Opko Health, Inc.
Form 424B5
March 10, 2011

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Filed pursuant to Rule 424(b)(5)
Registration Statement No. 333-172168

PROSPECTUS SUPPLEMENT
(to Prospectus dated February 11, 2011)

27,000,000 Shares

OPKO HEALTH, INC.

Common Stock

We are offering 27,000,000 shares of our common stock. Our common stock is listed on the NYSE Amex under the symbol OPK. On March 8, 2011, the last reported sale price of our common stock on the NYSE Amex was $3.84 per share.

As part of this offering, entities affiliated with two of our directors and executive officers, Dr. Phillip Frost, our Chairman and Chief Executive Officer and our principal stockholder, and Dr. Jane H. Hsiao, our Vice Chairman and Chief Technical Officer, as well as entities associated with an existing stockholder have agreed to purchase an aggregate of 5,333,000 shares of the common stock offered in this offering at the public offering price.

Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-15 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Public Offering Price	$ 3.75000	$ 101,250,000
Underwriting Discounts and Commissions(1)	$ 0.20625	$ 4,468,819
Proceeds to OPKO Health (Before Expenses)(1)	$ 3.54375	$ 96,781,181

(1) The underwriters will not receive any underwriting discount or commissions on the sale of 5,333,000 shares of common stock to entities associated with certain stockholders, including two of our directors and executive officers.

Delivery of the shares of common stock is expected to be made on or about March 14, 2011. We have granted the underwriters an option for a period of 30 days to purchase up to 4,050,000 additional shares of our common stock solely to cover overallotments. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $5,304,131 and the total proceeds to us, before expenses, will be $111,133,369.

Joint Book-Running Managers

Jefferies **J.P. Morgan**

Co-Lead Managers

UBS Investment Bank **Lazard Capital Markets**

Co-Manager

Ladenburg Thalmann & Co. Inc.

Prospectus Supplement dated March 9, 2011.

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You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with different information. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated

by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled Where You Can Find More Information and Information Incorporated by Reference.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary is not complete and may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus supplement and the accompanying prospectus carefully, including the factors described under the heading Risk Factors in this prospectus supplement, in our Quarterly Reports on Form 10-Q, and in our Annual Report on Form 10-K, the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, and the information contained in any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision.

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the common stock being offered by us, and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information, some of which may not apply to this offering of common stock. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in the accompanying prospectus the statement in the document having the later date modifies or supersedes the earlier statement

Unless the context requires otherwise, references in this prospectus supplement and the accompanying prospectus to OPKO, the Company, we, us and our refer to OPKO Health, Inc.

This prospectus supplement, the accompanying prospectus and the information incorporated herein and thereby by reference include trademarks, servicemarks and tradenames owned by us or other companies. The name OPKO Health is our trademark. All trademarks, servicemarks and tradenames included or incorporated by reference in this prospectus supplement or the accompanying prospectus are the property of their respective owners.

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ABOUT OPKO HEALTH, INC.

Overview

We are a multi-national biopharmaceutical and diagnostics company that seeks to establish industry-leading positions in large and rapidly growing medical markets by leveraging our discovery, development and commercialization expertise and our novel and proprietary technologies. Our current focus is on conditions with major unmet medical needs including neurological disorders, infectious diseases, oncology and ophthalmologic diseases. We are developing a range of solutions to diagnose, treat and prevent these conditions, including molecular diagnostics tests, proprietary pharmaceuticals and vaccines. We plan to commercialize these solutions on a global basis in large and high growth markets, including emerging markets. We have already established emerging markets pharmaceutical platforms in Chile and Mexico, which are delivering revenue and which we expect to deliver cash flow and facilitate future market entry for our products currently in development. We also actively explore opportunities to acquire complementary pharmaceuticals, compounds, technologies, and businesses.

Our lead program under development is an innovative molecular diagnostic platform technology for the rapid identification of molecules or immunobiomarkers that may be useful in the creation of accurate, easy-to-use tests for conditions where we believe no objective diagnostic test currently exists or where presently available tests are characterized by invasive procedures and low levels of accuracy. We have demonstrated in initial studies that our platform has the ability to identify diagnostic biomarkers for a wide range of diseases to which the immune system reacts, including cancers, autoimmune diseases, neurodegenerative diseases and infectious diseases. This technology platform may also allow for the development of vaccines and highly targeted therapeutic agents.

