in Code Section 280G and the regulations thereunder) will be characterized as a "parachute payment," within the meaning of Section 280G(b)(2) of the Code.

(h) *Employment Matters*. Inovio and its Subsidiaries are in compliance in all material respects with all applicable foreign, federal, state and local laws, rules and regulations respecting employment, employment practices, terms and conditions of employment and wages and hours, in each case, with respect to each Inovio Employee and have made all reportings, registrations, filings, contributions, withholdings or other payments with respect to each Inovio Employee.

(i) *Labor.* No work stoppage or labor strike against Inovio or any Subsidiary is pending, or to the Knowledge of Inovio, threatened or reasonably anticipated. To the Knowledge of Inovio, there are no activities or proceedings of any labor union to organize any Inovio Employees. There are no actions, suits, claims, labor disputes or grievances pending, or, to the Knowledge of Inovio, threatened or reasonably anticipated relating to any labor, safety or discrimination matters involving any employee, which, if adversely determined, would, individually or in the aggregate, result in any material liability to Inovio or any of its Subsidiaries. Neither Inovio nor any of its Subsidiaries has engaged in any unfair labor practices within the meaning of the National Labor Relations Act. Neither Inovio nor any of its Subsidiaries is presently, nor has it been in the past, a

party to, or bound by, any collective bargaining agreement or union contract with respect to employees and no collective bargaining agreement is being negotiated with respect to Inovio Employees

3.12 Title to Properties.

(a) Real Properties. Inovio does not own any real property.

(b) Leased Properties. Section 3.12(b) of the Inovio Disclosure Letter sets forth a true, complete and correct list as of the date hereof of all real property currently leased by Inovio or any of its Subsidiaries (each an "Inovio Facility", and collectively, the "Inovio Facilities"). All such current leases (the "Inovio Leases") are legal, valid and binding agreements, enforceable against Inovio in accordance with its terms, on Inovio or the Subsidiary of Inovio party thereto and, to the Knowledge of Inovio, of each other Person party thereto, except as such enforcement may be limited by applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other general principles of equity (regardless of whether enforceability is considered in a proceeding in equity or at law). All such current leases are in full force and effect, and there is not, under any of such leases, any existing material default of Inovio or its Subsidiaries or, to the Knowledge of Inovio, any event, which with notice or lapse of time, or both, would constitute a material default of Inovio or its Subsidiaries thereunder.

(c) *No Subleases.* Inovio has not entered into any sublease, license, option, right, concession or other agreement or arrangement, written or oral, granting to any person the right to use or occupy any Inovio Facility or any portion thereof or interest therein.

(d) *Valid Title*. Inovio and each of its Subsidiaries has good and valid title to, or, in the case of leased properties and tangible assets, valid leasehold interests in, all of its tangible properties and assets (real, personal, tangible and mixed, including all Inovio Facilities) used or held for use in its business, free and clear of any Liens except Permitted Liens, and except for such tangible properties and assets, no other material tangible property or asset is necessary for or used in the operation of Inovio's business or the business of any of its Subsidiaries as conducted as of the date hereof (other than Inovio Intellectual Property, the sufficiency of which is addressed in *Section 3.7*).

3.13 Environmental Matters.

(a) *Hazardous Material*. As of the Closing, to the Knowledge of Inovio, and except as would not be reasonably likely to result in material liability to Inovio or any of its Subsidiaries, no Hazardous Materials have been disposed of, dumped, injected, pumped, deposited, spilled, leaked, emitted or released at, on or under any Inovio Facilities, nor have any Hazardous Materials been manufactured or transported by Inovio or its Subsidiaries in violation of any applicable Legal Requirement.

(b) *Environmental Claims*. There are no Legal Proceedings pending or, to the Knowledge of Inovio, threatened against Inovio or any of its Subsidiaries which allege a violation of Environmental Laws. To the Knowledge of Inovio, neither Inovio nor any of its Subsidiaries have received any written or oral notification alleging any violation of Environmental Laws, disposal, release or threatened release of any Hazardous Material generated or transported by Inovio or any of its Subsidiaries.

3.14 Contracts.

(a) Scheduled Contracts. For purposes of this Agreement, "Inovio Scheduled Contract" shall mean:

(i) any employment, consulting or other compensatory or services-related Contract with any executive officer or other employee of Inovio earning an annual salary in excess of \$75,000 or member of the Inovio Board, *except* those that are terminable by Inovio or any of its Subsidiaries on no more than thirty (30) days notice without liability or financial obligation by Inovio and which contain no severance, "change in control" or similar provisions;

(ii) any Contract containing any covenant (A) limiting in any respect the right of Inovio or any of its Subsidiaries to engage in any line of business or compete with any Person in any material line of business or any geographic area,
(B) granting any exclusive distribution, use or development rights, (C) agreeing to purchase a minimum amount of goods or services in excess of \$500,000 in the aggregate in any consecutive twelve (12) month period, (D) agreeing to purchase goods or services exclusively from a certain party or (E) requiring Inovio or any of its Subsidiaries to give "most favored nation" pricing to any customers, potential customers or any class of customers or to provide exclusive or "most favored nation" access to any product or service features, excluding standard customizations, to any customers, potential customers or any class of customers;

(iii) any Contract relating to the disposition or acquisition by Inovio or any of its Subsidiaries after the date of this Agreement of a material amount of assets not in the ordinary course of business or pursuant to which Inovio or any of its Subsidiaries has any material ownership interest in any other Person or other business enterprise other than Inovio's Subsidiaries;

(iv) any distributor, joint marketing, partnership, development, collaborator, manufacturer or similar agreement (including such agreements under which the other party has the right to manufacture or reproduce Inovio's products) under which Inovio or any of its Subsidiaries have continuing material obligations to jointly develop or market any product, technology or service;

(v) any Contract relating to the development, use or protection of any material Inovio Intellectual Property, including, but not limited to (A) any agreement pursuant to which Inovio or any of its Subsidiaries have continuing material obligations to jointly develop any Intellectual Property that will not be owned, in whole or in part, by Inovio or any of its Subsidiaries, and (B) any agreement pursuant to which Inovio or any of its Subsidiaries has agreed to warrant, indemnify, hold harmless, reimburse guaranty or otherwise assume or incur any material obligation or liability or provide a right of rescission with respect to the infringement or misappropriation by Inovio or such other person of its rights with respect to any material Intellectual Property;

(vi) any Contract (excluding Inovio Leases) containing any support, maintenance or service obligation on the part of Inovio or any of its Subsidiaries, other than those obligations that have a term of one year or less or involving annual revenues to Inovio of under \$1,000,000 in any individual case;

(vii) any mortgages, indentures, guarantees, loans or credit agreements, security agreements or other Contracts relating to the borrowing of money or extension of credit in a principal amount in excess of \$500,000 that is outstanding or may be incurred on the terms thereof, other than accounts receivables and payables in the ordinary course of business;



(viii) any other individual agreement, contract or commitment that involves future expenditures or obligations by or of Inovio in excess of \$500,000 in the aggregate during any consecutive twelve month period;

(ix) any Contract with the United States federal, state or local government or any department thereof; and

(x) any Contract or other arrangement with an Affiliate, other than (A) advance or reimbursement for travel and entertainment expenses, (B) any standard form of invention assignment and confidentiality agreement, (C) employee benefits generally available to Inovio Employees (including stock options), and (D) "at will" employment offer letters.

(b) Schedule. Section 3.14(b) of the Inovio Disclosure Letter sets forth a list of all Inovio Scheduled Contracts to which Inovio or any of its Subsidiaries is a party or is bound by as of the date hereof. Inovio has made available to VGX true, complete and correct copies of each contract listed in Section 3.14(b) of the Inovio Disclosure Letter.

(c) *No Breach.* All Inovio Scheduled Contracts are legal, valid and binding agreements, enforceable in accordance with their terms, of Inovio and/or a Subsidiary of Inovio party thereto and, to the Knowledge of Inovio, of each other Person party thereto, except as such enforcement may be limited by (i) applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws now or hereinafter in effect relating to or affecting creditors' rights generally and (ii) general principles of equity (regardless of whether enforceability is considered in a proceeding in equity or at law). All Inovio Scheduled Contracts are in full force and effect except to the extent they have previously expired in accordance with their terms or if the failure to be in full force and effect, individually or in the aggregate, would not reasonably be expected to be material to Inovio. Neither Inovio nor any of its Subsidiaries has violated any provision of, or committed or failed to perform any act which, with or without notice, lapse of time or both would constitute a material default under the provisions of, any Inovio Scheduled Contract.

3.15 *Board Approval.* As of the date hereof, the Inovio Board has, by resolutions duly adopted at a meeting duly called and held and not subsequently rescinded or modified in any way, (i) determined the Merger to be advisable, (ii) approved this Agreement and the transactions contemplated thereby, including the Merger, and (iii) recommended that the Inovio Stockholders approve this Agreement and the Mergers and directed that such matters be submitted to the Inovio Stockholders for approval.

3.16 *Transactions with Related Parties.* As of the date hereof, Inovio is not a party to any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC.

3.17 Insurance.

(a) Section 3.17 of the Inovio Disclosure Letter sets forth a list of each currently effective insurance policy or binder of insurance (including policies providing property, casualty, liability, and workers' compensation coverage, bond and surety arrangements, clinical trials or contract research insurance, or intellectual property infringement insurance, but excluding policies related to Employee Plans) to which Inovio is currently a party, a named insured, or otherwise the beneficiary of coverage as of the date hereof:

- (i) the name and address of the agent;
- (ii) the name of the insurer, the name of the policyholder, and the name of each covered insured;

(iii) the policy number and the period of coverage; and

(iv) the scope (including an indication of whether the coverage was on a claims made, occurrence or other basis) and amount of coverage.

(b) With respect to each such insurance policy or binder: (i) Inovio has timely paid all premiums when due, (ii) the applications therefor completed by Inovio do not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements or facts contained therein not misleading where such misstatement or omission would constitute a basis for denial of coverage under the terms of such policy or binder, (iii) Inovio is not in material breach or material default (including with respect to the giving of notices), and no event has occurred or, by reason of the consummation of the transaction contemplated by this Agreement, will occur which, with notice or the lapse of time, would constitute such a material breach or material default, or permit termination, modification, or acceleration, under the policy and (iv) the policies are in full force and effect. There are no outstanding unpaid claims made by Inovio or any of its Subsidiaries under any such policies or binders.

3.18 *Liabilities.* Except as disclosed in *Section 3.18* of the Inovio Disclosure Letter, since the date of the most recent SEC Report prior to the date hereof, neither Inovio nor any of its Subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required by US GAAP to be disclosed on a consolidated balance sheet or in the related notes thereto, or any off-balance sheet liabilities, other than (i) any liabilities which did not have or would not have had, individually or in the aggregate, a Material Adverse Effect on Inovio, (ii) liabilities incurred in the ordinary course of business and (iii) liabilities incurred in connection with the transactions contemplated hereby.

3.19 *Product Claims.* To the Knowledge of Inovio, there has not been any claim under any contractual warranty, guaranty or other indemnity, or any claims of product liability arising from allegations of personal injury, property damage, or medical malpractice, with respect to the products or services of Inovio or its Subsidiaries through the date hereof.

3.20 *Accounts Receivable.* As of the date hereof, Inovio does not reasonably expect that the collections rate of its currently outstanding accounts receivable will be materially worse than its historical collection rate.

3.21 Anti-Takeover Statute Not Applicable. No "business combination," "fair price," "moratorium," "control share acquisition" or other similar anti-takeover statute or regulation under the laws of the State of Delaware is applicable to Inovio, the shares of Inovio Common Stock or other Inovio Securities, the Merger or any of the other transactions contemplated by this Agreement.

3.22 *Foreign Corrupt Practices.* Neither Inovio nor any of its Subsidiaries nor, to the knowledge of Inovio, any director, officer, agent, employee or other Person acting on behalf of Inovio or any of its Subsidiaries has, in the course of its actions for, or on behalf of, Inovio or its Subsidiaries (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

3.23 *Listing and Maintenance Requirements.* Inovio has not, in the twelve months preceding the date hereof, received notice (written or oral) from the NYSE Alternext to the effect that Inovio is not in compliance with the listing or maintenance requirements of such market.

3.24 *Opinion of Financial Advisor.* Inovio's Board of Directors has received an opinion from Oppenheimer & Co. Inc. to the effect that, as of the date of such opinion specified therein, the Merger Exchange Ratio is fair to Inovio from a financial point of view.

3.25 *Operations of Submerger.* Submerger is a direct, wholly owned subsidiary of Inovio, formed solely for the purpose of engaging in the transactions contemplated by this Agreement, and has engaged in no other business activities and has conducted its operations only as contemplated by this Agreement.

ARTICLE IV CONDUCT PRIOR TO THE EFFECTIVE TIME

4.1 Conduct of Business of VGX and its Subsidiaries.

(a) Ordinary Course. During the period from the date hereof and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Effective Time, VGX and each of its Subsidiaries shall, except as otherwise expressly contemplated by this Agreement, as provided in *Section 4.1* of the VGX Disclosure Letter or to the extent that Inovio shall otherwise consent in writing (i) carry on its business in the usual, regular and ordinary course, in substantially the same manner as heretofore conducted and in compliance in all material respects with all applicable laws and regulations, (ii) pay its debts and taxes when due, pay or perform other material obligations when due, (iii) use all commercially reasonable efforts to preserve intact VGX's and its Subsidiaries' present business organization, taken as a whole, (iv) use all commercially reasonable efforts to keep available the services of the current officers, employees and consultants of VGX and its Subsidiaries and (v) manage in the ordinary course its business relationships with third parties. Without limiting the generality of the foregoing, VGX and/or each Subsidiary will use all reasonable efforts to prepare all Tax Returns that are required to be filed by VGX or such Subsidiary on or before the Closing Date (including properly obtained extensions). VGX or such Subsidiary shall use all reasonable efforts to deliver each such income and franchise Tax Return.

(b) *Required Consent.* In addition, without limiting the generality of *Section 4.1(a)*, except as permitted or contemplated by the terms of this Agreement, without the prior written consent of Inovio, which consent shall not be unreasonably withheld or delayed, during the period from the date hereof and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Effective Time, VGX (i) shall not, directly or indirectly, do any of the following, (ii) shall not permit any of its Subsidiaries other than VGXI to, directly or indirectly do any of the following, and (iii) shall not take any action to authorize, implement, encourage, assist or otherwise allow VGXI to do any of the following:

(i) Cause, permit or propose any amendments to VGX Charter Documents or any of the VGX Subsidiary Charter Documents;

(ii) Adopt a plan of complete or partial liquidation or dissolution;

(iii) Declare, accrue, set aside or pay any dividends on or make any other distributions (whether in cash, stock, equity securities or property) in respect of any capital stock or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction effected in the ordinary course of business by a wholly owned Subsidiary of it that remains a wholly owned Subsidiary of it after consummation of such transaction;

(iv) Purchase, redeem or otherwise acquire, directly or indirectly, any shares of its capital stock or the capital stock of its Subsidiaries, except repurchases of unvested shares in connection with the termination of the employment relationship with any Employee pursuant to stock option or purchase agreements in effect on the date hereof;

(v) Issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, or any securities convertible into shares of capital stock, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into shares of capital stock, or enter into other agreements or commitments of any character obligating it to issue any such securities or rights, other than (A) issuances of VGX Common Stock upon the exercise of VGX Options, VGX Warrants or VGX Convertible Debt outstanding as of the date hereof in accordance with the terms of such securities as of the date hereof, (B) grants of stock options under the VGX Option Plan at fair market value, *provided* that such options (1) are issued in the ordinary course of business consistent with past practice, (2) vest in accordance with VGX's standard vesting schedule under the applicable Option Plan, and (3) are issued no later than five (5) business days prior to the Form S-4 Filing Date, and (C) reservation of VGX Common Stock in connection with certain amendments to the notes evidencing some or all of the VGX Convertible Debt to provide for their conversion in connection with the Merger as contemplated hereby;

(vi) Acquire or agree to acquire by merging or consolidating with, or by purchasing any material equity or voting interest in or a material portion of the assets of, or by any other manner, any business of any Person or division thereof, or otherwise acquire or agree to acquire any assets of any other Person, which acquisition would be material to the business of VGX;

(vii) Sell, lease, license, encumber or otherwise dispose of any properties or assets except (A) the sale, lease or disposition (other than through licensing) of property or assets which are not, individually or in the aggregate, material to the business of VGX and its Subsidiaries or (B) the sale, licensing or distribution of VGX Products and services in the ordinary course of business;

(viii) Make any loans, advances or capital contributions to, or investments in, any other Person, other than: (A) loans or investments by it or a wholly owned Subsidiary of it to it or any wholly-owned Subsidiary of it or (B) employee advances for travel and entertainment expenses made in the ordinary course of business;

(ix) Except as required by US GAAP as concurred with by its independent auditors, make any material change in its methods or principles of accounting since the date of VGX Balance Sheet;

(x) Make any Tax election or accounting method change that is reasonably likely to adversely affect the Tax liability or Tax attributes of VGX or any of its subsidiaries or settle or compromise any income tax liability or consent to any extension or waiver of any limitation period with respect to Taxes;

(xi) Revalue any of its assets other than in the ordinary course of business;

(xii) Commence or enter into any settlement of litigation other than the settlements involving the payment of money only in an amount not in excess of \$250,000 individually for any one settlement or \$500,000 in the aggregate for all such settlements, other than in connection with this Agreement and the transactions contemplated hereby;

(xiii) Commence or enter into any clinical scientific program prior to the Closing;

(xiv) Except as required by Legal Requirements, VGX Employee Plans, this Agreement or Contracts currently binding on VGX or its Subsidiaries or policies of VGX currently in effect, (A) increase in any manner the amount of compensation or fringe benefits of, pay any bonus to or grant severance or termination pay to any Employee of VGX or any Subsidiary of VGX (other than increases in connection with performance reviews or annual salary increases of amounts up to 110% of current salary and bonuses not exceeding \$1,000,000 in the aggregate to all Employees), (B) make any increase in or commitment to increase any benefits provided under any Employee Plan (including any severance plan), adopt or amend or make any commitment to establish, terminate, adopt or amend any Employee Plan or (C) waive any stock repurchase rights, accelerate, amend or change the period of exercisability of VGX Options or other securities outstanding pursuant to the VGX Option Plan, or reprice any VGX Options or authorize cash payments in exchange for any VGX Options;

(xv) Sell, grant or modify in any material respect any Material Contract which is a license with respect to VGX Intellectual Property other than in connection with the sale or license of VGX's products in the ordinary course of business or grant any exclusive rights with respect to any VGX Intellectual Property;

(xvi) Enter into, renew or modify any Contracts containing, or otherwise subject the Surviving Entity or Inovio to, any non-competition, exclusivity or other material restrictions on VGX or any of its businesses prior to Closing, or the Surviving Entity or Inovio, or any of their respective businesses, following the Closing;

(xvii) Enter into any agreement or commitment the effect of which would be to grant to a third party following the Merger any actual or potential right of license to any Intellectual Property owned by Inovio or any of its Subsidiaries (other than VGX and its Subsidiaries);

(xviii) Take any action that would result, or is reasonably likely to result, in any of the conditions to the Merger set forth in *Article VI* not being satisfied, that would materially impair the ability of VGX to consummate the Merger in accordance with the terms hereof or materially delay such consummation;

(xix) Hire any executive officer level employees;

(xx) Incur any indebtedness for borrowed money or guarantee any such indebtedness of another Person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of VGX or any of its Subsidiaries, guarantee any debt securities of another Person, enter into any "keep well" or other agreement to maintain any financial statement condition of any other Person (other than any wholly-owned Subsidiary of it) or enter into any arrangement having the economic effect of any of the foregoing, other than (A) in connection with the financing of ordinary course trade payables, (B) indebtedness for money borrowed in an amount not exceeding \$100,000 in the aggregate or (C) indebtedness to Inovio or one of its Subsidiaries pursuant to Section 5.25 hereof;

(xxi) Make or commit to make capital expenditures in excess of 1,000,000 in the aggregate in any consecutive twelve (12) month period;

(xxii) Modify in any material respect, amend or terminate any VGX Scheduled Contract currently in effect, or waive, release or assign any material rights or claims thereunder, except in the ordinary course consistent with past practice or enter into any agreement that would constitute a VGX Scheduled Contract;

(xxiii) Enter into any Contract requiring VGX or any of its Subsidiaries to pay in excess of \$1,000,000 in the aggregate in any consecutive twelve (12) month period;

(xxiv) Enter into any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC;

(xxv) Make or commit to make any payment for any brokerage or finders' fee or agents' commissions or any similar charges in connection with this Agreement or the transactions contemplated hereby; or

(xxvi) Agree to take any of the actions described in (i) through (xxiv) above.

4.2 Conduct of Business of Inovio and its Subsidiaries.

(a) Ordinary Course. During the period from the date of this Agreement and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Effective Time, Inovio (which for the purposes of this Article IV shall include Inovio and its Subsidiaries, including Submerger) agrees to, except as otherwise expressly contemplated by this Agreement, as provided in *Section 4.2* of the Inovio Disclosure Letter or to the extent that VGX shall otherwise consent in writing, (i) carry on its business in the usual, regular and ordinary course, in substantially the same manner as heretofore conducted and in compliance in all material respects with all applicable laws and regulations, (ii) pay its debts and taxes when due, pay or perform other material obligations when due, (iii) use all commercially reasonable efforts to preserve intact Inovio's and its Subsidiaries' present business organization, taken as a whole, (iv) use all commercially reasonable efforts to keep available the services of the current officers, employees and consultants of Inovio and its Subsidiaries and (v) manage in the ordinary course its business relationships with third parties.

(b) *Required Consent.* In addition, without limiting the generality of *Section 4.2(a)*, except as permitted or contemplated by the terms of this Agreement, without the prior written consent of VGX, which consent shall not be unreasonably withheld or delayed, during the period from the date hereof and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Effective Time, Inovio shall not, directly or indirectly, do any of the following, and shall not permit any of its Subsidiaries to, directly or indirectly do any of the following:

(i) Fail to file any periodic reports required to be filed with the SEC pursuant to the Exchange Act, except in such case as (i) the consent of Inovio's auditors is required in connection with such filing and the auditors have not delivered such consent or (ii) filing without the consent of Inovio's auditors would cause its auditors to withdraw from representing Inovio and the auditors have not delivered such consent;

(ii) Cause or permit or propose any amendments to Inovio Charter Documents or any of the Inovio Subsidiary Charter Documents;

(iii) Adopt a plan of complete or partial liquidation or dissolution;

(iv) Declare, accrue, set aside or pay any dividends on or make any other distributions (whether in cash, stock, equity securities or property) in respect of any capital stock, except as required pursuant to the terms of the Inovio Preferred Stock outstanding as of the date hereof, or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction effected in the ordinary course of business by a wholly owned Subsidiary of it that remains a wholly owned Subsidiary of it after consummation of such transaction;

(v) Purchase, redeem or otherwise acquire, directly or indirectly, any shares of its capital stock or the capital stock of its Subsidiaries, except repurchases of unvested shares in connection with the termination of the employment relationship with any Employee pursuant to stock option or purchase agreements in effect on the date hereof;

(vi) Issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, or any securities convertible into shares of capital stock, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into shares of capital stock, or enter into other agreements or commitments of any character obligating it to issue any such securities or rights, other than (A) issuances of Inovio Common Stock upon the exercise of Inovio Options or Inovio Warrants outstanding as of the date hereof in accordance with the terms of such securities as of the date hereof, (B) grants of stock options under the Inovio Incentive Plan at fair market value, *provided* that such options (1) are issued in the ordinary course of business consistent with past practice, (2) vest in accordance with Inovio's standard vesting schedule under the applicable Inovio Incentive Plan, and (3) are issued no later than five (5) business days prior to the Form S-4 Filing Date; and (C) issuance of Inovio Common Stock upon conversion of Inovio Preferred Stock outstanding as of the date hereof;

(vii) Acquire or agree to acquire by merging or consolidating with, or by purchasing any material equity or voting interest in or a material portion of the assets of, or by any other manner, any business of any Person or division thereof, or otherwise acquire or agree to acquire any assets of any other Person, which acquisition would be material to the business of Inovio;

(viii) Sell, lease, license, encumber or otherwise dispose of any properties or assets except (A) the sale, lease or disposition (other than through licensing) of property or assets which are not, individually or in the aggregate, material to the business of Inovio and its Subsidiaries or (B) the sale, licensing or distribution of Inovio products and services in the ordinary course of business;

(ix) Make any loans, advances or capital contributions to, or investments in, any other Person, other than: (A) loans or investments by it or a wholly owned Subsidiary of it to it or any wholly-owned Subsidiary of it, (B) employee advances for travel and entertainment expenses made in the ordinary course of business or (C) extending a line of credit to VGX pursuant to Section 5.25 hereof;

(x) Except as required by US GAAP as concurred with by its independent auditors, make any material change in its methods or principles of accounting since the date of Inovio Balance Sheet;

(xi) Make any Tax election or accounting method change that is reasonably likely to adversely affect the Tax liability or Tax attributes of Inovio or any of its subsidiaries or settle or compromise any income tax liability or consent to any extension or waiver of any limitation period with respect to Taxes;

(xii) Revalue any of its assets other than in the ordinary course of business;

(xiii) Commence or enter into any settlement of litigation other than the settlements involving the payment of money only in an amount not in excess of \$250,000 individually for any one settlement or \$500,000 in the aggregate for all such settlements, other than in connection with this Agreement and the transactions contemplated hereby;

(xiv) Commence or enter into any clinical scientific program prior to the Closing;

(xv) Except as required by Legal Requirements, Employee Plans, this Agreement or Contracts currently binding on Inovio or its Subsidiaries or policies of Inovio currently in effect, (A) increase in any manner the amount of compensation or fringe benefits of, pay any bonus to or grant severance or termination pay to any Employee of Inovio or any Subsidiary of Inovio (other than increases in connection with performance reviews or annual salary

increases of amounts up to 110% of current salary and bonuses not exceeding \$1,000,000 in the aggregate to all Employees), (B) make any increase in or commitment to increase any benefits provided under any Employee Plan (including any severance plan), adopt or amend or make any commitment to establish, terminate, adopt or amend any Employee Plan or (C) waive any stock repurchase rights, accelerate, amend or change the period of exercisability of Inovio Options or other securities outstanding pursuant to the Inovio Incentive Plan, or reprice any Inovio Options or authorize cash payments in exchange for any Inovio Options;

(xvi) Sell, grant or modify in any material respect any Material Contract which is a license with respect to Inovio Intellectual Property other than in connection with the sale or license of Inovio's products in the ordinary course of business or grant any exclusive rights with respect to any Inovio Intellectual Property;

(xvii) Enter into, renew or modify any Contracts containing, or otherwise subject the Surviving Entity or Inovio or any of its Subsidiaries to any non-competition, exclusivity or other material restrictions on their respective businesses following the Closing;

(xviii) Enter into any agreement or commitment the effect of which would be to grant to a third party following the Merger any actual or potential right of license to any Intellectual Property owned by VGX or any of its Subsidiaries (other than Inovio and its Subsidiaries);

(xix) Take any action that would result, or is reasonably likely to result, in any of the conditions to the Merger set forth in *Article VI* not being satisfied, that would materially impair the ability of Inovio to consummate the Merger in accordance with the terms hereof or materially delay such consummation;

(xx) Hire any executive officer level employees;

(xxi) Incur any indebtedness for borrowed money or guarantee any such indebtedness of another Person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of Inovio or any of its Subsidiaries, guarantee any debt securities of another Person, enter into any "keep well" or other agreement to maintain any financial statement condition of any other Person (other than any wholly-owned Subsidiary of it) or enter into any arrangement having the economic effect of any of the foregoing, other than (A) in connection with the financing of ordinary course trade payables or (B) indebtedness for money borrowed in an amount not exceeding \$100,000 in the aggregate;

(xxii) Make or commit to make capital expenditures in excess of \$1,000,000 in the aggregate in any consecutive twelve (12) month period;

(xxiii) Modify in any material respect, amend or terminate any Inovio Scheduled Contract currently in effect, or waive, release or assign any material rights or claims thereunder, except in the ordinary course consistent with past practice or enter into any agreement that would constitute an Inovio Scheduled Contract;

(xxiv) Enter into any Contract requiring Inovio or any of its Subsidiaries to pay in excess of \$1,000,000 in the aggregate in any consecutive twelve (12) month period;

(xxv) Enter into any transaction of the type described in Item 404(a) of Regulation S-K of the rules and regulations of the SEC;

(xxvi) Make or commit to make any payment for any brokerage or finders' fee or agents' commissions or any similar charges in connection with this Agreement or the transactions contemplated hereby; or

(xxvii) Agree to take any of the actions described in (i) through (xxiv) above.