Our most advanced application of this technology is a simple blood test for Alzheimer s disease, a debilitating neurodegenerative disease for which there are limited diagnostic options available today. Based on initial clinical work, as described in the journal *Cell* in January 2011, our Alzheimer s test demonstrated an ability to identify and differentiate Alzheimer s patients by detecting elevated levels of antibodies that appear to be unique to Alzheimer s disease. We are currently conducting a broader validation study that we expect to be completed by late 2011 and we expect to begin marketing our test for Alzheimer s disease in 2013. We believe that this test could initially be useful in stratifying patients for ongoing clinical trials of potential Alzheimer s drugs as well as to confirm the diagnosis in a clinical setting and to track the progression of the disease or effectiveness of a therapeutic in a clinical trial. In December 2010 we entered into a non-exclusive collaboration agreement with Bristol-Myers Squibb Company, or BMS, to investigate the utility of our diagnostic technology for the diagnosis of Alzheimer s disease and for identifying individuals with early stage cognitive impairment that are likely to progress to Alzheimer s disease.

In addition to Alzheimer s disease, we are developing a pipeline of diagnostic tests for other conditions such as pancreatic cancer, Parkinson s disease and non-small cell lung cancer. We anticipate entering into additional collaboration agreements regarding our diagnostic pipeline tests and expect to commercially launch up to three diagnostic tests over the next three years.

Our product pipeline also includes several pharmaceutical compounds and technologies in research and development for a broad range of indications and conditions. We are developing a protein-based influenza vaccine designed to offer multi-season and multi-strain protection, that we believe will offer more effective and longer lasting protection against influenza, in addition to more rapid and efficient production than existing influenza vaccine technologies. We recently acquired an up-regulating oligonucleotide therapeutics technology that has the potential to create new drugs for the treatment of a wide variety of illnesses, including cancer, heart disease, metabolic disorders and a range of genetic disorders. We have a variety of therapeutic agents for respiratory disorders in clinical development, including products

for asthma, chronic obstructive pulmonary disease, or COPD, and chronic cough. In addition to these development programs, we have growing pharmaceutical businesses in Chile and Mexico.

We have a highly experienced management team that we believe has demonstrated an ability to successfully build and manage pharmaceutical businesses. Our Chairman and Chief Executive Officer, Dr. Phillip Frost, founded and served as Chairman and Chief Executive Officer of IVAX Corporation, or IVAX, a multi-national pharmaceutical company, from 1987 until the acquisition of IVAX by Teva Pharmaceutical Industries, Limited, or Teva, in January 2006. Dr. Frost currently serves as Chairman of the Board of Teva. Prior to Ivax, Dr. Frost founded and served as

Chairman of the Board of Directors of Key Pharmaceuticals, Inc. from 1972 until the acquisition of Key Pharmaceuticals by Schering Plough Corporation in 1986. Our other senior executive officers, including Dr. Jane Hsiao, our Vice Chairman and Chief Technology Officer, Steven Rubin, our Executive Vice President, Administration, and Dr. Rao Uppaluri, our Senior Vice President and Chief Financial Officer, are former executive officers of IVAX. Based on their experience in the industry, we believe that our management team has extensive development, regulatory and commercialization expertise and relationships that provide access to commercial opportunities.

Molecular Diagnostics

In June 2009, we acquired exclusive, worldwide rights from the University of Texas Southwestern to an innovative platform technology for the rapid identification of molecules or immunobiomarkers that may be useful in the creation of accurate, easy-to-use diagnostic tests as well as the development of vaccines and highly targeted therapeutic agents for immune system-driven diseases. The technology is based on an innovative method for the identification in small blood samples of disease-specific antibodies that can serve as diagnostic biomarkers for various diseases. We jointly own patent applications covering certain aspects of the technology and hold an exclusive license to the technology.