(c) *Ownership of Submerger*. During the period from the date of this Agreement and continuing up to and including the Effective Time, Inovio shall own all of the membership interests of Submerger and shall not make, nor shall permit or cause Submerger to make, any election under Treasury Regulation Section 301.7701-3, the effect of which would cause Submerger to be classified for federal income tax purposes as a "corporation" at any time on or before the Closing Date.

4.3 Sale of Assets; Reduction of VGX Convertible Debt. Notwithstanding anything to contrary in this Article IV, VGX may take all necessary actions to fulfill its obligations under that certain Asset Purchase Agreement between VGX and VGXI, Inc. dated as of June 10, 2008, as provided as *Schedule 4.3* hereof, including transfer of the assets identified to be transferred therein (including the schedules and exhibits to such agreement) (the "*Transferred Assets*"), without any further written consent from Inovio, *provided, however* (i) VGX shall receive at least \$7,750,000 in aggregate in cash from VGXI, Inc. in consideration of the sale of the Transferred Assets; (ii) regardless of the timing of actual receipt of proceeds for the Transferred Assets from VGXI, Inc., VGX shall reduce an aggregate of \$7,750,000 owed pursuant to the VGX Convertible Debt outstanding as of the date of the Prior Agreement, as such VGX Convertible Debt becomes due and payable, and (iii) VGX shall perform its obligations under and maintain the agreement dated June 25, 2008 between VGXI, Inc. and VGX pursuant to which VGXI shall manufacture and supply product to VGX for preclinical studies and/or clinical trials use and future commercialization (the "*Manufacturing Agreement*").

ARTICLE V ADDITIONAL AGREEMENTS

5.1 Registration Pursuant to the Securities Act. Inovio shall use commercially reasonable efforts to prepare and, within forty-five (45) business days of the date of this Agreement file with the SEC a registration statement on Form S-4 to register the offer and sale of Inovio Common Stock in the Merger, including registering the assumption of and shares of Inovio Common Stock underlying the VGX Options, VGX Warrants and VGX Convertible Debt (the "Registration Statement"). The Registration Statement will include (i)(a) prospectus with respect to the Inovio Common Stock, Inovio Options, Inovio Warrants and other Inovio securities, if any, to be issued in the Merger (the "Prospectus"), (b) proxy materials which shall constitute the proxy statement for the Inovio Stockholders' Meeting, including description of the Additional Inovio Proposals (the "Inovio Proxy Statement"), and (iii) proxy materials which shall constitute the proxy statement for the VGX Stockholders' Meeting (the "VGX Proxy Statement"; the Prospectus, Inovio Proxy Statement and VGX Proxy Statement together, and any amendments or supplements thereto, the "Proxy Statement/Prospectus"). VGX and its counsel shall be given reasonable opportunity to review, comment on and approve, which approval shall not be unreasonably withheld, the Registration Statement prior to the filing thereof with the SEC. Inovio shall accept all reasonable comments provided to the Registration Statement by VGX. Inovio agrees to provide in writing to VGX and its counsel any comments Inovio or its counsel may receive from the SEC or its staff with respect to the Registration Statement promptly after receipt of such comments and shall provide VGX and its counsel with a reasonable opportunity to participate in the response of Inovio to such comments. Inovio will respond to any comments from the SEC on the Registration Statement, and VGX will work with Inovio in good faith to answer any comments from the SEC in a timely manner. Inovio shall provide VGX with copies of any written responses to the SEC or its staff and shall notify VGX with respect to any oral responses to the SEC or its staff. Inovio will work in good faith and use all reasonable efforts to have the Registration Statement declared effective as soon as practicable after the Form S-4 Filing Date and to maintain such effectiveness for so long as shall be required for the issuance of the Merger Consideration pursuant to the Merger; provided, however, that no party shall be required to modify any of the terms of this Agreement or the Merger, or the transactions contemplated hereby, in order to have the Registration Statement declared effective. Within two (2) business days following the

Registration Effective Date, Inovio shall file the final Proxy Statement/Prospectus included therein under Rule 424(b) promulgated pursuant to the Securities Act.

5.2 Solicitation Pursuant to the Exchange Act.

(a) Inovio Additional Proposals. In order to solicit requisite approval from the Inovio Stockholders on such actions, the Proxy Statement/Prospectus shall include discussion of and set forth for a separate vote a proposal for the amendment of the Inovio 2000 Plan to (A) clarify the acceleration of vesting of Inovio Options issued and outstanding thereunder at the Effective Time and (B) remove the termination of unexercised Inovio Options issued and outstanding thereunder at the Effective Time (the "2000 Plan Amendment"). Inovio reserves the right to include such other proposals for stockholder approval, where such approval shall be required by applicable corporate or securities laws or rules of any securities exchange or quotation system, in relation to any proposed transaction(s) allowable under, or consented to by VGX pursuant to, Section 4.2 (collectively with the 2000 Plan Amendment, the "Inovio Additional Proposals").

(b) *Recommendation of Inovio Board.* Unless prohibited by its fiduciary duties under applicable laws, the Inovio Board shall recommend to the Inovio Stockholders that such stockholders approve the Merger and the Inovio Additional Proposals, and the Proxy Statement/Prospectus shall contain such recommendation, as well as the conclusion of the Inovio Board that the terms and conditions of the Merger and the Inovio Additional Proposals are in the best interests of the Inovio Stockholders in the opinion of the Inovio Board, and neither the VGX Board nor any committee thereof shall, unless otherwise required by its fiduciary duties under applicable laws, withdraw or modify, or propose or resolve to withdraw or modify in a manner adverse to Inovio, the recommendation of the Inovio Board that the Inovio Stockholders vote in favor of the Merger and the Inovio Additional Proposals.

(c) *Mailing*. Within five (5) business days of the Registration Effective Date, Inovio shall cause the Proxy Statement/Prospectus to be mailed to the Inovio Stockholders as of the Record Date identified therein.

5.3 VGX Stockholder Solicitation and Approval.

(a) *Support Stockholders' Voting Agreement*. Promptly following the execution of this Agreement, the VGX Support Stockholders shall execute the Support Stockholders Voting Agreement in the form attached as *Exhibit B*. The VGX Support Stockholders shall constitute as of the date of this Agreement, and shall continue to constitute as of the Registration Effective Date, at least 40% of the issued outstanding VGX Common Stock. The Support Stockholders Voting Agreement shall not be deemed effective until the VGX Solicitation Date.

(b) *Recommendation of VGX Board.* Unless prohibited by its fiduciary duties under applicable laws, the VGX Board shall recommend to the VGX Stockholders that such stockholders approve the VGX Voting Proposal, and the Information Statement shall contain such recommendation, as well as the conclusion of the VGX Board that the terms and conditions of the Merger are in the best interests of the VGX Stockholders in the opinion of the VGX Board, and neither the VGX Board nor any committee thereof shall, unless otherwise required by its fiduciary duties under applicable laws, withdraw or modify, or propose or resolve to withdraw or modify in a manner adverse to Inovio, the recommendation of the VGX Board that the VGX Stockholders vote in favor of the VGX Voting Proposal.

(c) *Special Meeting*. VGX shall seek approval of this Agreement, the Merger and the transactions contemplated thereby from the VGX Stockholders at a special meeting of the VGX Stockholders, upon notice provided in the VGX Soliciting Materials (as defined below) to be held no later than three (3) business days after the special meeting of Inovio Stockholders.

(d) *VGX Soliciting Materials*. VGX shall utilize the VGX Proxy Statement and Prospectus in soliciting the VGX Stockholder Approval (the VGX Proxy Statement, Prospectus, and any other materials to be submitted to the VGX Stockholders in connection with the solicitation of their approval of the Merger and this Agreement together, the "*VGX Soliciting Materials*"). Subject to *Section 5.3(b)*, the VGX Soliciting Materials shall include the recommendation of the VGX Board in favor of the Merger, this Agreement, and the other transactions contemplated by this Agreement, and a statement that the VGX Board has determined that the terms of the Merger and this Agreement are fair to and in the best interests of VGX and the VGX Stockholders. Further, the VGX Soliciting Materials shall include all notices and disclosures required under Section 262 of the DGCL. Anything to the contrary contained herein notwithstanding, VGX shall not include in the VGX Soliciting Materials any information with respect to Inovio or its Affiliates unless Inovio has approved of the form and content of such information prior to inclusion, which approval by Inovio shall not be unreasonably withheld, delayed or conditioned; provided, that, it shall be unreasonable for Inovio to withhold such consent with respect to any publicly available information.

(e) *Mailing.* Within five (5) business days of the Registration Effective Date, VGX shall cause the VGX Soliciting Materials to be mailed to the VGX Stockholders as of the Record Date identified in the VGX Proxy Statement, including to the VGX Support Stockholders. VGX shall use its commercially reasonable efforts to obtain the approval or consent of the VGX Stockholders sufficient to approve the Merger and this Agreement, in compliance with the applicable requirements of the DGCL, as promptly as practicable thereafter.

(f) *Dissenters' Notice*. Immediately after the Effective Time, the Surviving Entity or Inovio will mail all notices and disclosures required under Section 262 of the DGCL to the extent not already mailed to VGX Stockholders.

5.4 VGX and Inovio Information.

(a) *Cooperation, Responsibility.* Each of Inovio, Submerger and VGX shall reasonably cooperate with each other in the preparation and submission of the Registration Statement including all portions of the Proxy Statement/Prospectus, and any and all documents and materials required by the SEC in connection therewith. Each of Inovio, Submerger and VGX shall be solely responsible for any statement, information or omission in such materials relating to it or its affiliates based upon written information furnished by it.

(b) Accuracy of VGX Information. VGX agrees to use all reasonable efforts to ensure, with respect to all information supplied by VGX, that the Registration Statement, any and all documents and materials required by the SEC in connection therewith, and any other materials to be sent to the VGX Stockholders in connection with the solicitation of the approval of the VGX Stockholders of the Merger and this Agreement shall not, (X) as to the Registration Statement and any amendments, supplements or supporting materials thereto, as of the Form S-4 Filing Date and dates of subsequent filings with the SEC prior to the Registration Effective Date, (Y) as of the mailing of the VGX Soliciting Materials to the VGX Stockholders and the Proxy Statement/Prospectus to the Inovio Stockholders, or (Z) at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not false or misleading, or omit to state any material fact necessary to correct any statement in any earlier communication that has become false or misleading. If at any time prior to the Effective Time, any event relating to VGX or any of its affiliates, officers or directors is discovered by VGX which should be set forth in an amendment to the Registration Statement or Information Statement, VGX shall promptly inform Inovio. Notwithstanding the foregoing, VGX makes no

representation or warranty with respect to any information supplied by Inovio or Submerger which is contained in the foregoing documents.

(c) Accuracy of Inovio Information. Inovio agrees to use all reasonable efforts to ensure, with respect to all information supplied by Inovio or Submerger, that the Registration Statement, any and all documents and materials required by the SEC in connection therewith, the Information Statement and any other materials to be sent to the Inovio Stockholders in connection with the solicitation of the approval of the Inovio Stockholders of the Merger and this Agreement shall not, (X) as to the Registration Statement and any amendments, supplements or supporting materials thereto, as of the Form S-4 Filing Date and dates of subsequent filings with the SEC prior to the Registration Effective Date, (Y) as of the mailing of the VGX Soliciting Materials to the VGX Stockholders and the Proxy Statement/Prospectus to the Inovio Stockholders, or (Z) at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not false or misleading. If at any time prior to the Effective Time, any event relating to Inovio or Submerger or any of its affiliates, officers or directors is discovered by Inovio or Submerger which should be set forth in an amendment to the Registration Statement or Information Statement, Inovio or Submerger shall promptly inform VGX. Notwithstanding the foregoing, neither Inovio nor Submerger makes any representation or warranty with respect to any information supplied by VGX which is contained in the foregoing documents.

5.5 Confidentiality; Access to Information.

(a) The parties acknowledge that VGX and Inovio have previously executed a Confidentiality and Nondisclosure Agreement, dated January 28, 2008, and a Confidentiality Agreement, dated April 4, 2008 (together the "*Confidentiality Agreements*"), which Confidentiality Agreements will continue in accordance with its terms until the Closing shall have occurred, at which time it shall terminate.

(b) Access to Information.

(i) VGX will afford Inovio and Inovio's accountants, counsel and other representatives reasonable access during normal business hours to its and its Subsidiaries' properties, books, records and personnel during the period prior to the Effective Time to obtain all information concerning its business, including the status of product development efforts, properties, results of operations and personnel who are aware of the Merger for purposes of this Agreement, as Inovio may reasonably request; provided, however, that VGX may restrict the foregoing access to the extent that any law, treaty, rule or regulation of any Governmental Entity applicable to such party requires such party or its Subsidiaries to restrict or prohibit access to any such properties or information. In addition, any information obtained from VGX or any VGX Subsidiary pursuant to the access contemplated by this Section 5.5(b) shall be subject to the Confidentiality Agreements. Notwithstanding anything to the contrary herein, any access to any VGX Facility shall require prior consent of VGX and shall be subject to VGX's reasonable measures and insurance requirements and shall not include the right to perform any "invasive" testing, including, without limitation, any Phase II environmental assessment, without the written consent of VGX which can be granted or denied at the sole discretion of VGX. VGX will promptly notify Inovio upon (i) receipt by VGX or any of its Subsidiaries of any written notice of infringement by VGX or any of its Subsidiaries of the Intellectual Property of any third party, (ii) VGX or any of its Subsidiaries becoming a party to any Legal Proceeding, (iii) VGX learning that a suspension or cancellation of any VGX Permit is pending or threatened in writing, (iv) the development or creation, independently or jointly

with VGX or any of its Subsidiaries, of technology, software or Intellectual Property for VGX or any of its Subsidiaries by a third party other than pursuant to an agreement existing on the date hereof, (v) VGX or any of its Subsidiaries entering into any material contracts, licenses or agreements under which a third party will exclusively license or transfer any material Intellectual Property to VGX or any of its Subsidiaries, (vi) VGX or any of its Subsidiaries entering into any contract that would constitute a VGX Scheduled Contract, or (vii) incurring any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be disclosed on a consolidated balance sheet or in the related notes to the consolidated financial statement prepared in accordance with US GAAP which, individually or in the aggregate, would have a Material Adverse Effect on VGX, except those liabilities incurred in the ordinary course of business or in connection with the transactions contemplated hereby, in each case after the date hereof to the extent not previously disclosed in VGX Disclosure Letter.

(ii) Inovio will afford VGX and VGX's accountants, counsel and other representatives reasonable access during normal business hours to its and its Subsidiaries' properties, books, records and personnel during the period prior to the Effective Time to obtain all information concerning its business, including the status of product development efforts, properties, results of operations and personnel who are aware of the Merger for purposes of this Agreement, as VGX may reasonably request; provided, however, that Inovio may restrict the foregoing access to the extent that any law, treaty, rule or regulation of any Governmental Entity applicable to such party requires such party or its Subsidiaries to restrict or prohibit access to any such properties or information. In addition, any information obtained from Inovio or any Inovio Subsidiary pursuant to the access contemplated by this Section 5.5(b) shall be subject to the Confidentiality Agreements. Notwithstanding anything to the contrary herein, any access to any Inovio Facility shall require prior consent of Inovio and shall be subject to Inovio's reasonable measures and insurance requirements and shall not include the right to perform any "invasive" testing, including, without limitation, any Phase II environmental assessment without the written consent of Inovio which can be granted or denied at the sole discretion of Inovio. Inovio will promptly notify VGX upon (i) receipt by Inovio or any of its Subsidiaries of any written notice of infringement by Inovio or any of its Subsidiaries of the Intellectual Property of any third party, (ii) Inovio or any of its Subsidiaries becoming a party to any Legal Proceeding, (iii) Inovio learning that a suspension or cancellation of any Inovio Permit is pending or threatened in writing, (iv) the development or creation, independently or jointly with Inovio or any of its Subsidiaries, of technology, software or Intellectual Property for Inovio or any of its Subsidiaries by a third party other than pursuant to an agreement existing on the date hereof, (v) Inovio or any of its Subsidiaries entering into any material contracts, licenses or agreements under which a third party will exclusively license or transfer any material Intellectual Property to Inovio or any of its Subsidiaries, (vi) Inovio or any of its Subsidiaries entering into any contract that would constitute a Inovio Scheduled Contract, or (vii) Inovio or any of its Subsidiaries incurring any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be disclosed on a consolidated balance sheet or in the related notes to the consolidated financial statement prepared in accordance with US GAAP which, individually or in the aggregate, would have a Material Adverse Effect on Inovio, except those liabilities incurred in the ordinary course of business or in connection with the transactions contemplated hereby, in each case after the date hereof to the extent not previously disclosed in Inovio Disclosure Letter.

5.6 No VGX Solicitation.

(a) From and after the date of the Prior Agreement, VGX and its Subsidiaries have not, and from and after the date of this Agreement until the Effective Time or termination of this Agreement pursuant to *Article VII*, VGX and its Subsidiaries will not, nor will they authorize any

of their respective officers, directors, affiliates or employees or any investment banker, attorney or other advisor or representative retained by any of them to, directly or indirectly (i) solicit, initiate, encourage or induce the making, submission or announcement of any VGX Acquisition Proposal, (ii) participate in any discussions or negotiations regarding, or furnish to any person any information with respect to, or take any other action to facilitate any inquiries or the making of any proposal that constitutes or may reasonably be expected to lead to, any VGX Acquisition Proposal, (iii) engage in discussions with any person with respect to any VGX Acquisition Proposal, except as to the existence of these provisions, (iv) approve, endorse or recommend any VGX Acquisition Proposal or (v) enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any VGX Acquisition Transaction; provided, however, until the date on which this Agreement is approved by the required vote of the VGX Stockholders, this Section 5.6(a) shall not prohibit VGX from furnishing information regarding VGX and its Subsidiaries to, entering into a confidentiality agreement with or entering into discussions with, any person or group in response to a VGX Superior Offer submitted by such person or group to the extent and so long as (1) neither VGX nor any representative of VGX and its Subsidiaries shall have violated any of the restrictions set forth in this Section 5.6(a) in connection with obtaining such VGX Superior Offer, (2) the VGX Board concludes in good faith, after consultation with its outside legal counsel, that such action is required in order for the VGX Board to comply with its fiduciary obligations to the VGX Stockholders under applicable law, (3) (x) at least one (1) business day prior to furnishing any such information to, or entering into discussions or negotiations with, such person or group, VGX gives Inovio written notice of the identity of such person or group and of VGX's intention to furnish information to, or enter into discussions or negotiations with, such person or group and (y) VGX receives from such person or group an executed confidentiality agreement containing terms no less favorable to the disclosing party than the terms of the Confidentiality Agreements, and (4) contemporaneously with furnishing any such information to such person or group, VGX furnishes such information to Inovio (to the extent such information has not been previously furnished by VGX to Inovio). VGX and its Subsidiaries will immediately cease any and all existing activities, discussions or negotiations with any parties conducted heretofore with respect to any VGX Acquisition Proposal. In addition to the foregoing, VGX shall (i) provide Inovio with at least forty-eight (48) hours prior written notice (or such lesser prior written notice as provided to the members of the VGX Board but in no event less than eight hours) of any meeting of the VGX Board at which the VGX Board is reasonably expected to consider a VGX Acquisition Proposal for evaluation of whether it constitutes a VGX Superior Offer and together with such notice deliver a copy of the VGX Acquisition Proposal for review and (ii) provide Inovio with at least three (3) business days' prior written notice of a meeting of the VGX Board at which the VGX Board is reasonably expected to recommend a VGX Superior Offer to the VGX Stockholders in lieu of this Agreement and the Merger and recommend withdrawal of its prior recommendation pursuant to Section 5.3(b) above and together with such notice deliver a copy of the VGX Superior Offer for review.

(b) For purposes of this Agreement, "*VGX Acquisition Proposal*" shall mean any offer or proposal (other than an offer or proposal by Inovio) relating to any VGX Acquisition Transaction. For the purposes of this Agreement, "*VGX Acquisition Transaction*" shall mean any transaction or series of related transactions other than the transactions contemplated by this Agreement involving: (A) any acquisition or purchase from VGX by any person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of more than a 15% interest in the total outstanding voting securities of VGX or any of its Subsidiaries or any tender offer or exchange offer that if consummated would result in any person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) beneficially owning 15% or more of the total outstanding voting securities of VGX or any of its Subsidiaries or

any merger, consolidation, business combination or similar transaction involving VGX pursuant to which the stockholders of VGX immediately preceding such transaction hold less than 85% of the equity interests in the surviving or resulting entity of such transaction; (B) any sale, lease (other than in the ordinary course of business), exchange, transfer, license (other than in the ordinary course of business), acquisition or disposition of more than 15% of the assets of VGX; or (C) any liquidation or dissolution of VGX. For purposes of this Agreement, "VGX Superior Offer" shall mean an unsolicited, bona fide written offer made by a third party to consummate any of the following transactions: (i) a merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving VGX, pursuant to which the stockholders of VGX immediately preceding such transaction hold less than 50% of the equity interest in the surviving or resulting entity of such transaction; (ii) a sale or other disposition by VGX of assets (excluding inventory and used equipment sold in the ordinary course of business) representing in excess of 50% of the fair market value of VGX's business immediately prior to such sale, or (iii) the acquisition by any person or group (including by way of a tender offer or an exchange offer or issuance by VGX), directly or indirectly, of beneficial ownership or a right to acquire beneficial ownership of shares representing in excess of 50% of the voting power of the post-issuance outstanding shares of VGX Capital Stock, in each case on terms that the VGX Board determines in its good faith judgment (after consultation with its legal advisors) to be more favorable to the VGX Stockholders than the transactions contemplated by this Agreement, taking into account all legal, financial, regulatory and other aspects of the offer and the third party making the offer; provided, however, that any such offer shall not be deemed to be a "VGX Superior Offer" if any financing required to consummate the transaction contemplated by such offer is not legally committed and documented.

(c) In addition to the obligations of VGX set forth in clause (i) of *Section 5.6(a)*, VGX as promptly as practicable, and in any event within twenty-four (24) hours, shall advise Inovio orally and in writing of any request received by VGX for information which VGX reasonably believes could lead to a VGX Acquisition Proposal or of any VGX Acquisition Proposal, the material terms and conditions of such request, VGX Acquisition Proposal or inquiry, and the identity of the person or group making any such request, VGX Acquisition Proposal or informed in all material respects of the status and details (including material amendments or proposed amendments) of any such request, VGX Acquisition Proposal or inquiry.

(d) VGX shall be deemed to have breached the terms of this *Section 5.6* if any of its directors or officers, or any other agents, representatives or affiliates of VGX shall take any action that is prohibited by this *Section 5.6*. The parties hereto agree that irreparable damage would occur in the event that the provisions of this *Section 5.6* were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed by the parties hereto that Inovio shall be entitled to seek an injunction or injunctions to prevent breaches of the provisions of this *Section 5.6* and to enforce specifically the terms and provisions hereof, this being in addition to any other remedy to which Inovio may be entitled at law or in equity.