We believe this innovative technology could have broad applicability for the development of simple and accurate, quantitative blood tests across numerous important diseases, including a number of disease segments where there are no widely accepted or effective screening tests available. The first diagnostic product we are pursuing utilizing this technology is a simple blood test for Alzheimer s disease. The test is designed to detect elevated levels of antibodies that appear to be unique to Alzheimer s disease and could be useful in stratifying patients for ongoing clinical trials of potential Alzheimer s drugs as well as to confirm the diagnosis in a clinical setting and to track the progression of the disease or effectiveness of a therapeutic in a clinical trial. The Alzheimer s disease-specific antibodies were discovered using this novel proprietary platform that we have demonstrated in initial studies to be capable of identifying biomarkers for a wide range of diseases to which the immune system reacts, including Alzheimer s disease, as well as cancers, autoimmune diseases, neurodegenerative diseases and infectious diseases.

Currently it is estimated that over five million people in the United States, and over 35 million people worldwide, have Alzheimer s disease and the national cost of caring for people with Alzheimer s and other dementias is estimated to be $172 billion in 2010 in the United States alone. By 2050, it is estimated that between 11 and 16 million people in the United States over the age of 65 will have Alzheimer s, and the global prevalence of people living with Alzheimer s and other dementias is expected to be greater than 115 million. Currently there are no specific tests to detect Alzheimer s disease and follow its progression. Current diagnosis tools such as behavioral and cognitive measurements, brain scans and spinal fluid analysis have limited diagnostic accuracy, may not detect early stage disease, and in the case of spinal fluid analysis are highly invasive. Definitive diagnosis can currently be made only from examination of postmortem brain tissue samples. An effective early diagnostic blood test would provide a significant breakthrough in supporting definitive early diagnosis.

As reported in the January 2011 edition of the journal *Cell*, we demonstrated in a preliminary study that we were able to identify unique biomarkers from serum samples of known Alzheimer s disease patients, and then using these biomarkers we were able to distinguish patients with Alzheimer s disease from healthy controls, patients with Parkinson s disease and patients with lupus. In December 2010, we entered into a collaboration agreement with BMS, under which we and BMS will investigate the utility of our novel technology for the diagnosis of Alzheimer s disease and for identifying individuals with early stage cognitive impairment that are likely to progress to Alzheimer s disease. We have conducted a validation study of 140 patients, and we are expanding the study to include 200 patients with Alzheimer s disease, 200 demographically matched controls, and 180 patients with other conditions. We expect to complete this study by late 2011 and we expect to begin marketing our diagnostic test for Alzheimer s disease in 2013.

In addition to Alzheimer s disease, we are also pursuing the development of diagnostic tests for pancreatic cancer, Parkinson s disease, non-small cell lung cancer, and other diseases for which early detection could lead to earlier therapy and dramatically improved outcomes. We have conducted preliminary studies in pancreatic cancer, Parkinson s disease, and non-small cell lung cancer patient samples that we believe demonstrate the ability of our technology to identify biomarkers with diagnostic utility for these conditions. We plan to conduct additional studies in larger patient populations to further validate diagnostic tests for these and other conditions. We expect to

complete a validation study of an initial cancer diagnostic test in 2012 and we expect to begin marketing an initial cancer diagnostic test in 2013. We anticipate entering into additional collaboration agreements regarding our diagnostic pipeline tests and expect to commercially launch up to three diagnostic tests over the next three years.

Along with molecular diagnostic applications, we believe that this same platform technology should permit the development of pharmaceutical agents or other therapeutics which can be delivered directly to the targeted autoimmune cells. Similarly, we believe that the synthetic molecules that we are able to identify through this technology could be used for the formulation of synthetic vaccines to induce an immune response that protects against foreign pathogens.

Pharmaceutical Business

We presently have several pharmaceutical compounds and technologies in research and development for a broad range of indications and conditions. Our product development candidates are in various stages of development. Our primary focus is on developing and commercializing our novel influenza vaccine and therapeutics based on our oligonucleotide technology platform.

Vaccine Programs

In July 2009, we acquired worldwide rights from Academia Sinica in Taipei, Taiwan, for a new technology to develop protein-based vaccines against influenza and other viral infections. We are developing a proprietary, innovative influenza vaccine designed to provide multi-season and multi-strain protection against many human influenza virus strains, including both seasonal influenza strains as well as global influenza pandemic strains, such as swine flu, or H1N1, and avian flu, or H5N1. The world-wide seasonal influenza market place is projected to increase to $6.3 billion by 2014. Influenza results in approximately 200,000 hospitalizations and more than 36,000 deaths each year in the United States alone, with estimated economic costs in excess of $87 billion per year.