5.7 No Inovio Solicitation.

(a) From and after the date of the Prior Agreement, Inovio and its Subsidiaries have not, and from and after the date of this Agreement until the Effective Time or termination of this Agreement pursuant to *Article VII*, Inovio and its Subsidiaries will not, nor will they authorize any of their respective officers, directors, affiliates or employees or any investment banker, attorney or other advisor or representative retained by any of them to, directly or indirectly (i) solicit, initiate, encourage or induce the making, submission or announcement of any Inovio Acquisition Proposal, (ii) participate in any discussions or negotiations regarding, or furnish to any person any information with respect to, or take any other action to facilitate any inquiries or the making of any proposal that constitutes or may reasonably be expected to lead to, any Inovio Acquisition

Proposal, (iii) engage in discussions with any person with respect to any Inovio Acquisition Proposal, except as to the existence of these provisions, (iv) approve, endorse or recommend any Inovio Acquisition Proposal or (v) enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any Inovio Acquisition Transaction; provided, however, until the date on which this Agreement is approved by the required vote of the Inovio Stockholders, this Section 5.7(a) shall not prohibit Inovio from furnishing information regarding Inovio and its Subsidiaries to, entering into a confidentiality agreement with or entering into discussions with, any person or group in response to a Inovio Superior Offer submitted by such person or group to the extent and so long as (1) neither Inovio nor any representative of Inovio and its Subsidiaries shall have violated any of the restrictions set forth in this Section 5.7(a) in connection with obtaining such Inovio Superior Offer, (2) the Inovio Board concludes in good faith, after consultation with its outside legal counsel, that such action is required in order for the Inovio Board to comply with its fiduciary obligations to the Inovio Stockholders under applicable law, (3) (x) at least one (1) business day prior to furnishing any such information to, or entering into discussions or negotiations with, such person or group, Inovio gives VGX written notice of the identity of such person or group and of Inovio's intention to furnish information to, or enter into discussions or negotiations with, such person or group and (y) Inovio receives from such person or group an executed confidentiality agreement containing terms no less favorable to the disclosing party than the terms of the Confidentiality Agreements, and (4) contemporaneously with furnishing any such information to such person or group, Inovio furnishes such information to VGX (to the extent such information has not been previously furnished by Inovio to VGX). Inovio and its Subsidiaries will immediately cease any and all existing activities, discussions or negotiations with any parties conducted heretofore with respect to any Inovio Acquisition Proposal. In addition to the foregoing, Inovio shall (i) provide VGX with at least forty-eight (48) hours prior written notice (or such lesser prior written notice as provided to the members of the Inovio Board but in no event less than eight hours) of any meeting of the Inovio Board at which the Inovio Board is reasonably expected to consider a Inovio Acquisition Proposal for evaluation of whether it constitutes a Inovio Superior Offer and together with such notice deliver a copy of the Inovio Acquisition Proposal for review and (ii) provide VGX with at least three (3) business days' prior written notice of a meeting of the Inovio Board at which the Inovio Board is reasonably expected to recommend a Inovio Superior Offer to the Inovio Stockholders in lieu of this Agreement and the Merger and recommend withdrawal of its prior recommendation pursuant to Section 5.2(b) above and together with such notice deliver a copy of the Inovio Superior Offer for review.

(b) For purposes of this Agreement, "*Inovio Acquisition Proposal*" shall mean any offer or proposal (other than an offer or proposal by VGX) relating to any Inovio Acquisition Transaction. For the purposes of this Agreement, "*Inovio Acquisition Transaction*" shall mean any transaction or series of related transactions other than the transactions contemplated by this Agreement involving: (A) any acquisition or purchase from Inovio by any person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of more than a 15% interest in the total outstanding voting securities of Inovio or any of its Subsidiaries or any tender offer or exchange offer that if consummated would result in any person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) beneficially owning 15% or more of the total outstanding voting securities of Inovio or any of its Subsidiaries or any of its Subsidiaries or any merger, consolidation, business combination or similar transaction involving Inovio pursuant to which the stockholders of Inovio immediately preceding such transaction hold less than 85% of the equity interests in the surviving or resulting entity of such transaction; (B) any sale, lease (other than in the ordinary course of business), exchange, transfer, license (other than in the ordinary course of business), acquisition or disposition of more than 15% of the assets of Inovio; or (C) any liquidation or dissolution of Inovio. For purposes of this Agreement, "*Inovio Superior*"

Offer" shall mean an unsolicited, bona fide written offer made by a third party to consummate any of the following transactions: (i) a merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving Inovio, pursuant to which the stockholders of Inovio immediately preceding such transaction hold less than 50% of the equity interest in the surviving or resulting entity of such transaction; (ii) a sale or other disposition by Inovio of assets (excluding inventory and used equipment sold in the ordinary course of business) representing in excess of 50% of the fair market value of Inovio's business immediately prior to such sale, or (iii) the acquisition by any person or group (including by way of a tender offer or an exchange offer or issuance by Inovio), directly or indirectly, of beneficial ownership or a right to acquire beneficial ownership of shares representing in excess of 50% of the voting power of the post-issuance outstanding shares of Inovio Capital Stock, in each case on terms that the Inovio Board determines in its good faith judgment (after consultation with its legal advisors) to be more favorable to the Inovio Stockholders than the transactions contemplated by this Agreement, taking into account all legal, financial, regulatory and other aspects of the offer and the third party making the offer; *provided, however*, that any such offer shall not be deemed to be a "Inovio Superior Offer" if any financing required to consummate the transaction contemplated by such offer is not committed.

(c) In addition to the obligations of Inovio set forth in clause (i) of *Section 5.7a*), Inovio as promptly as practicable, and in any event within twenty-four (24) hours, shall advise VGX orally and in writing of any request received by Inovio for information which Inovio reasonably believes could lead to a Inovio Acquisition Proposal or of any Inovio Acquisition Proposal, the material terms and conditions of such request, Inovio Acquisition Proposal or inquiry, and the identity of the person or group making any such request, Inovio Acquisition Proposal or inquiry. Inovio will keep VGX informed in all material respects of the status and details (including material amendments or proposed amendments) of any such request, Inovio Acquisition Proposal or inquiry.

(d) Inovio shall be deemed to have breached the terms of this *Section 5.6* if any of its directors or officers or any other agents, representatives or affiliates of Inovio shall take any action that is prohibited by this *Section 5.7*. The parties hereto agree that irreparable damage would occur in the event that the provisions of this *Section 5.7* were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed by the parties hereto that VGX shall be entitled to seek an injunction or injunctions to prevent breaches of the provisions of this *Section 5.7* and to enforce specifically the terms and provisions hereof, this being in addition to any other remedy to which VGX may be entitled at law or in equity.

5.8 *Public Disclosure*. Inovio and VGX will consult with each other and agree before issuing any press release, making any public statement or otherwise making any disclosure with respect to the Merger, this Agreement (including the VGX and Inovio Disclosure Letters), a VGX Acquisition Proposal or an Inovio Acquisition Proposal and will not issue any such press release or make any such public statement or other disclosure prior to such agreement, except to the extent necessary in order to comply with (i) *Section 5.9* (Regulatory Filings; Reasonable Efforts), (ii) applicable law or any listing agreement with a national securities exchange and (iii) seeking the consents and waivers necessary to consummate the transactions contemplated hereby. Each of Inovio and VGX acknowledge that public disclosures related to this Agreement and the Merger are subject to the limitations and filing requirements set forth by Rules 165 and 425 as promulgated under the Securities Act.

5.9 Regulatory Filings; Reasonable Efforts.

(a) Regulatory Filings. Each of Inovio, Submerger and VGX shall coordinate and cooperate with one another and shall each use all reasonable efforts to comply with, and shall each refrain from taking any action that would impede compliance with, all Legal Requirements, and as promptly as practicable after the date hereof, each of Inovio, Submerger and VGX shall make all filings, notices, petitions, statements, registrations, submissions of information, application or submission of other documents required by any Governmental Entity in connection with the Merger and the transactions contemplated hereby, including: (i) Notification and Report Forms with the United States Federal Trade Commission (the "FTC") and the Antitrust Division of the United States Department of Justice (the "DOJ") as required by the HSR Act, if applicable; (ii) any other filing or correspondence necessary to obtain any Necessary Consent; (iii) filings under any other comparable pre-merger notification forms required by the merger notification or control laws of any applicable jurisdiction; and (iv) any filings required under the Securities Act, the Exchange Act, any applicable state or securities or "blue sky" laws and the securities laws of any foreign country, or any other Legal Requirement relating to the Merger, including, if applicable, assisting any foreign stockholders in making such individual registrations and filings as may be necessary for individual acquisition of Inovio Securities in the Merger or the other transactions contemplated by this Agreement. Each of Inovio, Submerger and VGX will cause all documents that it is responsible for filing with any Governmental Entity under this *Section 5.9(a)* to comply in all material respects with all applicable Legal Requirements.

(b) *Exchange of Information*. Inovio, Submerger and VGX each shall promptly supply the other with any information, which may be required in order to effectuate any filings or application pursuant to *Section 5.9(a)*. Except where prohibited by applicable Legal Requirements, and subject to the Confidentiality Agreement and any joint defense agreement entered into between the parties or their counsel, each of VGX, Submerger and Inovio shall consult with the others prior to taking a position with respect to any such filing, shall, to the extent reasonably required to permit appropriate coordination of efforts, permit the other to review and discuss in advance, and consider in good faith the views of the others in connection with any analyses, appearances, presentations, memoranda, briefs, white papers, arguments, opinions and proposals before making or submitting any of the foregoing to any Governmental Entity by or on behalf of any party hereto in connection with any investigations or proceedings in connection with the others in preparing and exchanging such information and promptly provide the other (and its counsel) with copies of all filings, presentations or submissions (and a summary of any oral presentations) made by such party with any Governmental Entity in connection with this Agreement or the transactions contemplated hereby, *provided* that with respect to any such filing, presentation or submission, each of Inovio, Submerger and VGX need not supply the others (or their counsel) with copies (or in case of oral presentations, a summary) to the extent that any law, treaty, rule or regulation of any Governmental Entity applicable to such party requires such party or its Subsidiaries to restrict or prohibit access to any such properties or information.

(c) *Notification.* Each of Inovio, Submerger and VGX will notify the others promptly upon the receipt of: (i) any comments from any officials of any Governmental Entity in connection with any filings made pursuant hereto and (ii) any request by any officials of any Governmental Entity for amendments or supplements to any filings made pursuant to, or information provided to comply in all material respects with, any Legal Requirements. Whenever any event occurs that is required to be set forth in an amendment or supplement to any filing made pursuant to *Section* 5.9(a), Inovio, Submerger or VGX, as the case may be, will promptly inform the others of such occurrence and cooperate in filing with the applicable Governmental Entity such amendment or supplement.

(d) Reasonable Efforts. Subject to the express provisions of Sections 5.1, 5.2 and 5.3 hereof and upon the terms and subject to the conditions set forth herein, each of the parties agrees to use all commercially reasonable efforts to take, or cause to be taken, all actions, and to do, or cause to be done, and to assist and cooperate with the other parties in doing, all things necessary, proper or advisable to consummate and make effective, in the most expeditious manner practicable, the Merger and the other transactions contemplated by this Agreement, including using all commercially reasonable efforts to accomplish the following: (i) the taking of all reasonable acts necessary to cause the conditions precedent set forth in Article VI to be satisfied; (ii) the obtaining of all necessary actions or nonactions, waivers, consents, approvals, orders and authorizations from Governmental Entities and the making of all necessary registrations, declarations and filings (including registrations, declarations and filings with Governmental Entities, if any) and the taking of all reasonable steps as may be necessary to avoid any suit, claim, action, investigation or proceeding by any Governmental Entity; (iii) the obtaining of all necessary consents, waivers and approvals, in a form and substance reasonably acceptable to Inovio, of any parties to any Contract of VGX or any of its Subsidiaries listed on Schedule 5.9(d)(iii) as are required thereunder in connection with the Merger; (iv) the obtaining of all necessary consents, waivers and approvals, in a form and substance reasonably acceptable to VGX, of any parties to any Contract of Inovio or any of its Subsidiaries listed on Schedule 5.9(d)(iv) as are required thereunder in connection with the Merger; (v) the defending of any suits, claims, actions, investigations or proceedings, whether judicial or administrative (including actions by a private party) challenging this Agreement or the consummation of the transactions contemplated hereby; and (v) the execution or delivery of any additional instruments necessary to consummate the transactions contemplated by, and to fully carry out the purposes of, this Agreement.

(e) *Divestitures.* Notwithstanding anything in this Agreement to the contrary, nothing contained in this Agreement shall be deemed to require Inovio or VGX or any Subsidiary thereof to take or agree to take any Action of Divestiture (as defined below), which would be reasonably likely to have a material adverse impact on the business of Inovio and its Subsidiaries on a combined basis with the business of VGX and its Subsidiaries following the Merger (a "*Material Divestiture*"). For purposes of this Agreement, an "*Action of Divestiture*" shall mean (i) the sale, license or other disposition or holding separate (through the establishment of a trust or otherwise) of any assets or categories of assets of Inovio or any of its Subsidiaries or VGX or any of its Subsidiaries, *except* for the transferred Assets as set forth in *Section 4.3*, (ii) the imposition of any limitation or regulation on the ability of Inovio, VGX or any of their Subsidiaries to freely conduct their business or own such assets, or (iii) the holding separate of the shares of VGX Capital Stock.

5.10 Notification of Certain Matters.

(a) By VGX. VGX shall give prompt notice to Inovio and Submerger upon VGX learning of any representation or warranty made by it contained in this Agreement becoming untrue or inaccurate in any material respect, or any failure of VGX to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or satisfied by it under this Agreement, in each case, such that the conditions set forth in Section 6.1 or 6.3 will not be satisfied; provided, however, that the delivery of any notice pursuant to this Section 5.10(a) will not limit or otherwise affect the remedies available hereunder to Inovio or the representations, warranties or covenants of VGX or the conditions to the obligations of Inovio or Submerger.

(b) *By Inovio.* Inovio and Submerger shall give prompt notice to VGX upon either of them learning of any representation or warranty made by it contained in this Agreement becoming untrue or inaccurate in any material respect, or any failure of Inovio or Submerger to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or

satisfied by it under this Agreement, in each case, such that the conditions set forth in *Section 6.1* or *6.2* would not be satisfied; *provided, however*, that the delivery of any notice pursuant to this *Section 5.10(b)* will not limit or otherwise affect the remedies available hereunder to VGX or the representations, warranties or covenants of Inovio or Submerger or the conditions to the obligations of VGX.

5.11 Employee Benefits.

(a) Service Credit; Eligibility. Following the Effective Time, Inovio shall arrange for each Employee who is a participant in a VGX Employee Plan that is a welfare benefit plan (within the meaning of Section 3(1) of ERISA), including any vacation plan or program (the "Company Participants"), who becomes an employee of Inovio, any Inovio Subsidiary or the Surviving Entity and their dependents to be eligible for substantially similar employee welfare benefits as those received by Inovio employees with similar positions and responsibilities. To the extent permitted under applicable Legal Requirements and the applicable waiting periods in Inovio's employee welfare benefit plans and arrangements, each Company Participant shall be given service credit for all purposes under Inovio's employee welfare benefit plans and arrangements, including for eligibility to participate (provided that no retroactive contributions will be required), eligibility for vesting under Inovio's employee welfare benefit plans and arrangements with respect to his or her length of service with VGX (and its subsidiaries and predecessors) prior to the Closing Date, except to the extent that such crediting would result in duplication of benefits. To the extent permitted under applicable Legal Requirements and the terms and provisions of Inovio's employee benefit plans and arrangements, Inovio shall cause any and all pre-existing condition (or actively at work or similar) limitations, eligibility waiting periods and evidence of insurability requirements under any Inovio employee welfare benefit plans and arrangements to be waived with respect to such Company Participants (and their beneficiaries) (except to the extent that such Company Participant was subject to a pre-existing condition limitation or had not yet satisfied a waiting period under the corresponding VGX welfare benefit plan) and shall provide them with credit for any expenses incurred or portion of any waiting period satisfied during the plan year which includes the Closing Date for the purposes of satisfying any applicable deductible, out-of-pocket, or similar requirements under any Inovio employee welfare benefit plans or arrangements in which they are eligible to participate after the Closing Date.

(b) *Cooperation.* Inovio and VGX shall reasonably cooperate with one another and provide such information to each other as Inovio or VGX shall reasonably request in order to enable Inovio and VGX to satisfy their obligations under this *Section 5.11*.

5.12 *Reservation of Shares.* Inovio shall take all corporate action necessary to reserve for issuance a sufficient number of shares of Inovio Common Stock for delivery upon exercise of the assumed and converted VGX Options and VGX Warrants, conversion of the assumed and converted VGX Convertible Debt and satisfaction of the converted Other VGX Rights.

5.13 Listing or Quotation.

(a) Within ten (10) business days following execution of this Agreement, Inovio shall notify the NYSE Alternext of this Agreement and provide the NYSE Alternext with a copy of this Agreement, the schedules and exhibits thereto and, as timely as possible thereafter, any other documentation reasonably requested by the NYSE Alternext for use in its further evaluation of the applicability to the Merger of Section 341 of the Company Guide of the NYSE Alternext and the definition of "Reverse Merger" set forth therein ("*Section 341*"). Inovio agrees to use all reasonable efforts to obtain a determination from the NYSE Alternext regarding its intended treatment of the Merger under Section 341 as soon as possible after the date of this Agreement and no later than Registration Effective Date.

(b) If the NYSE Alternext indicates that the Merger does not constitute a "Reverse Merger" under Section 341, Inovio agrees to use all reasonable efforts to timely file an additional listing application intended to cause the shares of Inovio Common Stock issuable in connection with the Merger, including all shares reserved pursuant to *Section 5.12* hereof (the "*Inovio Reserved Shares*") to be approved for listing on the NYSE Alternext and effective for trading no later than one (1) Trading Day after the Effective Time; *provided, however,* if the NYSE Alternext notifies Inovio that actions are necessary to maintain the listing of Inovio Common Stock on the NYSE Alternext and Inovio is unable to maintain the listing of the Inovio Common Stock on the NYSE Alternext prior to the Closing using commercially reasonable efforts, then Inovio agrees to use commercially reasonable efforts to have the Inovio Common Stock listed or quoted on an Alternate Exchange.

(c) If the NYSE Alternext indicates that the Merger does constitute a "Reverse Merger" under Section 341, Inovio agrees to use commercially reasonable efforts to timely file an initial listing application intended to cause the Inovio Common Stock, including the Inovio Reserved Shares, to be approved for listing on the NYSE Alternext and effective for trading no later than one (1) Trading Day after the Effective Time; *provided, however*, if Inovio will be unable to satisfy the initial listing standards for the NYSE Alternext using commercially reasonable efforts prior to the Closing, then Inovio agrees to use commercially reasonable efforts to have the Inovio Common Stock listed or quoted on an Alternate Exchange.

5.14 Continuation of Indemnification.

(a) Inovio will, and will cause the Surviving Entity to, fulfill and honor all rights to indemnification existing as of the date of this Agreement (i) in favor of an officer, director or employee of VGX or any of its Subsidiaries (the "*VGX Indemnified Parties*"), whether provided in the VGX Charter Documents or pursuant to any contractual agreement (as in effect as of the date of this Agreement) to survive the Merger and be observed by the Surviving Entity to the fullest extent permitted by applicable law, and (ii) in favor of an officer, director or employee of Inovio or any of its Subsidiaries (the "*Inovio Indemnified Parties*"), whether provided in the Inovio Charter Documents or pursuant to any contractual agreement (as in effect as of the date of this Agreement) to survive the Merger and be observed by applicable law, end (ii) in the Inovio Charter Documents or pursuant to any contractual agreement (as in effect as of the date of this Agreement) to survive the Merger and be observed by Inovio to the fullest extent permitted by applicable law, in each case until not earlier than the sixth anniversary of the Effective Time.

(b) The provisions of this *Section 5.14* are (i) intended to be for the benefit of, and shall be enforceable solely by, the VGX Indemnified Parties, Inovio Indemnified Parties and their heirs and personal representatives and shall be binding on Inovio and the Surviving Entity and its successors and assigns and (ii) shall be in addition to, and not in substitution for, any other rights to indemnification or contribution that any such person may have by contract or otherwise. In the event Inovio or the Surviving Entity or any successor or assign (i) consolidates with or merges into any other Person and shall not be the continuing or surviving corporation or entity in such consolidation or merger or (ii) transfers all or substantially all of its properties and assets to any Person, then, and in each case, proper provision shall be made so that the successor and assign of Inovio or the Surviving Entity, as the case may be, honors the obligations set forth with respect to Inovio or the Surviving Entity, as the case may be, in this *Section 5.14*.

5.15 *FIRPTA Compliance*. On the Closing Date, VGX shall deliver to Inovio a properly executed statement in a form reasonably acceptable to Inovio for purposes of satisfying Inovio's obligations under Treasury Regulation Section 1.1445-2(c)(3).

5.16 *Submerger Compliance*. Inovio shall cause Submerger to comply with all of its obligations under or relating to this Agreement. Prior to the Effective Time, Submerger shall not engage in any business which is not in connection with the Merger pursuant to this Agreement.

5.17 *Certain Litigation.* From the date hereof, VGX shall use all reasonable efforts to provide Inovio with periodic updates (upon the request of Inovio) of the status and developments in the litigation referenced in *Section 2.9* of the VGX Disclosure Letter. From the date hereof, Inovio shall use all reasonable efforts to provide VGX with periodic updates (upon the request of VGX) of the status and developments in the litigation referenced in *Section 3.9* of the Inovio Disclosure Letter.

5.18 *Treatment as Reorganization.* The parties hereby adopt this Agreement as a "plan of reorganization" within the meaning of Section 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations. Each of Inovio, VGX and Submerger shall deliver officer's certificates as requested by counsel for purposes of rendering the opinions described in *Section 6.1(g)* hereto. Neither VGX nor Inovio has taken or will take any action, either before or after the Closing, which could cause the Merger to fail to qualify as a reorganization. The parties hereto shall timely satisfy or cause to be satisfied all applicable tax reporting and filing requirements with respect to the transactions contemplated hereby, including the reporting requirements of Treasury Regulations Section 1.368-3T.

5.19 Financial Statements.

(a) To the extent any portion of the VGX Financials has not been previously delivered to Inovio pursuant to *Section 2.4*, VGX shall deliver to Inovio such remaining financial information as anticipated by *Section 2.4* within ten (10) business days of this Agreement. VGX shall concurrently deliver a certificate on behalf of VGX signed by the Chief Executive Officer and Chief Financial Officer of VGX acknowledging the additional financial information as part of the VGX Financials for purposes of this Agreement and making the representation and warranties provided in *Section 2.4* hereof with respect to the complete VGX Financials as of the date of this Agreement.

(b) Within forty-five (45) business days after the end of each quarter subsequent to the date of the Agreement and prior to the Effective Time, VGX shall deliver to Inovio the unaudited balance sheet of VGX at the end of the fiscal quarter, the related unaudited statements of operations, changes in stockholders equity and cash flows for the fiscal quarter then ended, which interim quarterly financial statements since shall have been reviewed by VGX's independent accountants in accordance with Statement of Accounting Standards No. 71.

5.20 *Affiliates.* Within ten (10) business days following the date of this Agreement, VGX shall deliver to Inovio a letter identifying all known Persons who, as known to VGX, would be deemed affiliates of the VGX for purposes of Rule 144 of the Securities Act (the "*Affiliate Letter*"), and VGX shall update such Affiliate Letter from time to time prior to the Effective Time if and when VGX learns that additional Persons would be deemed affiliates of VGX for such purposes. VGX shall use its reasonable efforts to obtain a written agreement from each Person who may be so deemed an affiliate for such purposes as soon as reasonably practicable and, in any event, prior to the Effective Time, substantially in the form of *Exhibit D* hereto. Inovio and Submerger acknowledge that the requirement in Section 5.20 of the Prior Agreement for delivery of the Affiliate Letter within ten (10) business days of the date of the Prior Agreement has been previously waived.

5.21 *Identification of Directors.* No later than five (5) business days prior to the Form S-4 Filing Date, (i) Inovio shall have identified and put forth to VGX the names of two (2) individuals from the Inovio Board as of the date of this Agreement and (ii) VGX shall have identified and put forth to Inovio the name of one (1) individual from the VGX Board as of the date of this Agreement, each to serve as directors of Inovio after the Closing. No later than five (5) business days prior to the filing of the first pre-effective amendment to the Registration Statement, each of Inovio and VGX shall have identified and put forth to the other party the name of one (1) additional individual from each of the Inovio Board and the VGX Board to serve as directors of Inovio after the Closing. At least two (2) of the individuals put forth by Inovio and one (1) of the individuals put forth by VGX must be "independent" pursuant to the rules and regulations of the NYSE Alternext and the Rule 10A-3(b) as promulgated under the Exchange Act. If a named individual is not satisfactory to the other party, the

party shall notify the other party of its objections within two (2) business days and the nominating party shall identify an alternate individual promptly. No later than two (2) business days prior to the Form S-4 Filing Date, (a) each of Inovio and VGX shall have approved the initial four (4) individuals proposed as directors, and (b) each of the identified individuals shall have signed an acknowledgement indicating his or her consent to serve as a director for Inovio after the Closing and providing consent to being identified as a prospective director in the Registration Statement, the VGX Soliciting Materials and other Merger-related documentation. The two (2) additional individuals must provide such executed acknowledgment and consent no later than two (2) business days prior to the filing of the first pre-effective amendment to the Registration Statement. Inovio and VGX agree that one of the appointees from the Inovio Board shall serve as Chairman of the Board of Directors after Closing.