There are several major limitations of current influenza vaccines, including:

- **Inability to respond to mutations.** The influenza virus undergoes frequent and unpredictable antigenic changes, or mutations, in its surface proteins, creating new strains of the virus which the immune system often fails to recognize. Currently available vaccines do not provide adequate protection against new influenza strains, leading to the need for the ongoing development and administration of vaccines on an annual basis.

- **Slow development timelines.** Currently available influenza vaccines are based on annual World Health Organization predictions of the influenza strains that will be prevalent in the upcoming season. Because of the long development timeline required to create current influenza vaccines, the actual virus strains prevalent in a given season may differ from the strains used to create the vaccine, resulting in commercially available vaccines that offer limited protection and clinical efficacy.

- **Production cycle limitations.** The annual strain prediction and selection process necessitates annual vaccine manufacturing with time-consuming and expensive annual production cycles. The prediction of optimal production quantities is also difficult and often results in either a shortage or excess of doses.

Instead of the typical method of making a cocktail of inactivated viruses for annual flu shots, our approach to anti-viral vaccines is designed to increase protective antibodies against multiple strains of viral influenza. We believe that our technology will, among other things, permit the development of a molecular protein-based flu vaccine that will provide protection against multiple H1, H3 or H5 flu variances. We believe that our novel vaccine technology addresses the current limitations by providing a wider scope of virus strain coverage with longer-term protection, in a

recombinant protein format that requires shorter development timelines and enables efficient year-round and demand-based production.

In addition, in March 2010, we acquired worldwide rights from Academia Sinica to certain alpha-galactosyl ceramide analogs which are believed to be useful as vaccines or vaccine adjuvants for a wide variety of disorders including cancer, infectious disease, and autoimmune disease. We are working in conjunction with Academia Sinica to advance and develop products under these technologies.

Oligonucleotide Therapeutics

In January 2011, we acquired CURNA, Inc., a privately held company based in Jupiter, Florida, engaged in the discovery of new drugs for the treatment of a wide variety of illnesses, including cancer, heart disease, metabolic

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disorders and a range of genetic anomalies. CURNA s broad platform technology utilizes a short, single strand oligonucleotide and is based on the up-regulation of protein production through interference with non-coding RNA s, or natural antisense. This strategy contrasts with established approaches which down-regulate protein production. CURNA has designed a novel type of therapeutic modality, termed AntagoNAT, and has initially demonstrated this approach for up-regulation of several therapeutically relevant proteins in *in vitro* and animal models. We believe that this short, single strand oligonucleotide can be delivered intravenously or subcutaneously without the drug delivery or cell penetration complications typically associated with double stranded siRNA therapeutics. CURNA has identified and developed compounds which increase the production of over 80 key proteins involved in a large number of individual diseases.

Asthma and COPD

In May 2010, we acquired worldwide rights to a novel heparin-derived oligosaccharide which has significant potential in treating asthma and COPD. Over 22 million people in the United States live with asthma, including nearly six million children. Additionally, there are more than 12 million people in the United States who have COPD. The market for asthma and COPD treatments was estimated to be $26 billion in 2009. Currently available therapies often include unwanted side effects and may have limited efficacy. We believe that our product may have an improved efficacy and side effect profile. Our initial studies have demonstrated anti-inflammatory and anti-allergic activity when administered orally or inhaled with inhalers or nebulizers in sheep and mice asthma models. We have also successfully completed human feasibility studies in asthma.

NK-1 Program

In November 2009, we acquired rolapitant and other neurokinin-1, or NK-1, assets from Schering Plough Corporation. Rolapitant, a potent and selective competitive antagonist of the NK-1 receptor, has successfully completed Phase II clinical testing for prevention of chemotherapy induced nausea and vomiting, or CINV, and post-operative induced nausea and vomiting, or PONV. Based on studies conducted to-date, we believe that rolapitant may be differentiated from other agents in this class through both its duration of action and lack of drug-drug interactions. Rolapitant has an extended plasma half-life that has the potential to improve the management of nausea and vomiting experienced by cancer patients undergoing chemotherapy treatment. Phase II clinical testing of rolapitant for the prevention of nausea and vomiting in cancer patients treated with highly emetogenic chemotherapy demonstrated promising five-day activity following the administration of a single dose, with no significant drug-drug interactions.

The global emesis market was nearly $2.4 billion in 2009. There are more than two million chemotherapy patients each year in the United States, Europe, and Japan alone, and there are more than 23 million surgery patients in the United States and Europe. NK-1 receptor antagonists and 5HT3 receptor antagonists are major classes of drugs used for prevention of nausea and vomiting. In general, NK-1 inhibitors are complementary to 5HT3 inhibitors with the potential for additive effects in PONV and demonstrated additive effects in CINV. While there are several approved 5HT3 receptor antagonists, including palonosetron (Aloxi), ondansetron (Zofran), and other generics, there is only one NK-1 receptor antagonist approved for commercial use, aprepitant (Emend).

In December 2010, we exclusively out-licensed the development, manufacture and commercialization of rolapitant to TESARO, Inc., an oncology-focused biopharmaceutical company co-founded by former executives of MGI PHARMA, an oncology and acute-care focused biopharmaceutical company acquired by Eisai Co., Ltd. in 2008. We believe that the TESARO team brings significant development and commercialization experience and a demonstrated track record of success in launching and differentiating products for the CINV market.

TESARO is initially pursuing development and commercialization of rolapitant for CINV. Under the terms of the license, we are eligible to receive payments of up to $121.0 million, of which an up-front payment of $6.0 million has

been received, and additional payments based upon net sales and achievement of specified regulatory and commercialization milestones. In addition, TESARO will pay us double digit tiered royalties on sales of licensed product. Further, we will share with TESARO future profits from the commercialization of licensed products in Japan, and we will have an option to market the products in Latin America. In addition, we acquired an approximately 10% equity position in TESARO on an as-converted basis.

Separately, we are also developing a second generation NK-1 receptor antagonist, SCH 900978, for chronic cough. The product has completed a Phase II proof of concept study with no safety issues identified and low drug-drug interaction potential.

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Ophthalmics

We have therapeutic programs under development for a range of ophthalmic diseases and conditions such as wet and dry Age Related Macular Degeneration, or AMD, which represent markets with significant unmet needs. In July 2007, we initiated the first of two required pivotal Phase III trials for our lead ophthalmic product, bevasiranib, a drug candidate in development for the treatment of Wet AMD. On March 6, 2009, following the recommendation of an independent data monitoring committee, or IDMC, we determined to terminate the Phase III clinical trial of bevasiranib. Review of the data by the IDMC had indicated that the trial as structured was unlikely to meet its primary end point. We are continuing to investigate improved drug delivery methods in an effort to determine appropriate next steps regarding the development of bevasiranib. We may seek to continue development of these programs in the future, or to outlicense or sell these programs.

Emerging Markets Operations

We also intend to continue to leverage our global commercialization expertise to pursue acquisitions of commercial businesses that will both drive our growth and provide geographically diverse sales and distribution opportunities, particularly outside of the United States. It is estimated that by 2030 emerging markets will account for 60% of global GDP. According to IMS Health, emerging healthcare markets, including markets such as Brazil, Chile, China, India, Mexico, Russia, and Turkey, are projected to grow approximately 15% in total per year through 2014, while developed markets are projected to grow only 3% to 5% over the same period. At a time of slowing pharmaceutical sales growth in many mature countries, this expansion in many emerging markets has led to higher sales growth rates and an increasing contribution to the industry s global performance. As a result we expect that emerging markets will continue to be a growing part of our business strategy, contributing both attractive revenue growth and cash flow to support our development programs.

In February 2010, we completed the acquisition of Pharmacos Exakta S.A. de C.V., or Exakta-OPKO, a Mexican pharmaceutical business engaged in the manufacture, marketing, sale, and distribution of ophthalmic and other pharmaceutical products to private and public customers in Mexico. Exakta-OPKO manufacturers and sells more than 25 products primarily in the generics market in Mexico, although it has recently increased its focus on the development of proprietary products as well. Exakta-OPKO has also signed a letter of intent to collaborate with the Centro de Investigación y Asistencia Tecnológica y Diseño del Estado de Jalisco, or CIATEJ, a preeminent technology and research center in the State of Jalisco, Mexico to develop and manufacture vaccines for flu, dengue fever, and West Nile virus. The first project under development with CIATEJ is a new H1N1 vaccine which is expected to launch in Mexico in 2012.