5.22 *Employment Agreements.* On or prior to the Effective Time, Inovio shall execute employment agreements with those individuals set forth on *Schedule 5.22* for the positions and at the salary levels noted thereon, in substantially the form provided in *Exhibits E, F, G, H and I* as referenced in such Schedule (the "*Closing Employment Agreements*"), which shall solely become effective as of the Effective Time.

5.23 No Severance Obligations. Each party will use its reasonable best efforts to obtain appropriate agreements, acknowledgement or waivers from its officers and its Subsidiaries' officers that the Merger will not constitute a "Change of Control" or "Change in Control" within the meaning of their respective employment, change in control or other compensatory or employment-related agreements, other than as provided in Section 5.23(a).

5.24 *Expenses.* All fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such expenses whether or not the Merger is consummated.

5.25 *Line of Credit.* Upon request of VGX subsequent to the Registration Effective Date and subject to approval of the Inovio Board at such time, Inovio shall provide VGX with a line of credit up to \$2,000,000 for use to fund continuing operations, to be documented upon issuance with customary terms and conditions.

5.26 *Headquarters*. Inovio and VGX agree to use commercially reasonable efforts to maintain Inovio's headquarters in San Diego, California after the Effective Time.

ARTICLE VI CONDITIONS TO THE MERGER

6.1 *Conditions to Obligations of Each Party to Effect the Merger.* The respective obligations of each party to this Agreement to effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of the following conditions, any of which may be waived, in writing, solely by VGX and Inovio together, except as otherwise noted below:

(a) *Effective Registration.* The Registration Statement shall have been declared effective and the registration of the securities to be issued in the Merger thereunder shall not be the subject of any stop order or proceedings seeking a stop order or other suspension.

(b) *VGX Approval*. This Agreement, the Merger and the other transactions contemplated hereby shall have received the requisite approval of the VGX Stockholders and the number of Dissenting Shares shall not exceed ten percent (10%) of the number of shares of outstanding VGX Common Stock.

(c) *Inovio Approval.* This Agreement, the Merger, and the other transactions contemplated thereby, including the 2000 Plan Amendment shall have received the requisite approval of the Inovio Stockholders (for the avoidance of doubt, in no event shall the approval of any Inovio Additional Proposal other than the 2000 Plan Amendment be required to satisfy the condition set forth in this *Section 6.1(c)*).

(d) *No Order.* No Governmental Entity shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which has the effect of making the Merger illegal or otherwise prohibiting consummation of the Merger, the issuance of the Merger Shares to the VGX Stockholders or the assumption of the VGX Options, VGX Warrants, VGX Debt or VGX Convertible Debt.

(e) Resignation of Directors and Officers.

(i) The directors and officers of VGX in office immediately prior to the Effective Time shall have resigned as directors and officers of the Surviving Entity effective immediately following the Effective Time, *except* if such individual is designated as a continuing director or officer of the Surviving Entity pursuant to *Section 1.6(a)* or (*b*) hereof.

(ii) The directors and officers of Inovio in office immediately prior to the Effective Time shall have resigned as directors and officers of the Inovio effective immediately following the Effective Time, *except* if such individual is designated as a continuing director or officer of Inovio pursuant to Section 1.6(c) or (d) hereof.

(f) *HSR Act; Other Pre-Merger Clearances.* The waiting period, if any (and any extension thereof), applicable to the Merger under the HSR Act shall have been terminated or shall have expired. Any necessary pre-merger clearances or approvals pursuant to Legal Requirements applicable to VGX or its Subsidiaries or Inovio or Submerger in any jurisdiction shall have been received from the appropriate Governmental Entity or necessity of receipt prior to the Closing shall have been waived or acknowledged as unnecessary by the appropriate Governmental Entity, in each case where failure to receive such clearance or approval would constitute a Material Adverse Effect on the combined company.

(g) *Tax Opinions*. Inovio shall have received an opinion of K&L Gates LLP, and VGX shall have received an opinion of Duane Morris LLP, each dated as of the Closing Date, and each to the effect that the Merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Code. The issuance of such opinions shall be conditioned upon the receipt by such counsel of appropriate representation letters from each of Inovio, Submerger, and VGX, in each case, in form and substance reasonably satisfactory to such counsel. Each such representation letter shall be dated as of the Closing Date.

6.2 *Additional Conditions to Obligations of VGX*. The obligation of VGX to consummate and effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by VGX:

(a) *Representations and Warranties.* The representations and warranties of Inovio and Submerger contained in this Agreement shall have been true and correct in all respects as of the date of this Agreement, and on and as of the Closing Date with the same force and effect as if they had been made on the Closing Date (except for any such representations and warranties that by their terms speak only as of a specific date or dates, in which case such representations and warranties shall be true and correct, in all respect on and as of such specified date or dates); *provided, however*, that the foregoing condition shall be deemed to have been satisfied even if such representations and warranties are not so true and correct so long as the failure of such representations or warranties), individually or in the aggregate, does not constitute a Material Adverse Effect with respect to Inovio and Submerger, *provided, further*, to the extent any of the information disclosed in *Section 3.7(b)* shall have changed subsequent to the date of this Agreement, VGX shall have received a

certificate with respect to the foregoing signed on behalf of Inovio by the Chief Executive Officer and Chief Financial Officer of Inovio.

(b) Agreements and Covenants. Inovio and Submerger shall have performed or complied in all material respects with the agreements and covenants required by this Agreement to be performed or complied with by them on or prior to the Effective Time, and VGX shall have received a certificate to such effect signed on behalf of Inovio by a duly authorized officer.

(c) *Material Adverse Effect*. No Material Adverse Effect on Inovio shall have occurred since the date hereof and be continuing.

(d) *Third Party Consents.* VGX shall have been furnished with all consents, approvals and waivers set forth on *Schedule 5.9(d)(iv)* or with evidence reasonably satisfactory to VGX that such consents, approvals and waivers have been obtained.

(e) *No Suspension.* There shall not have been a suspension in trading of Inovio Common Stock on the NYSE Alternext, or if applicable, an Alternate Exchange, at any time during the five (5) Trading Days prior to and on the Closing Date; *provided, however*, if pursuant to *Section 5.13* the Inovio Common Stock is in the process of being listed or quoted on an Alternate Exchange and such transition requires a halt of trading on the Closing Date or the two (2) Trading Days prior to the Closing Date, this condition shall be deemed automatically waived by VGX.

(f) Listing or Quotation. If Inovio files an additional listing application consistent with Sections 5.13(b) of this Agreement, the Inovio Common Stock remains listed on the NYSE Alternext and the NYSE Alternext has not given Inovio any notice that the Merger Shares may not be authorized for listing on the NYSE Alternext, then (A) the Merger Shares shall be authorized for listing on the NYSE Alternext, then (A) the Merger Shares shall be authorized for listing on the NYSE Alternext, then (A) the Merger Shares shall be authorized for listing of the Inovio Common Stock from the NYSE Alternext; for clarity, the failure to implement a reverse stock split prior to Closing shall not constitute an action with respect to this Section 6.2(f)(B). In all other instances, Inovio shall have either obtained, or have made arrangements to obtain concurrent with the Closing, listing or quotation of the Inovio Common Stock on an Alternate Exchange, including any necessary assignment of a new trading symbol and the listing or quotation of the Merger Shares when issued.

(g) *Legal Opinion*. VGX shall have received legal opinions from K&L Gates LLP reasonably acceptable to VGX covering the matters and in substantially the form attached hereto as *Exhibit J*.

6.3 Additional Conditions to the Obligations of Inovio. The obligations of Inovio to consummate and effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by Inovio:

(a) *Representations and Warranties.* The representations and warranties of VGX contained in this Agreement shall have been true and correct in all respects as of the date of this Agreement, and on and as of the Closing Date with the same force and effect as if they had been made on the Closing Date (except for any such representations and warranties that by their terms speak only as of a specific date or dates, in which case such representations and warranties shall be true and correct, in all respect on and as of such specified date or dates); *provided, however*, that the foregoing condition shall be deemed to have been satisfied even if such representations and warranties are not so true and correct so long as the failure of such representations or warranties to be so true and correct (determined without regard to any materiality qualifier contained in such representations and warranties), individually or in the aggregate, does not constitute a Material Adverse Effect with respect to VGX, *provided, further*, to the extent any of the information disclosed in *Section 2.7(b)* shall have changed subsequent to the date of this Agreement, Inovio shall have received an updated version of *Schedule 2.7(b)*, complete and correct as of the Effective

Date.. Inovio shall have received a certificate with respect to the foregoing signed on behalf of VGX by the Chief Executive Officer and Chief Financial Officer of VGX.

(b) Agreements and Covenants. VGX shall have performed or complied in all material respects with the agreements and covenants required by this Agreement to be performed or complied with by it on or prior to the Effective Time, and Inovio shall have received a certificate to such effect signed on behalf of VGX by a duly authorized officer of VGX.

(c) Material Adverse Effect. No Material Adverse Effect on VGX shall have occurred since the date hereof and be continuing.

(d) *Third Party Consents.* Inovio shall have been furnished with all consents, approvals and waivers set forth on *Schedule 5.9(d)(iii)* or with evidence reasonably satisfactory to Inovio that such consents, approvals and waivers have been obtained.

(e) Audited and Reviewed Financial Statements. VGX's auditor's opinion with respect to the VGX audited consolidated financial statements (including restatements thereof, if applicable) for the periods ended December 31, 2005, 2006 and 2007, shall remain in full force and effect and VGX shall not have received any written notice from its auditors that such opinions and related financial statements may no longer be relied upon, nor that VGX's reviewed financial statements for each of the quarters ended subsequent to January 1, 2008 may no longer be relied upon.

(f) *Status of VGX Debt.* VGX shall have (i) paid in full, principal and interest accrued, all VGX Debt identified in *Section 2.2(d)* of the VGX Disclosure Letter with maturity dates prior to the Effective Time, (ii) paid in full, principal and interest accrued, all VGX Convertible Debt *not* listed on *Schedule 1.7(d)(ii)*, and (iii) amended the VGX Convertible Debt listed on *Schedule 1.7(d)(ii)* to allow for optional conversion at \$1.05 per share after the Effective Time and to provide for mandatory conversion at \$1.05 per share should the Inovio Common Stock trade at or above \$2.10 per share for five (5) consecutive Trading Days after the Effective Time.

(g) *Manufacturing Agreement*. VGX shall have entered into the Manufacturing Agreement anticipated by *Section 4.3* hereof and such agreement shall upon its terms be effective at the time of the Closing and bear a term for at least twelve (12) months post-Closing.

(h) No Acceleration of Options. VGX shall not have accelerated the vesting of the VGX Options prior to or upon the Closing.

(i) [Reserved.]

(j) *Legal Opinion*. Inovio and Submerger shall have received a legal opinion from Duane Morris LLP reasonably acceptable to Inovio and Submerger covering the matters and in substantially the form attached hereto as Exhibit K.

(k) *No Outstanding Loans to Directors, Officers or Employees.* VGX shall have received payment in full of all principal and interest owed on all loans to VGX's directors, officers and/or employees and there shall be no outstanding loans from VGX or any Affiliate of VGX to any director, officer or employee of VGX or any of its Subsidiaries, other than advances made in the ordinary course of business for business purposes.

(1) *Execution of Voting Trust Agreement.* The signatories to the voting trust agreement provided as *Exhibit C* shall have provided executed signature pages to the voting trust agreement, to be held in escrow pending the Closing and counter-signature by the Trustees. If required by the Exchange Agent, the signatories to the voting trust agreement shall also have provided executed instructions to the Exchange Agent allowing for the direct issuance of the shares of Inovio Common Stock to be deposited in the voting trust in the name of the Trustees at the time of the exchange pursuant to *Section 1.9(c)* hereof.

ARTICLE VII TERMINATION, AMENDMENT AND WAIVER

7.1 *Termination*. This Agreement may be terminated at any time prior to the Effective Time, by action taken or authorized by the board of directors of the terminating party or parties as provided below, whether before or after the requisite approvals of the VGX Stockholders and/or the Inovio Stockholders:

(a) by mutual written consent duly authorized by the Inovio Board and the VGX Board;

(b) by either VGX or Inovio if the Closing shall not have occurred by March 31, 2009 (the "*End Date*"); *provided* that the right to terminate this Agreement under this *Section 7.1(b)* (i) shall not be available to any party whose action or failure to act has prevented the consummation of the transactions contemplated hereby prior to the End Date and such action or failure to act constitutes a breach of this Agreement and (ii) shall not be available to either party if (x) there are Inovio responses to comments received from the SEC staff that are under review by the SEC staff on such date, and which were submitted to the SEC staff within ten (10) days prior to such date, in which case the End Date shall be the earlier of forty-five (45) days after Inovio's receipt of further comments or clearance from the SEC staff or forty (40) days after the Registration Effective Date, or (y) VGX and Inovio have mailed the Proxy Statement/Prospectus to their respective stockholders, in which case the End Date shall be type Stockholders' Meeting.

(c) by either VGX or Inovio if a Governmental Entity shall have issued an order, decree or ruling or taken any other action (including the failure to take action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger, which order, decree or ruling is final and nonappealable.

(d) by VGX, upon a breach of any representation, warranty, covenant or agreement on the part of Inovio set forth in this Agreement, or if any representation or warranty of Inovio shall have become untrue, in either case such that the conditions set forth in *Section 6.2(a)* or *Section 6.2(b)* would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, *provided*, that if such inaccuracy in Inovio's representations and warranties or breach of a covenant or agreement by Inovio is curable by Inovio within the earlier of thirty (30) days or the date set forth in *Section 7.1(b)* through the exercise of all reasonable efforts, then VGX may not terminate this Agreement under this *Section 7.1(d)* until the earlier of thirty (30) days or such fewer number of days before the date set forth in *Section 7.1(b)* after delivery of written notice from VGX to Inovio of such breach, *provided* Inovio continues to exercise all reasonable efforts to cure such breach (it being understood that VGX may not terminate this Agreement pursuant to this paragraph (d) if such breach by Inovio is cured during such period); or

(e) by Inovio, upon a breach of any representation, warranty, covenant or agreement on the part of VGX set forth in this Agreement, or if any representation or warranty of VGX shall have become untrue, in either case such that the conditions set forth in *Section 6.3(a)* or *Section 6.3(b)* would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, *provided*, that if such inaccuracy in VGX's representations and warranties or breach of a covenant or agreement by VGX is curable by VGX within the earlier of thirty (30) days or the date set forth in *Section 7.1(b)* through the exercise of all reasonable efforts, then Inovio may not terminate this Agreement under this *Section 7.1(e)* until the earlier of thirty (30) days or such fewer number of days before the date set forth in *Section 7.1(b)* after delivery of written notice from Inovio to VGX of such breach, *provided* VGX continues to exercise all reasonable efforts to cure such breach (it being understood that Inovio may not terminate this Agreement by VGX is cured during such period).

(f) by VGX, upon written notice to Inovio setting forth (i) the VGX Board's determination that a VGX Acquisition Proposal constitutes a VGX Superior Offer, (ii) the VGX Board's determination to withdraw its recommendation provided pursuant to *Section 5.3(b)* in favor of recommending the VGX Superior Offer to the VGX Stockholders, in satisfaction of the fiduciary duties of the VGX Board, and (iii) VGX's representation of full and complete compliance with the terms of *Section 5.6* prior to such termination; *provided, however*, to the extent that VGX did not comply with the advance notice and document delivery requirements of *Section 5.6(a)* for the VGX Superior Offer in relation to which VGX is seeking termination, the termination of this Agreement shall not be effective until 11:59 p.m. PDT on the fifth (5th) business day after receipt of the notice required by this *Section 7.1(f)* and such notice may be revoked prior to such effectiveness by VGX.

(g) by Inovio, upon written notice to VGX setting forth (i) the Inovio Board's determination that a Inovio Acquisition Proposal constitutes an Inovio Superior Offer, (ii) the Inovio Board's determination to withdraw its recommendation provided pursuant to *Section 5.2(b)* in favor of recommending the Inovio Superior Offer to the Inovio Stockholders, in satisfaction of the fiduciary duties of the Inovio Board, and (iii) Inovio's representation of full and complete compliance with the terms of *Section 5.7* prior to such termination; *provided, however*, to the extent that Inovio did not comply with the advance notice and document delivery requirements of *Section 5.7(a)* for the Inovio Superior Offer in relation to which Inovio is seeking termination, the termination of this Agreement shall not be effective until 11:59 p.m. PDT on the fifth (5th) business day after receipt of the notice required by this *Section 7.1(g)* and such notice may be revoked prior to such effectiveness by Inovio.

7.2 Notice of Termination; Effect of Termination. Any termination of this Agreement under Section 7.1 above will be effective immediately upon the delivery of written notice of the terminating party to the other parties hereto (or such later time as may be contemplated by Sections 7.1(b), (d), (e)). In the event of the termination of this Agreement as provided in Section 7.1, this Agreement shall be of no further force or effect and no party hereto shall have any liability hereunder, except (i) as set forth in Section 5.5(a), this Section 7.2, Section 7.3, and Article IX (General Provisions), each of which shall survive the termination of this Agreement, and (ii) nothing herein shall relieve any party from liability for any willful breach of this Agreement. This Section 7.2 shall not impair the right of any party to compel specific performance by another party of its obligations hereunder.

7.3 *Amendment*. Subject to applicable law, this Agreement may be amended by the parties hereto at any time by execution of an instrument in writing signed on behalf of each of the parties hereto.

7.4 *Extension; Waiver*. At any time prior to the Effective Time any party hereto may, to the extent legally allowed, (i) extend the time for the performance of any of the obligations or other acts of the other parties hereto, (ii) waive any inaccuracies in the representations and warranties made to such party contained herein or in any document delivered pursuant hereto and (iii) waive compliance with any of the agreements or conditions for the benefit of such party contained herein. Any agreement on the part of a party hereto to any such extension or waiver shall be valid only if set forth in an instrument in writing signed on behalf of such party. Delay in exercising any right under this Agreement shall not constitute a waiver of such right. To the extent that any matter disclosed in the VGX Disclosure Letter, as updated from the disclosure letter of VGX attached to the Prior Agreement, would have constituted a breach of *Section 4.1* of the Prior Agreement, Inovio and Submerger hereby waive such breach. In addition, to the extent that any matter disclosed in the Inovio Disclosure Letter, as updated from the disclosure letter of Inovio and Submerger attached to the Prior Agreement, would have constituted a breach of *Section 4.2* of the Prior Agreement, VGX hereby waives such breach.

7.5 *Termination Payments.* In the event that this Agreement is terminated by Inovio pursuant to *Section 7.1(g)*, Inovio shall promptly, but in no event later than two (2) business days after the date of such event, pay VGX a fee equal to \$3,500,000 in immediately available funds and such payment shall be the sole and exclusive remedy relating therewith. In the event that this Agreement is terminated by VGX pursuant to *Section 7.1(f)*, VGX shall promptly, but in no event later than two (2) business days after the date of such event, pay Inovio a fee equal to \$3,500,000 in immediately available funds and such payment shall be the sole and exclusive remedy relating therewith.

ARTICLE VIII [RESERVED]

ARTICLE IX GENERAL PROVISIONS

9.1 *Survival of Representations and Warranties.* The representations and warranties contained in this Agreement shall survive until the Effective Time; *provided, however,* that the foregoing shall not affect the date the representations and warranties set forth herein are deemed made.

9.2 *Certain Definitions*. For all purposes of and under this Agreement, the following terms shall have the following respective meanings:

"2000 Plan Amendment" has the meaning set forth in Section5.2(a)(ii).

"Action of Divestiture" has the meaning set forth in Section 5.8(e).

"Affiliate" means, with respect to any specified Person, any other Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common Control with, such specified Person.

"Affiliate Letter" has the meaning set forth in Section 5.20.

"Agreement" has the meaning set forth in the introductory paragraph.

"*Alternate Exchange*" means a securities exchange or quotation system for which the Inovio Common Stock qualifies for initial listing or quotation using commercially reasonable efforts, as determined by Inovio in consultation with VGX.

"business day" means any day other than a Saturday or Sunday or a day on which banks in San Diego, California or Philadelphia, Pennsylvania are closed.

"Certificate of Merger" has the meaning set forth in Section 1.3.

"*Certificates*" means certificates which immediately prior to the Effective Time represented outstanding shares of VGX Capital Stock as set forth in *Section 1.9(c)*.

"Closing" has the meaning set forth in Section 1.2.

"Closing Date" has the meaning set forth in Section 1.2.

"COBRA" has the meaning set forth in Section 2.11(a)(i).

"*Code*" has the meaning set forth in *Section 2.11(a)(ii)*.

"Common Per Share Stock Consideration" means a number of shares of Inovio Common Stock equal to the Merger Exchange Ratio.

"Company Participants" has the meaning set forth in Section 5.11.

"Confidentiality Agreement" has the meaning set forth in Section 5.5.

"*Contract*" means any agreement, contract, lease (relating to real or personal property), license, indenture, mortgage, instrument, commitment, purchase or sale orders, consensual obligation, promise or obligation or other arrangement or understanding, oral or written, formal or informal, express or implied, in each case, that is legally binding.

"*Control*" means, with respect to the relationship between or among two (2) or more Persons, the possession, directly or indirectly or as trustee or executor, of the power to direct or cause the direction of the affairs or management of a Person, whether through the ownership of voting securities, as trustee or executor, by contract or otherwise, including, without limitation, the ownership, directly or indirectly, of securities having the power to elect a majority of the board of directors or similar body governing the affairs of such Person.

"Debt Lock-Up Period" has the meaning set forth in Section 1.7(h)(iv).

"*DGCL*" has the meaning set forth in the recitals.

"Dissenting Shares" has the meaning set forth in Section 1.8(b).

"*Dissenting Stockholder*" has the meaning set forth in *Section 1.8(c)*.

"*DOJ*" has the meaning set forth in *Section 5.8(a)*.

"DOL" has the meaning set forth in Section 2.11(a)(iii).

"Domain Names" has the meaning set forth in Section 2.7(q).

"Effect" has the meaning set forth in the definition of Material Adverse Effect.

"Effective Time" has the meaning set forth in Section 1.3.

"*End Date*" has the meaning set forth in *Section 8.1(b)*.

"Environmental Laws" means any applicable Legal Requirement which prohibits, regulates or controls Hazardous Materials.

"*ERISA*" has the meaning set forth in *Section 2.11(a)(iv)*.

"Exchange Act" means The Securities Exchange Act of 1934, as amended.

"*Exchange Agent*" has the meaning set forth in *Section 1.9(a)*.

"*Exchange Fund*" has the meaning set forth in *Section 1.9(b)*.

"FDA" means the U.S. Food and Drug Administration.

"Form S-4 Filing Date" means the date the initial Registration Statement is filed with and accepted by the SEC.

"FTC" has the meaning set forth in Section 5.9(a).

"Governmental Entity" means any:

(a) federal, provincial, state, local, municipal, foreign, or other government;

(b) governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal);

(c) multi-national organization or body; or

(d) body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature.

"*Hazardous Material*" means any chemical or substance that has been designated by any Governmental Entity (with jurisdiction over such chemical or substance) to be radioactive, toxic, hazardous, or a pollutant.

"HSR Act" has the meaning set forth in Section 2.3(c).

"Inbound License" has the meaning set forth in Section 2.7(j)(ii).

"IND" has the meaning set forth in Section 2.8(b).

"Inovio" has the meaning set forth in the introductory paragraph.

"Inovio 2000 Plan" means the Inovio Biomedical Corporation Amended 2000 Stock Option Plan.

"Inovio Acquisition Proposal" has the meaning set forth in Section 5.7(b).

"Inovio Acquisition Transaction" has the meaning set forth in Section 5.7(b).

"Inovio Additional Proposals" has the meaning set forth in Section 5.2(a).

"Inovio Board" means the Board of Directors of Inovio.

"Inovio Capital Stock" means the Inovio Common Stock and Inovio Preferred Stock.

"Inovio Charter Documents" has the meaning set forth in Section 3.1(b).

"Inovio Common Stock" means common stock of Inovio, par value \$0.001 per share.

"Inovio Disclosure Letter" has the meaning set forth in the preamble to Article III.

"Inovio Employee" has the meaning set forth in Section 3.11(a).

"Inovio Erisa Affiliate" has the meaning set forth in Section 3.11(a)(iii).

"Inovio Facility" has the meaning set forth in Section 3.12(b).

"Inovio Incentive Plan(s)" means the Inovio 2000 Plan and the Inovio Biomedical Corporation 2007 Omnibus Incentive Plan.

"Inovio Indemnified Parties" has the meaning set forth in Section 5.14(a).

"Inovio Intellectual Property" has the meaning set forth in Section 3.7(a).

"Inovio Options" means options to purchase shares of Inovio Common Stock issued pursuant to the Inovio Incentive Plans.

"Inovio Permits" has the meaning set forth in Section 3.8(b).

"*Inovio Preferred Stock*" means shares of Inovio's Preferred Stock, including shares of Inovio's Series A Cumulative Convertible Preferred Stock, Series B Cumulative Convertible Preferred Stock, Series D Convertible Preferred Stock.

"Inovio Proxy Statement" has the meaning set forth in Section 5.1.

"Inovio Registered Intellectual Property" has the meaning set forth in Section 3.7(a).

"Inovio Reserved Shares" has the meaning set forth in Section 5.13.

"Inovio Scheduled Contract" has the meaning set forth in Section 3.14.

"Inovio Securities" means securities issued by Inovio, including Inovio Common Stock, Inovio Preferred Stock, Inovio Options and Inovio Warrants.

"Inovio Stockholder" means each Person that is a holder of record of Inovio Capital Stock at the time referenced in context, as determined in accordance with the stock transfer records of Inovio.

"Inovio Superior Offer" has the meaning set forth in Section 5.7(b).

"Inovio Warrants" means warrants to purchase Inovio Common Stock.