In October 2009, we completed the acquisition of Pharma Genexx, S.A., or OPKO Chile. OPKO Chile markets, sells and distributes more than 100 products to the private, hospital and institutional markets in Chile for a wide range of indications, including, cardiovascular products, vaccines, antibiotics, gastro-intestinal products, and hormones, among others.

Other

Strategic Investments

We have and may continue to make investments in other early stage companies that we perceive to have valuable proprietary technology and significant potential to create value for OPKO as a shareholder.

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In December 2010, we acquired a minority equity interest in TESARO, Inc., a privately held oncology-focused biopharmaceutical company, as part of a license agreement with TESARO for the development, manufacture, commercialization and distribution of rolapitant and a related compound. As of December 31, 2010, we owned an approximately 10% equity position in TESARO on an as-converted basis.

- In November 2010, we acquired a minority equity interest in Fabrus, LLC, a privately held early-stage biotechnology company with next generation therapeutic antibody drug discovery and development capabilities that is using its proprietary antibody screening and engineering approach to discover promising lead compounds against several important oncology targets. As of December 31, 2010, we owned approximately 13% of the outstanding membership interests of Fabrus.

- In September 2009, we acquired a minority equity interest in Cocrystal Discovery, Inc., a privately held biopharmaceutical company focused on the discovery and development of novel small molecule antiviral

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therapeutics tailored for the treatment of serious and chronic viral diseases. As of December 31, 2010, we owned approximately 16% of the outstanding capital stock of Cocrystal Discovery.

- In June 2009, we acquired a minority equity interest in Sorrento Therapeutics, Inc., a publicly held development-stage biopharmaceutical company focused on applying its proprietary technology platform for the discovery and development of human therapeutic antibodies for the treatment of a variety of disease conditions, including cancer, inflammation, metabolic disease and infectious disease. As of December 31, 2010, we owned approximately 21% of the outstanding capital stock of Sorrento Therapeutics.

Instrumentation Business

Our instrumentation business consists of the development, commercialization and sale of ophthalmic diagnostic and imaging systems and instrumentation products. Currently, the instrumentation business is primarily based on technology that offers innovative systems with advanced diagnostic imaging capabilities and tools to meet the needs of eye care professionals. We may seek to continue development of this business in the future or to outlicense or sell this business.

Growth Strategy

We expect our future growth to come from leveraging our proprietary technology and development strengths, and opportunistically pursuing complementary, accretive, or strategic acquisitions and investments.

We have under development a broad and diversified portfolio of diagnostic tests, vaccines and small molecules, targeting a broad range of unmet medical needs. We intend to continue to leverage our proprietary technology and our strengths in all phases of pharmaceutical research and development to further develop and commercialize our portfolio of proprietary pharmaceutical and diagnostic products. Key elements of our strategy are to:

- obtain requisite regulatory approval and compile clinical data for our most advanced product candidates;
- develop a focused commercialization capability in the United States;
- strategically utilize our research and development resources to advance our product pipeline; and
- expand into other medical markets which provide significant opportunities and which we believe are complementary to and synergistic with our business.

We have and expect to continue to be opportunistic and pursue complementary, or strategic acquisitions, licenses and investments. Our management team has significant experience in identifying, executing and integrating these transactions. We expect to use well-timed, carefully selected acquisitions, licenses and investments to continue to drive our growth, including:

- **Products and technologies.** We intend to pursue product and technology acquisitions and licenses that will complement our existing businesses and provide new product and market opportunities, improve our growth, enhance our profitability, leverage our existing assets, and contribute to our own organic growth.
- **Commercial businesses.** We intend to continue to pursue acquisitions of commercial businesses that will both drive our growth and provide geographically diverse sales and distribution opportunities, particularly outside of the United States.

- **Early stage investments.** We have and may continue to make investments in early stage companies that we perceive to have valuable proprietary technology and significant potential to create value for OPKO as a shareholder.

Intellectual Property

We believe that technology innovation is driving breakthroughs in healthcare. We have adopted a comprehensive intellectual property strategy which blends the efforts to innovate in a focused manner with the efforts of our business development activities to strategically in-license intellectual property rights. We develop, protect, and defend our own intellectual property rights as dictated by the developing competitive environment. We value our intellectual property assets and believe we have benefited from early and insightful efforts at understanding the disease and the molecular basis of potential pharmaceutical intervention.