"Intellectual Property" has the meaning set forth in Section 2.7(a)(i).

"*IRS*" has the meaning set forth in Section 2.11(a)(v).

"*Knowledge*" means, with respect to any matter in question as of the particular date of determination, (a) with respect to VGX, the actual knowledge as of such date of the directors and officers of VGX; and (b) with respect to Inovio, the actual knowledge as of such date of the directors and executive officers of Inovio.

"Legal Proceedings" has the meaning set forth in Section 2.9.

"*Legal Requirements*" means any applicable international, multinational, federal, state, local, municipal, foreign or other law, statute, constitution, principle of common law, resolution, ordinance, code, order, edict, judgment, decree, injunction, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Entity, including, without limitation, any business or other regulatory licenses required.

"*Liens*" has the meaning set forth in *Section 2.1(c)*.

"Lock-Up Periods" has the meaning set forth in Section 1.7(h)(iii).

"Lock-Up Restrictions" has the meaning set forth in Section 1.7(h)(ii).

"Manufacturing Agreement" has the meaning set forth in Section 4.3.

"Material Adverse Effect" when used in connection with an entity means any change, event, violation, inaccuracy, circumstance or effect (each an "Effect") that, individually or in the aggregate with other such Effects, is or could reasonably be expected to be (i) materially adverse to the business, assets (including intangible assets), capitalization, financial condition or results of operations of such entity and its Subsidiaries taken as a whole or (ii) would materially impede the ability of such party to consummate the transaction contemplated by this Agreement; provided, however, that for purposes of subsection (i) above, in no event shall any of the following, alone or in combination, be deemed to constitute, nor shall any of the following be taken into account in determining whether there has been or will be, a Material Adverse Effect of such entity: (A) with respect to Inovio only, the decrease in such entity's stock price in and of itself or the failure to meet or exceed Wall Street research analysts' earnings or other estimates or projections in and of itself (it being understood that this clause (A) shall not exclude or in any way limit any facts and circumstances that cause any change in stock price or any failure to meet or exceed Wall Street research analysts' earnings or other estimates or projections from being deemed to be (or from being taken into account in determining) a Material Adverse Effect), or (B) any Effect on the business of the entity and its Subsidiaries taken as a whole to the extent resulting from (x) the public announcement of the transactions contemplated hereby in accordance with this Agreement (including any actions by customers or competitors, loss of personnel or customers or the delay or cancellation of orders for services and products, in each case resulting from the public announcement of the transaction contemplated hereby), (y) changes affecting the industry generally or (z) changes affecting the United States economy generally (it being understood that clauses (y) and (z) shall not exclude, in the case of a Material Adverse Effect with respect to

either party, any change affecting the industry generally and the United States economy generally that materially and disproportionately impacts such party).

"Material Divestiture" has the meaning set forth in Section 5.8(e).

"Merger" has the meaning set forth in the Recitals.

"Merger Consideration" means, collectively, the Merger Shares, the Merger Options and the Merger Warrants.

"*Merger Exchange Ratio*" means the quotient obtained by dividing (i) the Total Inovio Closing Shares by (ii) the Total VGX Closing Shares.

"Merger Options" means the options to purchase shares of Inovio Common Stock issued pursuant to Section 1.7(b).

"Merger Shares" means the shares of Inovio Common Stock issued pursuant to Sections 1.7(a).

"Merger Warrants" means the warrants to purchase shares of Inovio Common Stock issued pursuant to Section 1.7(c).

"Multiemployer Plan" has the meaning set forth in Section 2.11(a)(vi).

"NYSE Alternext" means NYSE Alternext US LLC.

"Officer's Certificate" has the meaning set forth in Section 9.5(a).

"Open Source Software" has the meaning set forth in Section 2.7(a)(v).

"ordinary course of business" means an action taken by a Person only if: (A) such action is consistent with the past practices of such Person and is taken in the ordinary course of the normal day-to-day operations of such Person; and (B) such action is not required to be authorized by the board of directors of such Person (or by any Person or group of Persons exercising similar authority) and is not required to be specifically authorized by the parent company (if any) of such Person; and

"Other VGX Rights" has the meaning set forth in Section 1.7(j).

"Outbound License" has the meaning set forth in Section 2.7(k)(i).

"*Pension Plan*" has the meaning set forth in *Section 2.11(a)*.

"*Permits*" has the meaning set forth in *Section 2.8(b)*.

"*Permitted Liens*" means (i) statutory Liens for Taxes, which are not yet delinquent or are being contested by appropriate proceedings, (ii) statutory or common law liens to secure landlords, lessors or renters under leases or rental agreements, (iii) statutory or common law liens in favor of carriers, warehousemen, mechanics and materialmen to secure claims for labor, materials or supplies and other like liens, and (iv) such minor restrictions, defects, irregularities or imperfections of title or Liens as do not materially adversely effect the use of the subject property or asset.

"*Person*" means any individual, corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, company (including any limited liability company or joint stock company), firm or other enterprise, association, organization, entity or Governmental Entity.

"Primary Lock-Up Period" has the meaning set forth in Section 1.7(h)(iii).

"Prior Agreement" has the meaning set forth in the Recitals.

"Proxy Statement / Prospectus" has the meaning set forth in Section 5.1.

"PTO" has the meaning set forth in Section 2.7.

"Registered Intellectual Property" has the meaning set forth in Section 2.7(a)(iii).

"Registration Effective Date" means the date on which the SEC declares the Registration Statement, as then amended, effective.

"Registration Statement" has the meaning set forth in Section 5.1.

"Restricted Party" or "Restricted Parties" has the meaning set forth in Section 1.7(h)(i).

"*Restricted Securities*" has the meaning set forth in Section 1.7(h)(i).

"Sarbanes-Oxley Act" shall mean the Sarbanes-Oxley Act of 2002, as amended.

"SEC" means the U.S. Securities and Exchange Commission.

"SEC Reports" has the meaning set forth in Section 3.4.

"Securities Act" means the Securities Act of 1933, as amended.

"Submerger" has the meaning set forth in the introductory paragraph.

"Subsidiary" has the meaning set forth in Section 2.1(a).

"Support Stockholder Voting Agreement" has the meaning set forth in the recitals.

"Surviving Entity" has the meaning set forth in Section 1.1.

"Tax" or "Taxes" has the meaning set forth in Section 2.6(a).

"Tax Returns" has the meaning set forth in Section 2.6(b)(i).

"*Total Inovio Closing Shares*" means the sum of the (i) total number of shares of Inovio Common Stock, (ii) the total number of shares of Inovio Common Stock issuable upon conversion of the outstanding shares of Inovio Preferred Stock, (iii) the total number of shares of Inovio Common Stock issuable upon exercise of the Inovio Options, whether vested or unvested, and (iv) the total number of shares of Inovio Common Stock issuable upon exercise of the Inovio Warrants, each as outstanding immediately prior to the Effective Time, less (i) the total number of any shares of Inovio Common Stock issuable under other securities held by VGX or any of its Subsidiaries immediately prior to the Effective Time.

"*Total VGX Closing Shares*" means the sum of the (i) total number of shares of VGX Common Stock, (ii) the total number of shares of VGX Common Stock issuable upon exercise of the VGX Options, whether vested or unvested, and (iii) the total number of shares of VGX Common Stock issuable upon exercise of the VGX Warrants, each as outstanding immediately prior to the Effective Time, less (i) the total number of any shares of VGX Common Stock held by and (ii) the total number of any shares of VGX Common Stock issuable under other securities held by Inovio or any of its Subsidiaries immediately prior to the Effective Time. For clarity, the Total VGX Closing Shares shall not include the number of shares of VGX Common Stock issuable upon conversion of the VGX Convertible Debt outstanding immediately prior the Effective Time.

"*Trading Day*" means a day on which trades occur on the NYSE Alternext, or an Alternate Exchange if applicable, and for which a last sale price is reported for Inovio Common Stock.

"Transferred Assets" has the meaning set forth in Section 4.3.

"US GAAP" has the meaning set forth in Section 2.4.

"USDA" has the meaning set forth in Section 2.8(c)(i).

"VGX" has the meaning set forth in the introductory paragraph.

"VGX Acquisition Proposal" has the meaning set forth in Section 5.6(b).

"VGX Balance Sheet" has the meaning set forth in Section 2.4(c).

"VGX Board" means the Board of Directors of VGX.

"VGX Capital Stock" means VGX Common Stock and/or VGX Preferred Stock.

"VGX Charter Documents" has the meaning set forth in Section 2.1(b).

"VGX Common Stock" means the common stock, par value \$0.0001 per share, of VGX.

"*VGX Convertible Debt*" means all outstanding promissory notes or other debt instruments providing the holder(s) a right to repayment or conversion of the debt into shares of VGX Common Stock in lieu of cash payment in satisfaction of such debt.

"*VGX Debt*" means all outstanding promissory notes or other debt instruments providing the holder(s) a right to payment in satisfaction of such debt; for clarity, VGX Debt does not include any VGX Convertible Debt.

"VGX Disclosure Letter" has the meaning set forth in the preamble to Article II.

"VGX Employee" has the meaning set forth in Section 2.11(a)(vii).

"VGX Employee Plan" has the meaning set forth in Section 2.11(a)(viii).

"VGX Erisa Affiliate" has the meaning set forth in Section 2.11(a)(ix).

"VGX Facilities" has the meaning set forth in Section 2.12(c).

"VGX Financials" has the meaning set forth in Section 2.4(c).

"VGXI" has the meaning set forth in Section 2.2(e).

"VGX Indemnified Party" has the meaning set forth in Section 5.14(a).

"VGX Intellectual Property" has the meaning set forth in Section 2.7(a)(ii).

"VGX Leases" has the meaning set forth in Section 2.12(b).

"VGX Options" means any and all options and other compensatory rights to acquire VGX Common Stock, whether issued under the VGX Option Plan or otherwise.

"*VGX Option Plan*" means collectively the Viral Genomix, Inc. Equity Compensation Plan and the VGX Animal Health, Inc. Equity Compensation Plan.

"VGX-Owned Facility" or "VGX-Owned Facilities" has the meaning set forth in Section 2.12(a).

"VGX Permits" has the meaning set forth in Section 2.8(b).

"VGX Preferred Stock" means the preferred stock, par value \$.0001 per share, of VGX.

"VGX Products" means all biological and drug products being manufactured, researched or developed by or on behalf of VGX or any of its Subsidiaries.

"VGX Proxy Statement" has the meaning set forth in Section 5.1.

"VGX Registered Intellectual Property" has the meaning set forth in Section 2.7(a)(iv).

"VGX Scheduled Contract" has the meaning set forth in Section 2.14(a).

"VGX Securities" means securities issued by VGX, including VGX Common Stock, VGX Options, VGX Warrants and VGX Convertible Debt.

"VGX Solicitation Date" means the date the VGX Soliciting Materials are mailed to the VGX Stockholders.

"VGX Soliciting Materials" has the meaning set forth in Section 5.3(d).

"*VGX Stockholder*" means each Person that is a holder of record of VGX Capital Stock at the time referenced in context, as determined in accordance with the stock transfer records of VGX.

"*VGX Stockholder Approval*" shall mean the approval of the VGX Voting Proposal by a vote, or by the written consent, of the requisite holders of the VGX Common Stock under the VGX Certificate of Incorporation, the DGCL and any other applicable laws.

"VGX Subsidiary Charter Documents" has the meaning set forth in Section 2.1(b).

"VGX Superior Offer" has the meaning set forth in Section 5.6(b).

"VGX Support Stockholders" has the meaning set forth in the recitals.

"VGX Voting Proposal" shall mean the proposal to adopt this Agreement and approve the Merger.

"VGX Warrants" means warrants to purchase VGX Common Stock.

"VGX Web Sites" has the meaning set forth in Section 2.7(s).

"Vest" or "Vesting" means (a) with respect to an option, such option becoming freely exercisable without subsequent risk of forfeiture of shares exercised, and (b) with respect to Merger Shares that are Restricted, such shares becoming released from the applicable risk of forfeiture or divestment or repurchase right; and "Vested" (a) with respect to options, refers to the portion of shares underlying such option which are exercisable, and (b) with respect to Restricted Merger Shares, refers to the number of shares which are released from the applicable risk of forfeiture or divestment or repurchase right.

"*Web*" has the meaning set forth in *Section 2.7(s)*.

9.3 *Notices.* All notices and other communications hereunder shall be in writing and shall be deemed duly given (i) on the date of delivery if delivered personally, (ii) on the date of confirmation of receipt (or, the first business day following such receipt if the date is not a business day or if sent after business hours) of transmission by telecopy, facsimile, or electronic mail, or (iii) on the date of confirmation of receipt (or, the first business day following such receipt a business day following such receipt if the date is not a business day) if delivered by a nationally recognized courier service. All notices hereunder shall be delivered as set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(a) if to Inovio or Submerger, to:

Inovio Biomedical Corporation 11494 Sorrento Valley Road San Diego, California 92121-1318 Attention: Dr. Avtar Dhillon Peter Kies Facsimile: (858) 597-0451

with a copy to:

K&L Gates LLP 10100 Santa Monica Boulevard, 7th Floor Los Angeles, CA 90067 Attention: Thomas J. Poletti, Esq. Shoshannah Katz, Esq. Facsimile: (310) 552-5001/(310) 552-5008

(b) if to VGX, to:

VGX Pharmaceuticals, Inc. 450 Sentry Parkway Blue Bell, PA 19422 Attention: Dr. J. Joseph Kim Gene Kim Facsimile: (267) 440-4242

with a copy to:

Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103-4196 Attention: Kathleen Shay, Esq. Sandra G. Stoneman, Esq. Facsimile: (215) 979-1020

9.4 *Interpretation.* When a reference is made in this Agreement to Exhibits, such reference shall be to an Exhibit to this Agreement unless otherwise indicated. The words "**include**," "**includes**" and "**including**" when used herein shall be deemed in each case to be followed by the words "**without limitation**." The table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. When reference is made herein to "**the business of**" an entity, such reference shall be deemed to include the business of all direct and indirect Subsidiaries of such entity. Reference to the Subsidiaries of an entity shall be deemed to include all direct and indirect Subsidiaries of such entity.

9.5 *Counterparts.* This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

9.6 *Entire Agreement; Third Party Beneficiaries.* This Agreement and the documents and instruments and other agreements among the parties hereto as contemplated by or referred to herein, including the VGX Disclosure Letter and the Inovio Disclosure Letter: (a) constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof including, without limitation, that certain Indicative Proposal dated March 14, 2008 addressed to Inovio from VGX; it being understood that the Confidentiality Agreement shall continue in full force and effect until the Closing and shall survive any termination of this Agreement in accordance with its terms; and (b) are not intended to confer upon any other person any rights or remedies hereunder, except the persons specified in *Section 5.14*. This Agreement amends and restates, and replaces and supersedes in its entirety, the Prior Agreement.

9.7 *Severability.* In the event that any provision of this Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the

remainder of this Agreement will continue in full force and effect and the application of such provision to other persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to replace such void or unenforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the extent possible, the economic, business and other purposes of such void or unenforceable provision.

9.8 *Other Remedies; Specific Performance.* Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to seek an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at law or in equity.

9.9 Governing Law; Forum Selection.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof.

(b) Each of parties irrevocably agrees that any legal action or proceeding with respect to this Agreement or for recognition and enforcement of any judgment in respect hereof brought by the other party hereto or its successors or assigns may be brought and determined in the Chancery or other Courts of the State of Delaware, and each of parties hereby irrevocably submits with regard to any such action or proceeding for itself and in respect to its property, generally and unconditionally, to the nonexclusive jurisdiction of the aforesaid courts.

9.10 *Rules of Construction.* The parties hereto agree that they have been represented by counsel during the negotiation and execution of this Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.

9.11 Assignment. No party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the other parties and any such attempted assignment without such consent shall be null and void. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

9.12 *Waiver of Jury Trial.* TO THE EXTENT PERMISSIBLE BY LAW, EACH OF INOVIO, SUBMERGER AND VGX HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF INOVIO, SUBMERGER OR VGX IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT HEREOF.

9.13 Time is of the Essence. The parties hereby agree that time is of the essence in connection with this Agreement.

9.14 *Legal Representation.* The parties' respective legal rights and obligations and the practical and legal effects of this Agreement have been fully explained to each of the parties by his or her respective counsel, and each party acknowledges that it has sought and obtained independent legal advice from counsel of its own selection; that each fully understands its legal rights and obligations; and that having had such advice and with such knowledge, each party clearly understands and assents to all the provisions hereof and each of them is signing this Agreement freely and voluntarily.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed by their duly authorized respective officers, as of the date first written above.

INOVIO BIOMEDICAL CORPORATION

By: /s/ AVTAR S. DHILLON

Name:Dr. Avtar DhillonTitle:Chief Executive Officer

INOVIO ACQUISITION, LLC

By: /s/ AVTAR S. DHILLON

Name:Dr. Avtar DhillonTitle:Chief Executive Officer

VGX PHARMACEUTICALS, INC.

By: /s/ J. JOSEPH KIM

Name: Dr. J. Joseph Kim Title: *Chief Executive Officer* A-91

AMENDMENT NO. 1 TO AMENDED AND RESTATED AGREEMENT AND PLAN OF MERGER

This Amendment No. 1 (the "Amendment") dated as of March 31, 2009, amends the Amended and Restated Agreement and Plan of Merger made and entered into as of December 5, 2008 (the "Agreement"), by and among Inovio Biomedical Corporation, a Delaware corporation ("Inovio"), Inovio Acquisition, LLC, a Delaware limited liability company and wholly-owned subsidiary of Inovio ("Submerger"), and VGX Pharmaceuticals, Inc. ("VGX"). Unless defined explicitly herein, all capitalized terms used in this Amendment shall have the respective meanings ascribed to them in the Agreement.

RECITALS

WHEREAS, Inovio and VGX remain committed to completion of the Merger and are taking active steps to complete the registration process with the SEC;

WHEREAS, the Closing will not be able to occur by March 31, 2009 due to the time required to complete the registration process, mail the Proxy Statement/Prospectus, provide for required notice periods and hold the Inovio and VGX Stockholder Meetings;

WHEREAS, the Agreement may be amended only in a written instrument signed by the parties to the Agreement; and

WHEREAS, the parties desire to amend the Agreement to protect and support the interests of Inovio and VGX stockholders alike and enable a Closing to occur on or prior to June 30, 2009.

NOW, THEREFORE, in consideration of the covenants, promises and representations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

1. Change of End Date. Subsection 7.1(b) of the Agreement shall be deleted in its entirety and replaced by the following:

"(b) by either VGX or Inovio if the Closing shall not have occurred by June 30, 2009 (the "*End Date*"); provided that the right to terminate this Agreement under this Section 7.1(b) (i) shall not be available to any party whose action or failure to act has prevented the consummation of the transactions contemplated hereby prior to the End Date and such action or failure to act constitutes a breach of this Agreement and (ii) shall not be available to either party if (x) there are Inovio responses to comments received from the SEC staff that are under review by the SEC staff on such date, and which were submitted to the SEC staff within ten (10) days prior to such date, in which case the End Date shall be the earlier of forty-five (45) days after Inovio's receipt of further comments or clearance from the SEC staff or forty (40) days after the Registration Effective Date, or (y) VGX and Inovio have mailed the Proxy Statement/Prospectus to their respective stockholders, in which case the End Date shall be fifteen (15) days after the latter of the Inovio Stockholders' Meeting and the VGX Stockholders' Meeting."

2. Continued Effect of Merger Agreement. All terms and conditions which the parties to the Agreement do not amend via this Amendment shall remain unchanged and in full force and effect, and the parties reserve all existing rights thereunder.

3. *Counterparts.* This Amendment may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

IN WITNESS WHEREOF, the undersigned have caused this Amendment to be executed by their duly authorized respective officers, as of the date first written above.

INOVIO BIOMEDICAL CORPORATION

By: /s/ AVTAR S. DHILLON

Name:Dr. Avtar DhillonTitle:Chief Executive Officer

INOVIO ACQUISITION, LLC

By: /s/ AVTAR S. DHILLON

Name:Dr. Avtar DhillonTitle:Chief Executive Officer

VGX PHARMACEUTICALS, INC.

By: /s/ J. JOSEPH KIM

Name: Dr. J. Joseph Kim Title: *Chief Executive Officer* A-93

WAIVER

This Waiver is made and entered into as of April 27, 2009, by and among Inovio Biomedical Corporation, a Delaware corporation ("*Inovio*"), Inovio Acquisition, LLC, a Delaware limited liability company and wholly-owned subsidiary of Inovio ("*Submerger*"), and VGX Pharmaceuticals, Inc. ("*VGX*").

Recitals

WHEREAS, Inovio, Submerger and VGX are parties to that certain Amended and Restated Agreement and Plan of Merger made and entered into as of December 5, 2008, as further amended March 31, 2009 (collectively, the "*Agreement*"), which provides for a business combination whereby VGX will be merged with and into Submerger, with Submerger as the surviving entity, and Inovio will issue shares of its common stock to VGX stockholders in exchange for all outstanding shares of common stock of VGX and assume all outstanding VGX options, warrants and, on a consolidated basis, convertible debt (collectively, the "*Merger*");

WHEREAS, Section 5.1 of the Agreement provides that Inovio shall use commercially reasonable efforts to register the offer and sale of Inovio common stock in the Merger, including registering the assumption of and shares of Inovio common stock underlying the VGX options, warrants and convertible debt assumed in the Merger, on Form S-4;

WHEREAS, Inovio has prepared and filed a registration statement on Form S-4 (the "*Registration Statement*") as anticipated by Section 5.1 with the Securities and Exchange Commission (the "*SEC*");

WHEREAS, Inovio and VGX have determined that the VGX convertible debt being assumed by Submerger by operation of law in the Merger (the "*Debt*") and the shares of Inovio common stock issuable upon any conversion of the assumed VGX convertible debt (the "*Debt*") do not need to be registered on the Registration Statement;

WHEREAS, Section 7.4 of the Agreement provides that a party may waive compliance with any of the agreements or conditions for the benefit of such party contained in the Agreement in writing prior to the closing of the Merger; and

WHEREAS, Inovio and VGX desire to document waiver of any requirement that the Debt or Debt Shares be registered in Registration Statement to avoid any further delays in the registration process related to this issue and enable the parties to continue progress towards closing of the Merger.

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises hereinafter set forth, the parties hereto, intending to be legally bound, agree as follows:

1. *Waiver and Consent.* VGX hereby waives any requirement that the Debt or Debt Shares be registered in Registration Statement, whether arising from Section 5.1 or any other provision of the Agreement and consents to the removal of the Debt and the Debt Shares from the registration fee table on the cover of the Registration Statement and other disclosure updates required in the Registration Statement to reflect such change; *provided, however*, that Inovio shall use commercially reasonable efforts to prepare and file a registration statement on Form S-3 to register the Debt Shares for resale within seven (7) business days of the consummation of the Merger (the "*Resale Registration Statement*"). Prior to closing of the Merger, VGX shall have the same obligations to provide information for and the same right to review the Resale Registration Statement as it has under the terms of Section 5.1 with respect to the Registration Statement.

2. *Further Actions*. Inovio and VGX shall immediately each take such actions as reasonably necessary to update the Registration Statement to reflect the removal of the Debt and Debt Shares and any disclosure deemed necessary to address the anticipated issuance of the Debt Shares as "restricted

securities" under the federal securities laws. Inovio and VGX shall further each take such actions as reasonably necessary to timely prepare and file the Resale Registration Statement.

3. *Continued Effect of Agreement*. All terms and conditions which the parties to the Agreement do not waive via this Waiver remain unchanged and in full force and effect, and the parties reserve all existing rights thereunder.

4. *Counterparts*. This Waiver may be executed in one or more counterparts, all of which shall be considered one and the same waiver and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

IN WITNESS WHEREOF, the undersigned have caused this Waiver to be executed by their duly authorized respective officers, as of the date first written above.

INOVIO BIOMEDICAL CORPORATION

By: /s/ AVTAR S. DHILLON

Name:Avtar S. DhillonTitle:Chief Executive Officer

INOVIO ACQUISITION, LLC

- By: /s/ AVTAR S. DHILLON
- Name:Dr. Avtar DhillonTitle:Chief Executive Officer

VGX PHARMACEUTICALS, INC.

- By: /s/ J. JOSEPH KIM
- Name: Dr. J. Joseph Kim Title: *Chief Executive Officer* A-95

ANNEX B

[LETTERHEAD OF OPPENHEIMER & CO. INC.]

July 2, 2008

The Board of Directors Inovio Biomedical Corporation 11494 Sorrento Valley Road San Diego, California 92121-1318

Members of the Board:

You have asked Oppenheimer & Co. Inc. ("Oppenheimer") to render a written opinion ("Opinion") to the Board of Directors of Inovio Biomedical Corporation ("Inovio") as to the fairness, from a financial point of view, to Inovio of the Exchange Ratio (as defined below) provided for in an Agreement and Plan of Merger (such agreement, the "Merger Agreement") to be entered into among Inovio, Inovio Acquisition Corporation, a wholly owned subsidiary of Inovio ("Merger Sub"), and VGX Pharmaceuticals, Inc. ("VGX"). The Merger Agreement provides for, among other things, the merger of Merger Sub with and into VGX (the "Merger"), as a result of which VGX will become a wholly owned subsidiary of Inovio and each outstanding share of the common stock, par value \$0.0001 per share, of VGX ("VGX Common Stock") will be converted into the right to receive a number of shares of the common stock, par value \$0.001 per share, of Inovio ("Inovio Common Stock") equal to the quotient obtained by dividing (a) the sum of the total number of outstanding shares of Inovio Common Stock plus the total number of shares of Inovio Common Stock issuable upon (i) conversion of outstanding shares of the preferred stock of Inovio, (ii) exercise of outstanding options to purchase Inovio Common Stock, whether vested or unvested, issued pursuant to Inovio's incentive plans and (iii) exercise of outstanding warrants to purchase Inovio Common Stock, by (b) the sum of the total number of outstanding shares of VGX Common Stock plus the total number of shares of VGX Common Stock issuable upon (i) exercise of outstanding options and other compensatory rights to acquire VGX Common Stock, whether vested or unvested, and (ii) exercise of outstanding warrants to purchase VGX Common Stock (such resulting quotient, the "Exchange Ratio"). The Merger Agreement further provides that, immediately subsequent to the effective time of the Merger, a portion of the outstanding convertible debt of VGX will be converted into shares of Inovio Common Stock at a conversion price equal to the average of the closing prices of Inovio Common Stock for the 10 trading-day period ending on the trading day prior to public announcement of the execution of the Merger Agreement (the "VGX Convertible Debt Conversion").

In arriving at our Opinion, we:

(a)	reviewed a draft, dated July 1, 2008, of the Merger Agreement;
(b)	reviewed audited financial statements of Inovio and VGX for fiscal years ended December 31, 2007, 2006 and 2005 and unaudited financial statements of Inovio and VGX for the three months ended March 31, 2008;
(c)	reviewed historical market prices and trading volumes of Inovio Common Stock;
(d)	held discussions with the senior managements of Inovio and VGX with respect to the businesses and prospects of Inovio and VGX;
(e)	reviewed and analyzed the market values of companies that we deemed relevant in evaluating Inovio and VGX;
(f)	reviewed and analyzed publicly available financial terms of transactions that we deemed relevant in evaluating the Merger;

(g)

(h)

reviewed and analyzed publicly available financial terms of licensing transactions that we deemed relevant in evaluating the product candidates of Inovio and VGX;

discussed with the management of Inovio its assessments as to the anticipated pro forma funding needs of, and cash available to, Inovio;

reviewed public information concerning Inovio and VGX; and

(j)

(i)

performed such other analyses, reviewed such other information and considered such other factors as we deemed appropriate.

In rendering our Opinion, we relied upon and assumed, without independent verification or investigation, the accuracy and completeness of all of the financial and other information provided to or discussed with us by Inovio, VGX and their respective employees, representatives and affiliates or otherwise reviewed by us. We have been advised that financial forecasts relating to Inovio and VGX have not been prepared by the managements of Inovio and VGX and, accordingly, we have not undertaken an analysis of the future financial performance of Inovio and VGX. We have assumed, with the consent of Inovio, that the final terms of the Merger Agreement will not vary materially from those set forth in the draft reviewed by us. We also have assumed, with the consent of Inovio, that the Merger will qualify for federal income tax purposes as a tax-free reorganization under Section 368(a) of the Internal Revenue Code of 1986, as amended. We further have assumed, with the consent of Inovio, that the Merger and related transactions, including the (i) pending sale by VGX of certain assets relating to its DNA plasmid products for total cash consideration of \$9,110,000 (the "Asset Sale") and the use of the proceeds therefrom and (ii) repayment of an aggregate of \$7.75 million of the outstanding convertible debt of VGX not converted into Inovio Common Stock in the VGX Convertible Debt Conversion, as such debt becomes due and payable, will be consummated in accordance with their respective terms without waiver, modification or amendment of any material term, condition or agreement and in compliance with all applicable laws and other requirements and that, in the course of obtaining the necessary regulatory or third party approvals, consents and releases with respect to the Merger and related transactions, no delay, limitation, restriction or condition will be imposed that would have an adverse effect on Inovio, VGX or the contemplated benefits of the Merger. We have neither made nor obtained any independent evaluations or appraisals of the assets or liabilities, contingent or otherwise, of Inovio or VGX.

Our opinion as set forth herein relates to the relative values of the fully diluted equity of Inovio and VGX after giving effect, in the case of VGX, to the VGX Convertible Debt Conversion. We are not expressing any opinion as to the underlying valuation, future performance or long-term viability of Inovio or VGX, the actual value of Inovio Common Stock when issued or the price at which Inovio Common Stock will trade at any time. We were not requested to, and we did not, participate in the negotiation or structuring of the Merger or any related transaction. We express no view as to, and our Opinion does not address, any terms or other aspects or implications of the Merger (other than the Exchange Ratio to the extent expressly specified herein) or any related transaction or any aspect or implication of any other agreement, arrangement or understanding entered into in connection with the Merger or otherwise, including, without limitation, the form or structure of the Merger or any related transaction, including the VGX Convertible Debt Conversion, or any terms or aspects of the Asset Sale or the use of the proceeds therefrom. We also express no view as to, and our Opinion does not address, the fairness of the amount or nature of, or any other aspect relating to, the compensation to be received by any individual officers, directors or employees of any parties to the Merger, or any class of such persons, relative to the Exchange Ratio. In addition, we express no view as to, and our Opinion

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does not address, the underlying business decision of Inovio to proceed with or effect the Merger nor does our Opinion address the relative merits of the Merger as compared to any alternative business strategies that might exist for Inovio or the effect of any other transaction in which Inovio might engage. Our Opinion is necessarily based on the information available to us and general economic, financial and stock market conditions and circumstances as they exist and can be evaluated by us on the date hereof. It should be understood that, although subsequent developments may affect this Opinion, we do not have any obligation to update, revise or reaffirm the Opinion.

The issuance of this Opinion was approved by an authorized committee of Oppenheimer. As part of our investment banking business, we are regularly engaged in valuations of businesses and securities in connection with acquisitions and mergers, underwritings, secondary distributions of securities, private placements and valuations for other purposes.

We have acted as financial advisor to Inovio solely for purposes of this Opinion and will receive a fee for our services, a portion of which was payable upon our engagement by Inovio and a significant portion of which will be payable upon delivery of this Opinion. We and our affiliates in the past have performed investment banking and other services for Inovio unrelated to the Merger, for which services we and our affiliates have received compensation, including financial advisory services to Inovio in connection with potential acquisition transactions in 2007. In the ordinary course of business, we and our affiliates may actively trade securities of Inovio for our and our affiliates' own accounts and for the accounts of customers and, accordingly, may at any time hold a long or short position in such securities.

Based upon and subject to the foregoing, and such other factors as we deemed relevant, it is our opinion, that, as of the date hereof, the Exchange Ratio provided for in the Merger is fair, from a financial point of view, to Inovio. This Opinion is for the use of the Board of Directors of Inovio in its evaluation of the Merger and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to any matters relating to the Merger.

Very truly yours, /s/ OPPENHEIMER & CO. INC. OPPENHEIMER & CO. INC. B-3

ANNEX C

STATE OF DELAWARE CERTIFICATE OF MERGER OF DOMESTIC CORPORATION INTO DOMESTIC LIMITED LIABILITY COMPANY

Pursuant to Title 8, Section 264(c) of the Delaware General Corporation Law and Title 6, Section 18-209 of the Limited Liability Company Act, the undersigned limited liability company executed the following Certificate of Merger:

FIRST: The name of the surviving limited liability company is Inovio Acquisition, LLC and the name of the corporation being merged into this surviving limited liability company is VGX Pharmaceuticals, Inc.

SECOND: The Agreement of Merger has been approved, adopted, certified, executed and acknowledged by the surviving limited liability company and the merging corporation.

THIRD: The name of the surviving limited liability company is VGX Pharmaceuticals, LLC.

FOURTH: The merger is to become effective on

FIFTH: The Agreement of Merger is on file at 11494 Sorrento Valley Rd. San Diego, CA 92121, the place of business of the surviving limited liability company.

SIXTH: A copy of the Agreement of Merger will be furnished by the surviving limited liability company on request, without cost, to any member of any constituent limited liability company or stockholder of any constituent corporation.

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IN WITNESS WHEREOF, said limited liability company has caused this certificate to be signed by an authorized person, the day of , A.D., .

By:	
	Authorized Person
Name:	Dr. Avtar Dhillon
	Print or Type
Title:	Chief Executive Officer
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ANNEX D

INOVIO BIOMEDICAL CORPORATION AMENDED AND RESTATED 2000 STOCK OPTION PLAN (as amended by the Board of Directors through July 2, 2008 with approvals by stockholders through [____], 2009)

1. INTERPRETATION

1.1 Defined Terms For the purposes of this Plan, the following terms shall have the following meanings:

- (a) "Affiliate" means a Parent Corporation or a Subsidiary Corporation of a corporation;
- (b) "Associate" means, where used to indicate a relationship with any Person,
 - (i) any relative of that Person,

(ii) any person of the opposite sex to whom that Person is married or with whom that Person is living in a conjugal relationship outside marriage,

- (iii) any relative of a Person mentioned in clause (ii) who has the same home as that Person,
- (iv) any partner of that Person,

(v) any trust or estate in which such Person has a substantial beneficial interest or as to which such Person serves as trustee or in a similar capacity, or

(vi) any corporation of which such Person beneficially owns, directly or indirectly, voting securities carrying more than 10 percent of the voting rights attached to all outstanding voting securities of the corporation;

(c) **"Beneficial Owner"** of a security includes any Person who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has voting power over the security or the power to dispose or direct the disposition of the security, and any Person who uses a trust or other arrangement with the purpose or effect of divesting such Person of beneficial ownership as part of a plan to evade the reporting requirements of section 13 of the Exchange Act shall be deemed to be the Beneficial Owner of the security;

(d) "Board" means the Board of Directors of Inovio Biomedical Corporation;

(e) "Change of Control" means, and shall be deemed to have occurred upon the occurrence of any one of the following events:

(i) the acquisition in one or more transactions, other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act), other than the Company, a Subsidiary Corporation or any employee benefit plan (or related trust) sponsored or maintained by the Company or a Subsidiary Corporation, of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of a number of Company Voting Securities in excess of twenty five percent (25%) of the Company Voting Securities unless such acquisition has been approved by the Board;

(ii) any election has occurred to persons to the Board that causes two-thirds of the Board to consist of persons other than (i) persons who were members of the Board on the Effective Date of the Plan and (ii) persons who were nominated for election as members of the Board at a time when two-thirds of the Board consisted of persons who were members of the Board on the Effective Date of the Plan, provided, however, than any person nominated

for election by a Board at least two-thirds of whom constituted persons described in clauses (i) and/or (ii) or by persons who were themselves nominated by such Board shall, for this purpose, be deemed to have been nominated by a Board composed of persons described in clause (i);

(iii) the consummation (*i.e.* closing) of a reorganization, merger or consolidation involving the Company, unless, following such reorganization, merger or consolidation, all or substantially all of the individuals and entities who were the respective beneficial owners of the Outstanding Shares and Company Voting Securities immediately prior to such reorganization, merger or consolidation, following such reorganization, merger or consolidation beneficially own, directly or indirectly, more than seventy five percent (75%) of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors or trustees, as the case may be, of the entity resulting from such reorganization, merger or consolidation in substantially the same proportion as their ownership of the Outstanding Shares and Company Voting Securities immediately prior to such reorganization, merger or consolidation in substantially the same proportion as their ownership of the Coutstanding Shares and Company Voting Securities immediately prior to such reorganization, merger or consolidation in substantially the same proportion as their ownership of the Coutstanding Shares and Company Voting Securities immediately prior to such reorganization, merger or consolidation, as the case may be;

(iv) the consummation (*i.e.* closing) of a sale or other disposition of all or substantially all of the assets of the Company, unless, following such sale or disposition, all or substantially all of the individuals and entities who were the respective beneficial owners of the Outstanding Shares and Company Voting Securities immediately prior to such reorganization, merger or consolidation, following such reorganization, merger or consolidation beneficially own, directly or indirectly, as the case may be, of the entity purchasing such assets in substantially the same proportion as their ownership of the Outstanding Shares and Company Voting Securities immediately prior to such as the case may be; or

- (v) a complete liquidation or dissolution of the Company.
- (f) "Code" means the United States Internal Revenue Code of 1986, as amended from time to time;

(g) **"Committee"** means a committee of the Board appointed in accordance with this Plan, or if no such committee is appointed, the Board itself;

(h) "Company" means Inovio Biomedical Corporation;

(i) **"Company Voting Securities"** means the combined voting power of all outstanding voting securities of the Company entitled to vote generally in the election of directors to the Board.

(j) **"Covered Employee"** means the chief executive officer and the four (4) other highest compensated officers of the Company for whom total compensation is required to be reported to shareholders under the Exchange Act, as determined for purposes of Section 162(m) of the Code;

(k) "Date of Grant" means the date on which a grant of an Option is effective;

(1) "Direct or Indirect Ownership" of securities by a Person is calculated in accordance with the following rules:

(i) the Person shall be deemed to own stock owned, directly or indirectly, by or for siblings (including half siblings), spouse, ancestors and lineal descendants, and

(ii) stock owned, directly or indirectly, by or for a corporation, partnership, estate or trust, shall be deemed to be owned proportionately by or for its shareholders, partners or beneficiaries;



(m) **"Disability"** means a medically determinable physical or mental impairment which causes an individual to be unable to engage in any substantial gainful activity, as determined by the Committee;

(n) "**Disposition**" includes a sale, exchange, gift, or transfer of legal title, but does not include a pledge, hypothecation, transfer from a decedent to an estate, transfer by bequest or inheritance, or the other excepted circumstances referred to in section 424(c) of the Code;

(o) **"Effective Date"** means the Effective Date of the Plan, as adopted by the Board as of July 31, 2000, subject to the approval of the shareholders of the Company;

(p) "Exchange Act" means the Securities Exchange Act of 1934, as amended;

(q) "Fair Market Value" means:

(i) where the Shares are listed for trading on a stock exchange or over the counter market, the closing price of the Shares on the trading day immediately prior to the date of grant on such stock exchange or over the counter market as may be selected for such purpose by the Committee, or

(ii) where the Shares are not listed for trading on a stock exchange or over the counter market, the value which is determined by the Committee to be the fair value of the Shares at the Date of Grant, taking into consideration all factors that the Committee deems appropriate, including, without limitation, recent sale and offer prices of the Shares in private transactions negotiated at arm's length;

(r) "Guardian" means the guardian, if any, appointed for an Optionee;

(s) **"ISO"** means an Option granted to an employee of the Company or an Affiliate of the Company that is intended to qualify as an "incentive stock option" for purposes of section 422 of the Code and is therefore subject to favourable tax treatment under the Code;

(t) "ISO Optionee" means an Optionee to whom an ISO has been granted;

(u) **"Modification"** means any change in the terms of an Option which gives the Optionee additional benefits under the Option within the meaning of section 424(h) of the Code, but such change shall not include a change in the terms of an Option:

(i) in the case of an Option not immediately exercisable in full, to accelerate the time within which the Option may be exercised, or

(ii) attributable to the issuance or assumption of an Option by reason of a corporate merger, consolidation, acquisition of property or stock, separation, reorganization or liquidation if the new Option or assumption of the old Option does not give the Optionee additional benefits which he did not have under the old Option;

(v) **"Non-Employee Director"** means a member of the Board who either (i) is not a current employee or officer (within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder) of the Company or an Affiliate of the Company, does not receive compensation (directly or indirectly) from the Company or an Affiliate of the Company for services rendered as a consultant or in any capacity other than as a director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("Regulation S-K"), does not possess an interest in any other transaction as to which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship as to which disclosure would be required under Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3;

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(w) "Non-ISO" means an Option that is not intended to qualify as an "incentive stock option" for purposes of section 422 of the Code;

- (x) "Non-ISO Optionee" means an Optionee to whom a Non-ISO has been granted;
- (y) "Option" means an option to purchase Shares granted pursuant to the terms of this Plan;

(z) "**Option Agreement**" means a written agreement between an Optionee and the Company, specifying the terms of the Option being granted to the Optionee under the Plan;

- (aa) "Option Price" means the price at which an Option is exercisable to purchase Shares;
- (bb) "Optionee" means a person to whom an Option has been granted;

(cc) **"Outside Director"** means a director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of the United States Treasury regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" receiving compensation for prior services (other than benefits under a tax qualified pension plan), was not an officer of the Company or an "affiliated corporation" at any time, and is not currently receiving direct or indirect remuneration from the Company or an "affiliated corporation" for services in any capacity other than as a director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code;

(dd) "Outstanding Shares" means , at any time, the issued and outstanding Shares.

(ee) "**Parent Corporation**" means any corporation in an unbroken chain of corporations ending with Inovio Biomedical Corporation if, at the Date of Grant, each corporation other than Inovio Biomedical Corporation owns stock possessing 50 percent or more of the total combined voting power of all classes of stock in one of the other corporations in such chain;

(ff) **"Person"** means a natural person, company, government, or political subdivision or agency of a government; and where two or more Persons act as a partnership, limited partnership, syndicate or other group for the purpose of acquiring, holding or disposing of securities of an issuer, such syndicate or group shall be deemed to be a Person;

(gg) "**Plan**" means this Stock Option Plan of the Company. The Plan was adopted by the Board as of July 31, 2000 and approved by the shareholders of the Company on August 7, 2000. The Plan was amended by the Committee through July 2, 2008, subject to the approval of the shareholders of the Company and required regulatory approvals;

(hh) "**Rule 16b-3**" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3 as in effect with respect to the Company at the time discretion is being exercised regarding the Plan;

(ii) **"Qualified Successor"** means a person who is entitled to ownership of an Option upon the death of an Optionee, pursuant to a will or the applicable laws of descent and distribution upon death;

(jj) "Securities Act" means the Securities Act of 1933, as amended;

(kk) "Shares" means the common shares without par value in the capital of Inovio Biomedical Corporation;

(ll) **"Subsidiary Corporation"** means any corporation in an unbroken chain of corporations beginning with Inovio Biomedical Corporation if, at the Date of Grant, each of the corporations other than the last corporation owns stock possessing 50 percent or more of the total combined voting power of all classes of stock in one of the other corporations in such chain; and

(mm) "Term" means the period of time during which an Option is exercisable.

2. STATEMENT OF PURPOSE

2.1 *Principal Purposes* The principal purposes of the Plan are to provide the Company and its shareholders with the advantages of the incentive inherent in stock ownership on the part of employees, officers, directors, and consultants responsible for the continued success of the Company; to create in such individuals a proprietary interest in, and a greater concern for, the welfare and success of the Company; to encourage such individuals to remain with the Company; and to attract new employees, officers, directors and consultants to the Company.

2.2 *ISOs and Non-ISOs* Under this Plan, the Company may grant either ISOs or Non-ISOs. Each ISO granted hereunder is intended to constitute an "incentive stock option," for the purposes of section 422 of the Code, and this Plan and each such ISO is intended to comply with all of the requirements of Section 422 of the Code and of all other provisions of the Code applicable to incentive stock options and to plans issuing the same. Each Non-ISO granted hereunder is intended to constitute an "incentive stock option" for the purposes of section 422 of the Code applicable to incentive stock option" for the purposes of section 422 of the Code, and that does not comply with the requirements of Section 422 of the Code.

3. ADMINISTRATION

3.1 *Board or Committee* The Plan shall be administered by the Board or by a committee of the Board appointed in accordance with Section 3.2 or 3.4 below.

3.2 *Appointment of Committee* The Board may at any time appoint a Committee, consisting of not less than two of its members, to administer the Plan on behalf of the Board in accordance with such terms and conditions as the Board may prescribe, consistent with this Plan. Once appointed, the Committee shall continue to serve until otherwise directed by the Board. From time to time, the Board may increase the size of the Committee and appoint additional members, remove members (with or without cause) and appoint new members in their place, fill vacancies however caused, or remove all members of the Committee and thereafter directly administer the Plan. In the discretion of the Board, a Committee may consist solely of two (2) or more Non-Employee Directors, and/or Outside Directors. Notwithstanding anything in this Section 3 to the contrary, the Board or the Committee may delegate to a Committee of one or more members of the Board the authority to grant Options to eligible persons who (a) are not then subject to Section 16 of the Exchange Act and/or (b) are either (i) not then Covered Employees and are not expected to be Covered Employees at the time of recognition of income resulting from such Options, or (ii) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code.

3.3 *Quorum and Voting* A majority of the members of the Committee shall constitute a quorum, and, subject to the limitations in this Section 3, all actions of the Committee shall require the affirmative vote of members who constitute a majority of such quorum.

3.4 *Committee Complying with Section 162(m) of the Code* If the Company is a "publicly held corporation" within the meaning of Section 162(m), the Board may establish a Committee of "outside directors" within the meaning of Section 162(m) to approve the grant of any Option which might reasonably be anticipated to result in the payment of employee remuneration that would otherwise exceed the limit on employee remuneration deductible for income tax purposes pursuant to Section 162(m) of the Code.

3.5 *Powers of Committee* Any Committee appointed under Section 3.2 or 3.4 above shall have the authority to do the following:

(a) administer the Plan in accordance with its express terms;

(b) determine all questions arising in connection with the administration, interpretation, and application of the Plan, including all questions relating to the value of the Shares;



(c) correct any defect, supply any information, or reconcile any inconsistency in the Plan in such manner and to such extent as shall be deemed necessary or advisable to carry out the purposes of the Plan;

(d) prescribe, amend, and rescind rules and regulations relating to the administration of the Plan;

(e) determine the duration and purposes of leaves of absence from employment which may be granted to Optionees without constituting a termination of employment for purposes of the Plan;

(f) do the following with respect to the granting of Options:

(i) determine the employees, officers, directors, or consultants to whom Options shall be granted, based on the eligibility criteria set out in this Plan,

(ii) determine whether such Options shall be ISOs or Non-ISOs,

(iii) determine the terms and provisions of the Option Agreement to be entered into with any Optionee (which need not be identical with the terms of any other Option Agreement),

(iv) amend the terms and provisions of Option Agreements, provided the Committee obtains:

(A) the consent of the Optionee, if the amendment would adversely affect the rights, or increase the obligations, of the Optionee under the Option, and

(B) the approval of any stock exchange on which the Company is listed, if such approval is required pursuant to the rules and policies of such stock exchange,

(v) determine when Options shall be granted,

(vi) determine the number of Shares subject to each Option,

(vii) make all other determinations necessary or advisable for administration of the Plan, and

(viii) determine the Fair Market Value of the Shares.

3.6 *Administration by Committee* The Committee's exercise of the authority set out in Section 3.4 shall be consistent with the intent that ISOs issued under the Plan be qualified under the terms of Section 422 of the Code, and that Non-ISOs shall not be so qualified. All determinations made by the Committee in good faith on matters referred to in Section 3.4 shall be final, conclusive, and binding upon all Persons. The Committee shall have all powers necessary or appropriate to accomplish its duties under this Plan. In addition, the Committee's administration of the Plan shall in all respects be consistent with the policies and rules of any stock exchange or over the counter market on which the Shares are listed.

4. ELIGIBILITY

4.1 *Eligibility for ISOs* An ISO may only be granted to a person who is an employee of the Company or an Affiliate of the Company, including directors or officers who are employees of the Company or an Affiliate of the Company.

4.2 *Eligibility for Non-ISOs* Non-ISOs may be granted to any employee, officer, director or consultant of the Company or an Affiliate of the Company.

4.3 No Violation of Securities Laws No Option shall be granted to any Optionee unless the Committee has determined that the grant of such Option and the exercise thereof by the Optionee will not violate applicable securities laws.

4.4 *Limit on Maximum Grant to any Optionee* Notwithstanding anything in this Plan to the contrary, no officer or employee of the Company or an Affiliate of the Company shall receive Options exercisable for more than two million one hundred thousand (2,100,000) Shares over any three year period, nine hundred thirty-five thousand (935,000) Shares over any one year period or 5% of the outstanding Shares.

5. SHARES SUBJECT TO THE PLAN

5.1 *Number of Shares* The Committee, from time to time, may grant Options to purchase an aggregate of up to four million seven hundred fifty thousand (4,750,000) Shares, subject to regulatory approval, to be made available from authorized, but unissued or reacquired, Shares. In calculating the foregoing four million seven hundred fifty thousand (4,750,000) Shares, the Committee shall include the 1,116,819 Shares subject to options outstanding as of the Effective Date of the Plan. The foregoing number of Shares shall be adjusted, where necessary, to take account of the events referred to in Section 11 hereof.

5.2 Decrease in Number of Shares Subject to Plan Upon exercise of an Option, the number of Shares thereafter available under the Plan and under the Option shall decrease by the number of Shares as to which the Option was exercised.

5.3 *Expiry of Option* If an Option expires or terminates for any reason without having been exercised in full, the unpurchased Shares subject thereto shall again be available for the purposes of the Plan.

5.4 *Reservation of Shares* The Company will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

6. OPTION TERMS

6.1 *Option Agreement* With respect to each Option to be granted to an Optionee, the Committee shall specify the following terms in the Option Agreement between the Company and the Optionee:

(a) whether such Option is an ISO or a Non-ISO;

(b) the number of Shares subject to purchase pursuant to such Option, provided that the number of Shares reserved for issuance to any one person pursuant to Options does not exceed 5% of the outstanding Shares;

- (c) the Date of Grant;
- (d) the Term, provided that:
 - (i) the Term shall in no event be more than ten (10) years following the Date of Grant; and

(ii) if an ISO Option is granted to an Optionee who on the Date of Grant has Direct or Indirect Ownership of more than 10% of the total combined voting power of all classes of stock of the Company, the Term of the Option shall not exceed five (5) years;

- (e) the Option Price, provided that:
 - (i) the Option Price shall not be less than the Fair Market Value of the Shares; and

(ii) if an Option is granted to an Optionee who on the Date of Grant has Direct or Indirect Ownership of more than 10% of the total combined voting power of all classes of stock of the Company or an Affiliate of the Company, then the Option Price shall be at least 110% of the Fair Market Value of the Shares on the Date of Grant, with the proviso that, with respect to a non-ISO, this pricing limitation shall not be applicable if the shares are listed on a national stock exchange;

- (f) any vesting schedule upon which the exercise of an Option is contingent, including discretion to;
 - (i) allow full and immediate vesting upon the grant of such Option,
 - (ii) permit partial vesting in stated percentage amounts based on the length of the Term of such Option;
 - (iii) permit full vesting after a stated period of time has passed from the Date of Grant; and

(iv) permit exercise of an Option for unvested Shares, provided however, that generally any unvested Shares so purchased shall be subject to a repurchase right in favor of the Company, with the repurchase price to be equal to the original purchase price of the stock, or to any other restriction the Board determines to be appropriate, but that (A) such repurchase right shall be exercisable only within (I) the ninety (90) day period following the termination of employment or the relationship as a director or consultant, or (II) such longer period as may be agreed to by the Company and the Optionee (for example, for purposes of satisfying the requirements of Section 1202(c)(3) of the Code (regarding "qualified small business stock")), and (B) such right shall be exercisable only for cash or cancellation of purchase money indebtedness for the shares; and

(g) such other terms and conditions as the Committee deems advisable and are consistent with the purposes of this Plan.

6.2 No Grant After Ten Years From Effective Date No Option shall be granted under the Plan later than ten (10) years from the Effective Date of the Plan. Except as expressly provided herein, nothing contained in this Plan shall require that the terms and conditions of Options granted under the Plan be uniform.

6.3 *No Disposition for Six Months* An Optionee who is subject to Section 16 of the Exchange Act and whose Option grant is not exempt from Section 16 under Rule 16b-3 shall not make a Disposition of any Shares issued upon exercise of an Option unless at least six (6) months has elapsed between the Date of Grant of the Option and the date of Disposition of the Shares issued upon exercise of such Option. Notwithstanding the foregoing, other than termination for just cause, if a sale within the applicable time periods set forth in this Section 6 or Section 9 of Shares acquired upon the exercise of an Option would subject the Optionee to suit under Section 16(b) of the Exchange Act, the Option shall remain exercisable until the earliest to occur of (i) the tenth (10th) day following the date on which a sale of such Shares by the Optionee would no longer be subject to suit, (ii) the one hundred and ninetieth (190th) day after the Optionee's termination of employment, or (iii) the Option Expiry Date.

7. LIMITATION ON GRANTS OF OPTIONS

7.1 US\$100,000 Limit on ISOs. If the aggregate Fair Market Value (valued as of the Date of Grant of each ISO) of:

(a) Shares underlying ISOs which have been granted to an Optionee under this Plan and which are exercisable for the first time during a calendar year, and

(b) Shares underlying incentive stock options which have been granted to such Optionee under any other plan of the Company or its Affiliates and which are exercisable for the first time during that calendar year,

exceeds US\$100,000, as such amount may be adjusted from time to time under Section 422(d) of the Code, then to the extent of such excess such options shall be treated as options that are not "incentive stock options" for purposes of the Code.



8. EXERCISE OF OPTION

8.1 *Method of Exercise* Subject to any limitations or conditions imposed upon an Optionee pursuant to the Option Agreement or Section 6 above, an Optionee may exercise an Option by giving written notice thereof to the Company at its principal place of business, provided that any Options granted after the Plan is approved by the required regulatory authorities but prior to the date on which shareholder approval to the Plan is given, may not be exercised unless and until the Plan receives shareholder approval.

8.2 *Payment of Option Price* The notice described in Section 8.1 shall be accompanied by full payment of the aggregate Option Price to the extent the Option is so exercised, and full payment of any amounts the Company determines must be withheld for tax purposes from the Optione pursuant to the Option Agreement. Such payment shall be:

(a) in lawful money (United States funds) by cheque;

(b) at the discretion of the Committee and if such form of payment is permitted under the corporate laws then governing the Company and if the Company has disclosed to its shareholders that it will accept such payment for the exercise of Options, by delivery of the Optionee's personal recourse note bearing interest at a rate deemed appropriate by the Committee;

(c) at the discretion of the Committee, and subject to all applicable securities laws, through delivery by the Optionee and/or withholding by the Company, of Shares having a market value as of the date of exercise equal to the cash exercise price of the Option plus any amounts that the Company determines must be withheld from the Optionee for U.S. or Canadian tax purposes. The market value of each of the Shares on the date of delivery shall be determined in good faith by the Committee, which determination shall be binding for all purposes hereunder; or

(d) at the discretion of the Committee, by any combination of Sections 8.2(a) to 8.2(c) above.

8.3 *Issuance of Stock Certificate* As soon as practicable after exercise of an Option in accordance with Sections 8.1 and 8.2 above, the Company shall issue a stock certificate evidencing the Shares with respect to which the Option has been exercised. Until the issuance of such stock certificate, no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to such Shares, notwithstanding the exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 11 below.

8.4 *Tax Withholding in General* The Company shall have the right to deduct from any and all payments made under the Plan, or to require the Optionee, through cash payment or otherwise, to make adequate provision for, the federal, state, local and foreign taxes, if any, required by law to be withheld by the Company with respect to an Option or the Shares acquired pursuant thereto. The Company shall have no obligation to deliver Shares or to release Shares from an escrow established pursuant to an Option Agreement until the Company's tax withholding obligations have been satisfied by the Optionee.

9. TRANSFERABILITY OF OPTIONS

9.1 *Non-Transferable* Unless otherwise specified in an Option Agreement, and except as provided otherwise in this Section 9, Options are non-assignable and non-transferable.

9.2 *Death of Optionee* If the employment of an Optionee as an employee or consultant of the Company or an Affiliate of the Company, or the position of an Optionee as a director of the Company or an Affiliate of the Company, terminates as a result of Optionee's death, any Options held by such Optionee shall pass to the Qualified Successor of the Optionee, and shall be exercisable by the

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Qualified Successor on or before the date which is the earlier of twelve (12) months following the date of death or the last day of the Term.

9.3 *Disability of Optionee* If the employment of an Optionee as an employee or consultant of the Company or an Affiliate of the Company, or the position of an Optionee as a director of the Company or an Affiliate of the Company, terminates as a result of the Optionee's Disability, any Option held by such Optionee that could have been exercised immediately prior to such termination of service shall be exercisable by such Optionee, or by such Optionee's Guardian, on or before the date which is the earlier of twelve (12) months following the termination of service of such Optionee, and the last day of the Term.

9.4 *Disability and Death of Optionee* If an Optionee who has ceased to be employed by the Company or an Affiliate of the Company by reason of such Optionee's Disability dies within six (6) months after the termination of such employment, any Option held by such Optionee that could have been exercised immediately prior to such Optionee's death shall pass to the Qualified Successor of such Optionee, and shall be exercisable by the Qualified Successor:

(a) in the case of an ISO, on or before a date which is the earlier of six (6) months following the death of such Optionee, and the last day of the Term, and

(b) in the case of a Non-ISO, on or before a date which is the earlier of twelve (12) months following the death of such Optionee, and the last day of the Term.

9.5 *Deemed Non-Interruption of Employment* Employment shall be deemed to continue intact during any military or sick leave or other bona fide leave of absence if the period of such leave does not exceed ninety (90) days or, if longer, for so long as the Optionee's right to re-employment with the Company or an Affiliate of the Company is guaranteed either by statute or by contract. If the period of such leave exceeds ninety (90) days and the Optionee's re-employment is not so guaranteed, then such Optionee's employment shall be deemed to have terminated ninety-one (91) days from the date such leave commenced.

10. TERMINATION OF OPTIONS

10.1 *Termination of Options* To the extent not earlier exercised or terminated in accordance with section 9 above, an Option shall terminate at the earliest of the following dates:

(a) the termination date specified for such Option in the Option Agreement;

(b) where the Optionee's position as an employee, officer, consultant or director of the Company or an Affiliate of the Company is terminated for just cause, and the Optionee has no continuing business relationship with the Company or an Affiliate of the Company as an employee, officer, consultant or director, the date of such termination for just cause;

(c) where the Optionee's position as an employee, officer, consultant or director of the Company or an Affiliate of the Company terminates for a reason other than the Optionee's Disability, death, or termination for just cause, and the Optionee has no continuing business relationship with the Company or an Affiliate of the Company as an employee, officer, consultant or director:

(i) where the Optionee is an Outside Director of the Company, then one (1) year after such date of termination, or

(ii) where the Optionee held any other position(s) with the Company, then ninety (90) days after such date of termination, except for an Optionee who is subject to restricted trading periods due to his or her status as an insider, as determined by the Company, in which case the Option shall terminate one (1) year or ninety (90) days, respectively, after the date

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the next trading window, immediately following such date of termination of the Optionee, opens; and

(d) the date of any sale, transfer, assignment or hypothecation, or any attempted sale, transfer, assignment or hypothecation, of such Option in violation of Section 9.1 above.

10.2 *Vesting* In the event that an Optionee's position as an employee, officer, consultant or director of the Company or of an Affiliate of the Company is terminated, and the Optionee has no continuing business relationship with the Company or an Affiliate of the Company as an employee, officer, consultant, or director, the Option held by such Optionee shall cease to vest as at the date of termination, regardless of whether the Optionee is subject to restricted trading periods due to his or her status as an insider, as determined by the Company.

11. ADJUSTMENTS TO OPTIONS

11.1 *Alteration in Capital Structure* If there is a material alteration in the capital structure of the Company resulting from a recapitalization, stock split, reverse stock split, stock dividend, or otherwise, the Committee shall make such adjustments to this Plan (and to the Options then outstanding under this Plan) as the Committee determines to be appropriate and equitable under the circumstances, so that the proportionate interest of each holder of any such Option shall, to the extent practicable, be maintained as before the occurrence of such event. Such adjustments may include, without limitation (a) a change in the number or kind of shares of stock of the Company covered by such Options, or other property for which Shares are exchanged as part of such adjustment, and (b) a change in the Option Price payable per share; provided, however, that the aggregate Option Price applicable to the unexercised portion of existing Options shall not be altered, it being intended that any adjustments made with respect to such Options shall apply only to the price per share and the number of shares subject thereto. For purposes of this Section 11.1, neither (i) the issuance of additional shares of stock of the Company in exchange for adequate consideration (including services), nor (ii) the conversion of outstanding preferred shares of the Company into Shares shall be deemed to be material alterations of the capital structure of the Company.

11.2 *Corporate Reorganization* In the event of a reorganization as defined in this Section 11.2 in which the Company is not the surviving or acquiring corporation, or in which the Company is or becomes a wholly-owned subsidiary of another corporation after the effective date of the reorganization, outstanding Options shall be subject to the agreement governing the reorganization, which may provide, without limitation, for the assumption of each Option granted under this Plan or its parent or subsidiary, for the substitution by surviving corporation or its parent or subsidiary of its own options for such Options, for accelerated vesting and accelerated expiration, or for settlement in cash or cash equivalents. In any event, the exercise and/or vesting of any Option that was permissible solely be reason of this Section 11.2 shall be conditioned upon the consummation of the reorganization. For purposes of this Section 11.2, "reorganization" shall mean any statutory merger, statutory consolidation, sale of all or substantially all of the assets of the Company, or sale, pursuant to an agreement with the Company, of securities of the Company pursuant to which the Company is or becomes a wholly-owned subsidiary of another corporation after the effective date of the reorganization.

11.3 *Acceleration of Vesting Schedule* The Committee shall have the right, in its sole discretion, to accelerate the vesting schedule of any Option.

11.4 *Change of Control* Unless otherwise provided by the Committee in the applicable Option Agreement, in the event of a Change of Control, all Options outstanding on the date of such Change of Control shall become immediately and fully exercisable. The provisions of this Section 11.4 shall not be applicable to any Options granted to an Optionee if any Change of Control results from such Optionee's beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of Shares or Company Voting Securities.

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11.5 *Determinations to be Made By Committee* Adjustments and determinations under this Section 11 shall be made by the Committee, whose decisions as to what adjustments or determination shall be made, and the extent thereof, shall be final, binding, and conclusive.

12. TERMINATION AND AMENDMENT OF PLAN

12.1 *Termination of Plan* Unless earlier terminated as provided in Section 12.2 below, the Plan shall terminate on, and no Option shall be granted under the Plan, after the end of the day prior to the tenth (10th) anniversary of the Effective Date.

12.2 *Power of Committee to Terminate or Amend Plan* Subject to the approval of any stock exchange on which the Company is listed, the Committee may terminate, suspend or amend the terms of the Plan; provided, however, that no amendment shall be effective unless approved by the shareholders of the Company within twelve (12) months before or after the adoption of the amendment, where the amendment will: (a) increase the number of shares reserved for Options under the Plan; (b) modify the requirements as to eligibility for participation in the Plan (to the extent such modification requires shareholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code); or (c) modify the Plan in any other way if such modification requires shareholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code); or amendment of the Plan, the Company shall notify the Optionees then holding Options under the Plan of such termination, suspension or amendment, and upon receipt of such notification, all Optionees will then be deemed to be bound by such termination, suspension or the provisions of such amendment to the Plan, as the case may be.

12.3 *No Grant During Suspension of Plan* No Option may be granted during any suspension, or after termination, of the Plan. Amendment, suspension, or termination of the Plan shall not, without the consent of the Optionee, impair any rights or increase any obligations of the Optionee under any Option previously granted prior to such amendment, suspension or termination.

13. CONVERSION OF ISOS INTO NON-ISOS

13.1 *Conversion of ISOs into Non-ISOs* At the written request of any ISO Optionee, the Committee may in its discretion take such actions as may be necessary to convert such Optionee's ISOs (or any installments or portions of installments thereof) that have not been exercised on the date of conversion into Non-ISOs at any time prior to the expiration of such ISOs, regardless of whether the Optionee is an employee of the Company or an Affiliate of the Company at the time of such conversion. Such actions include, but shall not be limited to, extending the exercise period of such ISOs. At the time of such conversion, the Committee, with the consent of the Optionee, may impose such conditions on the exercise of the resulting Non-ISOs as the Committee in its discretion may determine, provided that such conditions are consistent with this Plan. Nothing in the Plan shall be deemed to give any Optionee the right to have such Optionee's ISOs converted into Non-ISOs, and no such conversion shall occur until and unless the Committee takes appropriate action, unless such conversion is required by applicable law. The Committee, with the consent of the Optionee, may also terminate any portion of any ISO that has not been exercised at the time of such conversion.

14. CONDITIONS PRECEDENT TO ISSUANCE OF SHARES

14.1 *Compliance with Securities Laws* Options shall not be granted and Shares shall not be issued pursuant to the exercise of any Option unless the grant and exercise of such Option and the issuance and delivery of such Shares comply with all relevant provisions of law, including, without limitation, the Securities Act, the Exchange Act, any applicable state or provincial securities law, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the Shares may then be listed or otherwise traded.

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14.2 *Regulatory Approval to Issuance of Shares* The Company shall seek to obtain from regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell Shares upon the exercise of any Option; provided, however, that this undertaking shall not require the Company to register under the Securities Act (or any other applicable law for the registration and sale of securities) either the Plan, any Option or any Shares issued or issuable pursuant to any such Option. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which coursel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of any such Options unless and until such authority is obtained.

15. USE OF PROCEEDS

15.1 *Use of Proceeds* Proceeds from the sale of Shares made pursuant to the exercise of an Option shall constitute general funds of the Company and shall be used for general corporate purposes.

16. NOTICES

16.1 *Notices* All notices, requests, demands and other communications required or permitted to be given under this Plan and the Options granted under this Plan shall be in writing and shall be either served personally on the party to whom notice is to be given, in which case notice shall be deemed to have been duly given on the date of such service; telefaxed, in which case notice shall be deemed to have been duly given on the date of such service; telefaxed, in which case notice shall be deemed to have been duly given on the date the telefax is sent; or mailed to the party to whom notice is to be given, by registered or certified first class mail, return receipt requested, postage prepaid, and addressed to the party at his, her or its most recent known address, in which case such notice shall be deemed to have been duly given on the tenth (10th) postal delivery day following the date of such mailing.

17. MISCELLANEOUS PROVISIONS

17.1 No Obligation to Exercise An Optionee shall be under no obligation to exercise such Optionee's Option.

17.2 *No Obligation to Retain Optionee* Nothing contained in this Plan shall obligate the Company or an Affiliate of the Company to retain an Optionee as an employee, officer, director, or consultant for any period, nor shall this Plan interfere in any way with the right of the Company or an Affiliate of the Company to reduce such Optionee's compensation.

17.3 *Binding Agreement* The provisions of this Plan and each Option Agreement with an Optionee shall be binding upon such Optionee and any Qualified Successor or Guardian of such Optionee.

17.4 Use of Terms Where the context so requires, references herein to the singular shall include the plural, and vice versa.

17.5 *Headings* The headings used in this Plan are for convenience of reference only and shall not in any way affect or be used in interpreting any of the provisions of this Plan.

18. SHAREHOLDER APPROVAL OF PLAN

18.1 *Shareholder Approval of Plan* This Plan must be approved by a majority of the votes cast at a meeting of the shareholders of the Company, other than votes attaching to securities beneficially owned by:

- (a) insiders of the Company, meaning directors, officers and greater than 10% shareholders; and
- (b) Associates of persons referred to in subparagraph 18.1(a) above.

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19. MERGER OF FORMER STOCK OPTION PLANS

19.1 Upon receipt of shareholder and regulatory approval, the 1997 Stock Option Plan and the 1995 Stock Option Plan of the Company, as amended, shall both be deemed to be merged herein, such that all options outstanding under the 1997 Stock Option Plan of the Company (the "1997 Options") and the 1995 Stock Option Plan of the Company (the "1995 Options") shall be deemed to be outstanding under the Plan to the same extent as if they were originally granted hereunder, and shall be governed hereby and entitled to all of the benefits and obligations herein. The Committee shall be authorized to amend, at any time and from time to time, all or any of the 1997 Options and the 1995 Options as the Committee may determine necessary or advisable or may otherwise deem appropriate, to conform such agreements to this Plan.

ANNEX E

SECTION 262 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE

§ 262. Appraisal rights.

(a) Any stockholder of a corporation of this State who holds shares of stock on the date of the making of a demand pursuant to subsection (d) of this section with respect to such shares, who continuously holds such shares through the effective date of the merger or consolidation, who has otherwise complied with subsection (d) of this section and who has neither voted in favor of the merger or consolidation nor consented thereto in writing pursuant to § 228 of this title shall be entitled to an appraisal by the Court of Chancery of the fair value of the stockholder's shares of stock under the circumstances described in subsections (b) and (c) of this section. As used in this section, the word "stockholder" means a holder of record of stock in a stock corporation and also a member of record of a nonstock corporation; the words "stock" and "share" mean and include what is ordinarily meant by those words and also membership or membership interest of a member of a nonstock corporation; and the words "depository receipt" mean a receipt or other instrument issued by a depository representing an interest in one or more shares, or fractions thereof, solely of stock of a corporation, which stock is deposited with the depository.

(b) Appraisal rights shall be available for the shares of any class or series of stock of a constituent corporation in a merger or consolidation to be effected pursuant to § 251 (other than a merger effected pursuant to § 251(g) of this title), § 252, § 254, § 257, § 258, § 263 or § 264 of this title:

(1) Provided, however, that no appraisal rights under this section shall be available for the shares of any class or series of stock, which stock, or depository receipts in respect thereof, at the record date fixed to determine the stockholders entitled to receive notice of and to vote at the meeting of stockholders to act upon the agreement of merger or consolidation, were either (i) listed on a national securities exchange or (ii) held of record by more than 2,000 holders; and further provided that no appraisal rights shall be available for any shares of stock of the constituent corporation surviving a merger if the merger did not require for its approval the vote of the stockholders of the surviving corporation as provided in subsection (f) of § 251 of this title.

(2) Notwithstanding paragraph (1) of this subsection, appraisal rights under this section shall be available for the shares of any class or series of stock of a constituent corporation if the holders thereof are required by the terms of an agreement of merger or consolidation pursuant to §§ 251, 252, 254, 257, 258, 263 and 264 of this title to accept for such stock anything except:

a. Shares of stock of the corporation surviving or resulting from such merger or consolidation, or depository receipts in respect thereof;

b. Shares of stock of any other corporation, or depository receipts in respect thereof, which shares of stock (or depository receipts in respect thereof) or depository receipts at the effective date of the merger or consolidation will be either listed on a national securities exchange or held of record by more than 2,000 holders;

c. Cash in lieu of fractional shares or fractional depository receipts described in the foregoing subparagraphs a. and b. of this paragraph; or

d. Any combination of the shares of stock, depository receipts and cash in lieu of fractional shares or fractional depository receipts described in the foregoing subparagraphs a., b. and c. of this paragraph.

(3) In the event all of the stock of a subsidiary Delaware corporation party to a merger effected under § 253 of this title is not owned by the parent corporation immediately prior to the merger, appraisal rights shall be available for the shares of the subsidiary Delaware corporation.



(c) Any corporation may provide in its certificate of incorporation that appraisal rights under this section shall be available for the shares of any class or series of its stock as a result of an amendment to its certificate of incorporation, any merger or consolidation in which the corporation is a constituent corporation or the sale of all or substantially all of the assets of the corporation. If the certificate of incorporation contains such a provision, the procedures of this section, including those set forth in subsections (d) and (e) of this section, shall apply as nearly as is practicable.

(d) Appraisal rights shall be perfected as follows:

(1) If a proposed merger or consolidation for which appraisal rights are provided under this section is to be submitted for approval at a meeting of stockholders, the corporation, not less than 20 days prior to the meeting, shall notify each of its stockholders who was such on the record date for such meeting with respect to shares for which appraisal rights are available pursuant to subsection (b) or (c) hereof that appraisal rights are available for any or all of the shares of the constituent corporations, and shall include in such notice a copy of this section. Each stockholder electing to demand the appraisal of such stockholder's shares shall deliver to the corporation, before the taking of the vote on the merger or consolidation, a written demand for appraisal of such stockholder intends thereby to demand the appraisal of such stockholder intends thereby to demand the appraisal of such stockholder's shares. A proxy or vote against the merger or consolidation shall not constitute such a demand. A stockholder electing to take such action must do so by a separate written demand as herein provided. Within 10 days after the effective date of such merger or consolidation, the surviving or resulting corporation shall notify each stockholder of each constituent corporation who has complied with this subsection and has not voted in favor of or consented to the merger or consolidation of the date that the merger or consolidation has become effective; or

(2) If the merger or consolidation was approved pursuant to § 228 or § 253 of this title, then either a constituent corporation before the effective date of the merger or consolidation or the surviving or resulting corporation within 10 days thereafter shall notify each of the holders of any class or series of stock of such constituent corporation who are entitled to appraisal rights of the approval of the merger or consolidation and that appraisal rights are available for any or all shares of such class or series of stock of such constituent corporation, and shall include in such notice a copy of this section. Such notice may, and, if given on or after the effective date of the merger or consolidation, shall, also notify such stockholders of the effective date of the merger or consolidation. Any stockholder entitled to appraisal rights may, within 20 days after the date of mailing of such notice, demand in writing from the surviving or resulting corporation the appraisal of such holder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such holder's shares. If such notice did not notify stockholders of the effective date of the merger or consolidation, either (i) each such constituent corporation shall send a second notice before the effective date of the merger or consolidation notifying each of the holders of any class or series of stock of such constituent corporation that are entitled to appraisal rights of the effective date of the merger or consolidation or (ii) the surviving or resulting corporation shall send such a second notice to all such holders on or within 10 days after such effective date; provided, however, that if such second notice is sent more than 20 days following the sending of the first notice, such second notice need only be sent to each stockholder who is entitled to appraisal rights and who has demanded appraisal of such holder's shares in accordance with this subsection. An affidavit of the secretary or assistant secretary or of the transfer agent of the corporation that is required to give either notice that such notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. For purposes of determining the stockholders entitled to receive either notice, each constituent corporation may fix, in advance, a record date that shall be not more than 10 days prior to the date the notice is given, provided, that if the notice is given on or after the effective date of the merger or consolidation, the record date shall be

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such effective date. If no record date is fixed and the notice is given prior to the effective date, the record date shall be the close of business on the day next preceding the day on which the notice is given.

(e) Within 120 days after the effective date of the merger or consolidation, the surviving or resulting corporation or any stockholder who has complied with subsections (a) and (d) of this section hereof and who is otherwise entitled to appraisal rights, may commence an appraisal proceeding by filing a petition in the Court of Chancery demanding a determination of the value of the stock of all such stockholders. Notwithstanding the foregoing, at any time within 60 days after the effective date of the merger or consolidation, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party shall have the right to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation. Within 120 days after the effective date of the merger or consolidation, any stockholder who has complied with the requirements of subsections (a) and (d) of this section hereof, upon written request, shall be entitled to receive from the corporation surviving the merger or resulting from the consolidation a statement setting forth the aggregate number of holders of such shares. Such written statement shall be mailed to the stockholder within 10 days after such stockholder's written request for such a statement is received by the surviving or resulting corporation or within 10 days after expiration of the period for delivery of demands for appraisal under subsection (d) of this section hereof, whichever is later. Notwithstanding subsection (a) of this section, a person who is the beneficial owner of shares of such shock held either in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from the corporation the statement described in this subsection.

(f) Upon the filing of any such petition by a stockholder, service of a copy thereof shall be made upon the surviving or resulting corporation, which shall within 20 days after such service file in the office of the Register in Chancery in which the petition was filed a duly verified list containing the names and addresses of all stockholders who have demanded payment for their shares and with whom agreements as to the value of their shares have not been reached by the surviving or resulting corporation. If the petition shall be filed by the surviving or resulting corporation, the petition shall be accompanied by such a duly verified list. The Register in Chancery, if so ordered by the Court, shall give notice of the time and place fixed for the hearing of such petition by registered or certified mail to the surviving or resulting corporation and to the stockholders shown on the list at the addresses therein stated. Such notice shall also be given by 1 or more publications at least 1 week before the day of the hearing, in a newspaper of general circulation published in the City of Wilmington, Delaware or such publication as the Court deems advisable. The forms of the notices by mail and by publication shall be approved by the Court, and the costs thereof shall be borne by the surviving or resulting corporation.

(g) At the hearing on such petition, the Court shall determine the stockholders who have complied with this section and who have become entitled to appraisal rights. The Court may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Court may dismiss the proceedings as to such stockholder.

(h) After the Court determines the stockholders entitled to an appraisal, the appraisal proceeding shall be conducted in accordance with the rules of the Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceeding the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all relevant factors. Unless the Court in its discretion determines otherwise for good cause shown, interest

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from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. Upon application by the surviving or resulting corporation or by any stockholder entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the stockholders entitled to an appraisal. Any stockholder whose name appears on the list filed by the surviving or resulting corporation pursuant to subsection (f) of this section and who has submitted such stockholder's certificates of stock to the Register in Chancery, if such is required, may participate fully in all proceedings until it is finally determined that such stockholder is not entitled to appraisal rights under this section.

(i) The Court shall direct the payment of the fair value of the shares, together with interest, if any, by the surviving or resulting corporation to the stockholders entitled thereto. Payment shall be so made to each such stockholder, in the case of holders of uncertificated stock forthwith, and the case of holders of shares represented by certificates upon the surrender to the corporation of the certificates representing such stock. The Court's decree may be enforced as other decrees in the Court of Chancery may be enforced, whether such surviving or resulting corporation be a corporation of this State or of any state.

(j) The costs of the proceeding may be determined by the Court and taxed upon the parties as the Court deems equitable in the circumstances. Upon application of a stockholder, the Court may order all or a portion of the expenses incurred by any stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorney's fees and the fees and expenses of experts, to be charged pro rata against the value of all the shares entitled to an appraisal.

(k) From and after the effective date of the merger or consolidation, no stockholder who has demanded appraisal rights as provided in subsection (d) of this section shall be entitled to vote such stock for any purpose or to receive payment of dividends or other distributions on the stock (except dividends or other distributions payable to stockholders of record at a date which is prior to the effective date of the merger or consolidation); provided, however, that if no petition for an appraisal shall be filed within the time provided in subsection (e) of this section, or if such stockholder shall deliver to the surviving or resulting corporation a written withdrawal of such stockholder's demand for an appraisal and an acceptance of the merger or consolidation, either within 60 days after the effective date of the merger or consolidation as provided in subsection (e) of this section or thereafter with the written approval of the corporation, then the right of such stockholder to an appraisal shall cease. Notwithstanding the foregoing, no appraisal proceeding in the Court of Chancery shall be dismissed as to any stockholder without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just; provided, however that this provision shall not affect the right of any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation within 60 days after the effective date of the merger or consolidation, as set forth in subsection (e) of this section.

(1) The shares of the surviving or resulting corporation to which the shares of such objecting stockholders would have been converted had they assented to the merger or consolidation shall have the status of authorized and unissued shares of the surviving or resulting corporation.

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PART II Information Not Required in Joint Proxy Statement/Prospectus

Item 20. Indemnification of Directors and Officers

Under section 145 of the General Corporation Law of the State of Delaware, Inovio has broad powers to indemnify its directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Inovio's Bylaws also provide for mandatory indemnification of its directors and executive officers, and permissive indemnification of its employees and agents, to the fullest extent permissible under Delaware law.

Inovio's Certificate of Incorporation provides that the liability of its directors for monetary damages shall be eliminated to the fullest extent permissible under Delaware law. Pursuant to Delaware law, this includes elimination of liability for monetary damages for breach of the directors' fiduciary duty of care to Inovio and its Stockholders. These provisions do not eliminate the directors' duty of care and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Inovio, for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for any transaction from which the director derived an improper personal benefit, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

Inovio has obtained a policy of directors' and officers' liability insurance that insures Inovio's directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

Item 21. Exhibits and Financial Statement Schedules

		ned registrant hereby undertakes:
Item 22	Underta	kings
		The opinion of Oppenheimer & Co. Inc. is attached as <i>Annex B</i> to the joint proxy statement/prospectus included as part of this registration statement.
	(c)	Reports, Opinions or Appraisals
	(b)	Financial Statement Schedule No financial statement schedules are required to be filed herewith.
		See Exhibit Index, which is incorporated by reference in this item.
	(a)	Exhibits

(1)

To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i)

To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii)

To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii)

To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2)

That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3)

To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4)

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement and each post-effective amendment hereto shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5)

That prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other Items of the applicable form.

(6)

That every prospectus (i) that is filed pursuant to paragraph (5) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Securities Act, and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7)

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or

controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(8)

To respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11 or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(9)

To supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.



SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Amendment No. 3 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California on April 27, 2009.

Inovio Biomedical Corporation

By: /s/ AVTAR DHILLON

Avtar Dhillon, M.D. President and Chief Executive Officer (Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 3 to the registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Da	te
/s/ Avtar Dhillon	President and Chief Executive Offi (Principal Executive Officer),	cer Ap	ril 27, 2009
Avtar Dhillon	Director		
/s/ Peter Kies	Chief Financial Officer (Principal Accounting Officer and Principal	Apr	ril 27, 2009
Peter Kies	Financial Officer)		
*	Director	Apr	ril 27, 2009
James L. Heppell			
*	Director	Apt	ril 27, 2009
Riaz Bandali			
*	Director	Apr	ril 27, 2009
Tazdin Esmail			
*	Director	Apr	ril 27, 2009
Simon X. Benito			
*	Director	Apr	ril 27, 2009
Robert W. Rieder			
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Signature	Title	Date
*	Director	April 27, 2009
Stephen Rietiker		
*	Director	April 27, 2009
Patrick Gan		
/s/ Tee Khiang Ng	Director	April 27, 2009
Tee Khiang Ng		
*By: /s/ AVTAR DHILLO	DN	April 27, 2009
Avtar Dhillon, M.D Attorney- in- fact		
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EXHIBIT INDEX

Exhibit	Description
2.1#	Amended and Restated Agreement and Plan of Merger By and Among Inovio Biomedical Corporation, Inovio Acquisition, LLC, and VGX Pharmaceuticals, Inc. dated December 5, 2008 as further amended March 31,
	2009 (included as <i>Annex A</i> in the joint proxy statement/prospectus within this registration statement).
3.1(a)	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the registrant's Registration Statement on Form S-3 (File No. 333-108752) filed on September 12, 2003).
(b)	Certificate of Amendment to Amended and Restated Certificate of Incorporation as filed with the Delaware Secretary of State on September 10, 2004 (incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K filed September 16, 2004).
(c)	Certificate of Amendment to the Amended and Restated Certificate of Incorporation as filed with the Delaware Secretary of State on March 31, 2005 (incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K filed on April 4, 2005).
3.2(a)*	Certificate of Incorporation of Inovio Acquisition Corporation dated June 23, 2008.
(b) [*]	Certificate of Conversion of Inovio Acquisition Corporation to Inovio Acquisition, LLC dated October 31, 2008.
$(c)^*$	Certificate of Formation of Inovio Acquisition, LLC dated October 31, 2008.
3.3(a)	Certificate of Designations, Rights and Preferences of Series C Convertible Preferred Stock of Registrant (incorporated by reference to Exhibit 3.3 of the registrant's Registration Statement on Form S-3 filed on June 21, 2004).
(b)	Certificate of Decrease of Shares of Series C Cumulative Convertible Preferred Stock of Registrant (incorporated by reference to Exhibit 3.4 of the registrant's Registration Statement on Form S-3 filed on June 21, 2004).
3.4	Amended and Restated Bylaws of Inovio Biomedical Corporation, as amended through November 30, 2007 (incorporated by reference to Exhibit 3.2 of the registrant's Form 8-K filed on December 6, 2007).
3.5*	Operating Agreement of Inovio Acquisition, LLC, dated October 31, 2008.
4.1	Amended 2000 Stock Option Plan, as amended by the Board of Directors through March 6, 2006 with approvals by Stockholders through May 5, 2006 (incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form S-8 filed on July 28, 2006).
4.2 ⁺	Forms of Incentive and Nonstatutory Stock Option Agreements used in connection with the 2000 Stock Option Plan (incorporated by reference to Exhibit 10.7 of the registrant's Registration Statement on Form S-4/A (File No. 333-58168) filed on April 5, 2001).
4.3	Warrant to Purchase Common Stock, dated September 15, 2000 by and between the Registrant and the University of South Florida Research Foundation (incorporated by reference to Exhibit 10.6 of the registrant's Form 10-Q filed on

November 9, 2000).

4.4 Warrant to Purchase Common Stock, dated September 15, 2000 by and between the Registrant and Dr. Richard Gilbert (incorporated by reference to Exhibit 10.7 of the registrant's Form 10-Q filed on November 9, 2000).

Exhibit

Description

- 4.5 Warrant to Purchase Common Stock, dated September 15, 2000 by and between the Registrant and Dr. Richard Heller (incorporated by reference to Exhibit 10.8 of the registrant's Form 10-Q filed on November 9, 2000).
- 4.6 Warrant to Purchase Common Stock, dated September 15, 2000 by and between the Registrant and Dr. Mark Jaroszeski (incorporated by reference to Exhibit 10.9 of the registrant's Form 10-Q filed on November 9, 2000).
- 4.7 Investors Rights Agreement, dated July 14, 2003, between the Registrant and the Purchasers listed on Schedule 1 thereto (incorporated by reference to Exhibit 4.2 of the registrant's Registration Statement on Form S-3 (File No. 333-108752) filed on September 12, 2003).
- 4.8 Specimen Common Stock certificate (incorporated by reference to Exhibit 4.8 of the registrant's Registration Statement on Form S-3 (File No. 333-108752) filed on September 12, 2003).
- 4.9 Investor Rights Agreement dated as of May 10, 2004 by and between the registrant and the purchasers indicated on the schedule thereto (incorporated by reference to Exhibit 4.2 of the registrant's Registration Statement on Form S-3 filed on June 21, 2004).
- 4.10 Form of Series C Common Stock Purchase Warrant dated as of May 10, 2004 by and between the registrant and the purchasers indicated on the schedule thereto (incorporated by reference to Exhibit 4.3 of the registrant's Registration Statement on Form S-3 filed on June 21, 2004).
- 4.11 Registration Rights Agreement dated December 30, 2005, by and among the registrant and the investors named on the signature pages thereto (incorporated by reference to Exhibit 99.3 to registrant's Form 8-K filed with the Securities and Exchange Commission on January 6, 2006).
- 4.12 Form of Common Stock Purchase Warrant dated as of September 15, 2006 by and between the registrant and each of the purchasers listed on Schedule 1 to the Securities Purchase Agreement (Exhibit 10.23 herein) (incorporated by reference to Exhibit 4.3 of the registrant's Current Report on Form 8-K filed on September 20, 2006).
- 4.13 Registration Rights Agreement dated as of September 15, 2006 by and among registrant and certain investors indicated on a schedule thereto (incorporated by reference to Exhibit 10.5 of the registrant's Quarterly Report on Form 10-Q filed on November 9, 2006).
- 4.14 Form of Common Stock Purchase Warrant to be used by and between the registrant and each of the purchasers listed on Schedule 1 to the Securities Purchase and Exchange Agreement (Exhibit 10.25 herein) (incorporated by reference to Exhibit 4.24 of the registrant's Annual Report on Form 10-K filed on March 16, 2007).
- 4.15⁺ First Amended and Restated Inovio Biomedical Corporation 2007 Omnibus Incentive Plan (incorporated by reference to Exhibit 4.2 of the registrant's Registration Statement on Form S-8 filed on May 9, 2008).
- 4.16⁺ Form of Restricted Stock Award Grants under the 2007 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 4.3 to the Registrant's Registration Statement on Form S-8 filed on May 14, 2007).

Exhibit Description 4.17^{+} Form of Incentive and Non-Qualified Stock Option Grants under the 2007 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on May 14, 2007). 4.18* Form of Voting Trust Agreement, by and between certain stockholders listed on Schedule I thereto and the Trustees identified therein, to be executed and effective concurrent with the closing of the Merger. 5.1 Opinion of K&L Gates LLP. 8.1 Tax opinion of K&L Gates LLP. 8.2 Tax opinion of Duane Morris LLP. 10.1 Lease Agreement by and between the registrant and Nexus Sorrento Glen LLC dated August 26, 1999 (incorporated by reference to Exhibit 10.15 of the registrant's Registration Statement on Form S-1, as amended (File No. 333-88427), filed on October 5, 1999). 10.2 License Agreement dated September 20, 2000 by and between the registrant and the University of South Florida Research Foundation, Inc. (incorporated by reference to Exhibit 10.5 of the registrant's Form 10-Q filed on November 9, 2000). 10.3 Asset Purchase Agreement by and among the Registrant, Genetronics, Inc., a subsidiary of the Registrant, and Harvard Bioscience, Inc. dated December 24, 2002 (incorporated by reference to Exhibit A to the registrant's Definitive Proxy Statement filed on January 7, 2003). 10.4 Preferred Stock and Warrant Purchase Agreement dated as of May 10, 2004 by and between the registrant and the purchasers indicated on the schedule thereto (incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form S-3 filed on June 21, 2004). 10.5 Non-Exclusive License and Research Collaboration Agreement dated as of May 21, 2004 by and among the registrant and Merck & Co., Inc. and Genetronics, Inc., a subsidiary of the registrant (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on August 13, 2004). 10.6 Lease Agreement by and between the registrant and Sorrento Centre Tenancy in Common dated November 29, 2004 (incorporated by reference to Exhibit 10.16 of the registrant's Annual Report of Form 10-K for the year ended December 31, 2004, filed on March 15, 2005). 10.7 Lease Amendment #3 by and between the registrant and Nexus Sorrento Glen LLC dated January 21, 2005 (incorporated by reference to Exhibit 10.17 of the registrant's Annual Report of Form 10-K for the year ended December 31, 2004, filed on March 15, 2005). 10.8 Stock Purchase Agreement dated January 25, 2005 by and among the registrant, Inovio AS and the Shareholders of Inovio AS (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on January 31, 2005). 10.9 Securities Purchase Agreement dated as of December 16, 2005, among registrant and each purchaser identified on the signature pages thereto (incorporated by reference to Exhibit 99.1 of the registrant's Report of Form 8-K, filed on January 6, 2006).

10.10 License Agreement dated September 15, 2006 between registrant and Inovio Asia Pte. Ltd. (incorporated by referenced to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q filed on November 9, 2006).

Exhibit 10.11	Description Securities Purchase Agreement dated September 15, 2006 between registrant and purchasers named therein (incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K filed on September 20, 2006).
10.12	Amendment to Securities Purchase Agreement, amending the Securities Purchase Agreement filed as Exhibit 10.27 (incorporated by reference to Exhibit 4.3 of the registrant's Current Report on Form 8-K filed on October 16, 2006).
10.13	Securities Purchase and Exchange Agreement between registrant and Inovio Asia Pte. Ltd. and the purchasers named therein, dated September 15, 2006 (incorporated by referenced to Exhibit 10.2 to registrant's Quarterly Report on Form 10-Q filed on November 9, 2006).
10.14	Preferred Exchange Agreement dated September 15, 2006 between registrant and certain holders of Series C Preferred Stock (incorporated by referenced to Exhibit 4.4 of the registrant's Registration Statement on Form S-3, filed January 19, 2007).
10.15	Securities Purchase Agreement dated May 14, 2007 relating to the Direct Financing between registrant and purchasers named therein (incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K, filed May 16, 2007).
10.16	Letter Agreement Dated August 3, 2007 between Registrant and Asia Life Sciences Venture Consulting Inc. (incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K filed August 6, 2007).
10.17	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.2 of the registrant's Current Report on Form 8-K filed August 6, 2007).
10.18^{+}	Employment Agreement dated August 31, 2007 by and between the registrant and Dr. Michael Fons (incorporated by reference to Exhibit 99.2 of the registrant's Current Report on Form 8-K/A filed September 10, 2007).
10.19 ⁺	Employment Agreement for Punit Dhillon dated March 12, 2008 (incorporated by reference to Exhibit 99.2 of the registrant's Current Report on Form 8-K/A, filed March 14, 2008).
10.20+	Consulting Agreement dated May 3, 2008 by and between Dietmar Rabussay and Genetronics, Inc. (incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K, filed May 7, 2008).
10.21 ⁺	Addendum to P. Kies Employment Agreement, dated July 2, 2008 (incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K, filed July 8, 2008).
10.22 ⁺	Form of Employment Agreement by and between the registrant and Dr. Michael Fons, for use effective only upon closing of the Merger (incorporated by reference to Exhibit 10.22 as filed with the registrant's registration statement on Form S-4 (File No. 333-156035) on December 10, 2008).
10.23 ⁺	Form of Employment Agreement by and between the registrant and Punit Dhillon, for use effective only upon closing of the Merger (incorporated by reference to Exhibit 10.23 as filed with the registrant's registration statement on Form S-4 (File No. 333-156035) on December 10, 2008).
10.24+	Form of Employment Agreement by and between the registrant and Peter Kies,

Exhibit 10.24 as filed with the registrant's registration statement on Form S-4 (File No. 333-156035) on December 10, 2008).

	5 5
Exhibit 10.25 ⁺	Description Form of Employment Agreement by and between the registrant and Dr. Avtar Dhillon, for use effective only upon closing of the Merger (incorporated by reference to Exhibit 10.25 as filed with the registrant's registration statement on Form S-4 (File No. 333-156035) on December 10, 2008).
10.26 **	License Agreement dated June 26, 2000 by and among Baylor College of Medicine, Valentis, Inc. and Applied Veterinary Systems, Inc., as assigned to VGX Pharmaceuticals, Inc.
10.27 **	License Agreement dated January 25, 2001 by and between Baylor College of Medicine and Applied Veterinary Systems, Inc., as assigned to VGX Pharmaceuticals, Inc., as amended by First Amendment dated April 17, 2002, Second Amendment dated May 29, 2002, Third Amendment dated March 5, 2002, Fourth Amendment dated April 14, 2004 and Fifth Amendment dated February 15, 2007.
10.28	Reserved.
10.29 **	License Agreement dated November 5, 2001 by and between The Trustees of the University of Pennsylvania and VGX Pharmaceuticals, Inc., as amended by First Amendment dated August 15, 2005.
10.30**	Agreement of Lease dated January 21, 2005 by and between 450 Sentry Parkway Associates and VGX Pharmaceuticals, Inc.; Addendum confirming lease term dated June 16, 2005.
10.31 **	R&D Alliance Agreement dated December 19, 2005 by and between Ganial Immunotherapeutics, Inc. and VGX Pharmaceuticals, Inc.
10.32 **	Asset Purchase Agreement dated February 21, 2007 by and among Ronald O. Bergan, Mary Alice Bergan, and VGX Pharmaceuticals, Inc.
10.33 ***	Exclusive License Agreement dated April 18, 2007 by and between Dow Global Technologies, Inc. and VGX Pharmaceuticals, Inc.
10.34 **	License Agreement dated May 9, 2007 by and between Baylor University and VGX Pharmaceuticals, Inc.
10.35 **	R&D Collaboration and License Agreement dated June 27, 2007 by and between VGX International, Inc. and VGX Pharmaceuticals, Inc.
10.36 **	Non-Exclusive License Agreement dated September 1, 2007 by and between VGX Animal Health, Inc. and VGX Pharmaceuticals, Inc.
10.37 **	License Agreement dated September 1, 2007 by and between VGX Animal Health, Inc. and VGX Pharmaceuticals, Inc.
10.38**	Assignment of Contingent Payments Agreement dated October 20, 2007 by and among Ronald O. Bergan, Mary Alice Bergan, VGX Animal Health, Inc., and VGX Pharmaceuticals, Inc.
10.39 **	R&D Collaboration and License Agreement dated December 18, 2006 by and between VGX International, Inc. and VGX Pharmaceuticals, Inc., as amended by First Amendment dated October, 31, 2007 and as amended by Second Amendment dated August 4, 2008.

10.40^{+**} Employment Agreement dated November 1, 2007 by and between Niranjan Sardesai, Ph.D. and VGX Pharmaceuticals, Inc., as amended by First Amendment

to Employment Agreement dated August 20, 2008 and Second Amendment to Employment Agreement dated October 1, 2008.

Exhibit 10.41**	Description Lease Agreement dated August 20, 2001 by and between Woodlands VTO 2000 Land, L.P. and Applied Veterinary Systems, Inc., as assigned to VGX Pharmaceuticals, Inc. and as amended by First Amendment to Lease Agreement dated November 12, 2007.
10.42 **	Sales and Marketing Agreement dated February 28, 2008 by and between VGX International and VGX Pharmaceuticals, Inc.
10.43***	Employment Agreement dated March 31, 2008 by and between J. Joseph Kim, Ph.D. and VGX Pharmaceuticals, Inc., as amended by First Amendment to Employment Agreement dated March 31, 2008.
10.44 **	CELLECTRA Device License Agreement dated April 16, 2008 by and between VGX International and VGX Pharmaceuticals, Inc.
10.45***	Employment Agreement dated December 17, 2005 by and between Kevin Rassas and VGX Pharmaceuticals, Inc., as amended by First Amendment to Employment Agreement Extension dated August 20, 2008.
10.46***	Employment Agreement dated August 1, 2005 by and between C. Jo White, M.D. and VGX Pharmaceuticals, Inc., as amended by First Amendment to Employment Agreement Extension dated August 20, 2008.
10.47***	Employment Agreement dated May 1, 2005 by and between Bryan ByongJin Kim and VGX Pharmaceuticals, Inc., as amended by First Amendment to Employment Agreement Extension dated May 1, 2008.
10.48**	Asset Purchase Agreement dated June 10, 2008 by and among VGXI, Inc. and VGX Pharmaceuticals, Inc.
10.49**	Sublease Agreement dated June 10, 2008 by and between VGXI, Inc. and VGX Pharmaceuticals, Inc
10.50 **	Patent License Agreement dated April 27, 2007 by and between The Trustees of the University of Pennsylvania and VGX Pharmaceuticals, Inc., as amended by First Amendment dated June 12, 2008.
10.51***	Employment Agreement dated October 1, 2005 by and between Gene J. Kim and VGX Pharmaceuticals, Inc., as amended by First Amendment to Employment Agreement Extension dated August 20, 2008.
10.52**	Form of Note Purchase Agreement for Notes issued by VGX Pharmaceuticals, Inc. from October 2005 until June 2008.
10.53**	Form of Convertible Note for notes issued by VGX Pharmaceuticals, Inc. from October 2005 until June 2008.
10.54**	Note Amendment dated January 19, 2008 by and between DongKook Pharm Co., Ltd. and VGX Pharmaceuticals, Inc.
10.55**	Note Amendment dated June 11, 2008 by and between Huvitz Co., Ltd. and VGX Pharmaceuticals, Inc.
10.56	[Reserved.]
10 57**	

10.57^{**} Form of Note Assignment utilized by VGX Pharmaceuticals, Inc. in June and July 2008.

- 10.58^{**} Form of Allonge utilized by VGX Pharmaceuticals, Inc. in June and July 2008.
- 10.59^{**} Form of Note Purchase Agreement for Notes issued by VGX Pharmaceuticals, Inc. used in November and December 2008.

Exhibit	Description
10.60	[Reserved.]
10.61*	Form of VGX Stockholder Voting Agreement.
10.62+**	2001 Equity Compensation Plan for VGX Pharmaceuticals, Inc., as amended.
10.63***	2007 Equity Compensation Plan for VGX Animal Health, Inc.
10.64**	Form of Allonge utilized by VGX Pharmaceuticals, Inc. in November 2008.
10.65 **	License Agreement dated November 9, 2006 by and between Genetronics, Inc. and VGX Pharmaceuticals, Inc.
10.66**	Memorandum of NIH Research Grant Agreement by and between National
	Institute of Allergy and Infectious Diseases and VGX Pharmaceuticals, Inc.
10.67**	Form of Warrant to Purchase Common Stock issued by VGX Pharmaceuticals,
	Inc. since 2003.
10.68**	Form of Warrant Purchase Agreement for Warrants to Purchase Common Stock
	issued by VGX Pharmaceuticals, Inc. since 2003.
14.1	Inovio Biomedical Corporation Code of Ethics for Senior Officers (incorporated
	by reference to Exhibit 14.1 of the registrant's Annual Report on Form 10-K for
	the year ended December 31, 2004, filed on March 15, 2005).
21.1*	Subsidiaries of the registrant.
23.1	Consent of K&L Gates LLP (Included in Exhibit 5.1).
23.2	Consent of Duane Morris LLP (Included in Exhibit 8.2).
23.3	Consent of Independent Registered Public Accounting Firm.
23.4	Consent of Independent Auditors.
24.1*	Power of Attorney.
99.1*	Consent of Oppenheimer & Co. Inc.
99.2*	Consent of Needham & Company, LLC.
99.3*	Consents of persons named as directors for post-Merger company.
99.4	Consent of person named as director for post-Merger company.
99.5	Proxy Card of Inovio Biomedical Corporation.
99.6	Proxy Card of VGX Pharmaceuticals, Inc.

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The registrant hereby agrees to supplementally furnish the staff, on a confidential basis, a copy of any omitted schedule upon the staff's request.

Designates management contract, compensatory plan or arrangement.

The company has applied with the Secretary of the Securities and Exchange Commission for confidential treatment of certain information pursuant to Rule 24b-2 of the Securities Exchange Act of 1934 (with respect to Inovio documents incorporated herein by reference) or Rule 406 of the Securities Act of 1933 (with respect to VGX documents previously filed with this registration statement). Copies of the exhibits including all confidential portions have been previously filed separately with confidential treatment applications, which may be made available for public inspection pending the Securities and Exchange Commission's review of the application in accordance with Rule 24b-2 or Rule 406, as applicable.

*

Previously filed with registrant's initial registration statement on Form S-4 on December 10, 2008.

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Previously filed with registrant's Amendment No. 1 to registration statement on Form S-4 on January 23, 2009.

Previously filed with registrant's Amendment No. 2 to registration statement on Form S-4 on April 2, 2009.

QuickLinks

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