We actively seek, when appropriate and available, protection for our products and proprietary information by means of United States and foreign patents, trademarks, trade secrets, copyrights, and contractual arrangements. Patent

protection in the pharmaceutical field, however, can involve complex legal and factual issues. There can be no assurance that any steps taken to protect such proprietary information will be effective.

Because the patent positions of pharmaceutical and biotechnology companies are highly uncertain and involve complex legal and factual questions, the patents owned and licensed by us, or any future patents, may not prevent other companies from developing similar or therapeutically equivalent products or ensure that others will not be issued patents that may prevent the sale of our products or require licensing and the payment of significant fees or royalties. Furthermore, to the extent that any of our future products or methods are not patentable, that such products or methods infringe upon the patents of third parties, or that our patents or future patents fail to give us an exclusive position in the subject matter claimed by those patents, we will be adversely affected. We may be unable to avoid infringement of third party patents and may have to obtain a license, defend an infringement action, or challenge the validity of the patents in court. A license may be unavailable on terms and conditions acceptable to us, if at all. Patent litigation is costly and time consuming, and we may be unable to prevail in any such patent litigation or devote sufficient resources to even pursue such litigation.

Government Regulation of Our Drug and Device Development Activities

The U.S. government regulates healthcare through various agencies, including but not limited to the following: (i) the U.S. Food and Drug Administration, or FDA, which administers the Federal Food, Drug and Cosmetic Act, or FDCA, as well as other relevant laws; (ii) the Centers for Medicare & Medicaid Services, or the CMS, which administers the Medicare and Medicaid programs; (iii) the Office of Inspector General, or the OIG, which enforces various laws aimed at curtailing fraudulent or abusive practices, including by way of example, the Anti-Kickback Law, the Physician Self-Referral Law, commonly referred to as the Stark law, the Anti-Inducement Law, the Civil Money Penalty Law, and the laws that authorize the OIG to exclude healthcare providers and others from participating in federal healthcare programs; and (iv) the Office of Civil Rights, which administers the privacy aspects of the Health Insurance Portability and Accountability Act of 1996, or HIPAA. All of the aforementioned are agencies within the Department of Health and Human Services, or HHS. Healthcare is also provided or regulated, as the case may be, by the Department of Defense through its TriCare program, the Department of Veterans Affairs, especially through the Veterans Health Care Act of 1992, the Public Health Service within HHS under Public Health Service Act § 340B (42 U.S.C. § 256b), the Department of Justice through the Federal False Claims Act and various criminal statutes, and state governments under the Medicaid and other state sponsored or funded programs and their internal laws regulating all healthcare activities.

The testing, manufacture, distribution, advertising, and marketing of drug products and medical devices are subject to extensive regulation by federal, state, and local governmental authorities in the United States, including the FDA, and by similar agencies in other countries. Any drug or device product that we develop must receive all relevant regulatory approvals or clearances, as the case may be, before it may be marketed in a particular country.

Drug Development

The regulatory process, which includes overseeing preclinical studies and clinical trials of each pharmaceutical compound to establish its safety and efficacy and confirmation by the FDA that good laboratory, clinical, and manufacturing practices were maintained during testing and manufacturing, can take many years, requires the expenditure of substantial resources, and gives larger companies with greater financial resources a competitive advantage over us. Delays or terminations of clinical trials that we undertake would likely impair our development of product candidates. Delays or terminations could result from a number of factors, including stringent enrollment criteria, slow rate of enrollment, size of patient population, having to compete with other clinical trials for eligible patients, geographical considerations, and others.

The FDA review processes can be lengthy and unpredictable, and we may encounter delays or rejections of our applications when submitted. Generally, in order to gain FDA approval, we must first conduct preclinical studies in a laboratory and in animal models to obtain preliminary information on a compound and to identify any safety problems. The results of these studies are submitted as part of an IND application that the FDA must review before human clinical trials of an investigational drug can commence.

Clinical trials are normally done in three sequential phases and generally take two to five years or longer to complete. Phase I consists of testing the drug product in a small number of humans, normally healthy volunteers, to determine preliminary safety and tolerable dose range. Phase II usually involves studies in a limited patient population to evaluate the effectiveness of the drug product in humans having the disease or medical condition for

which the product is indicated, determine dosage tolerance and optimal dosage, and identify possible common adverse effects and safety risks. Phase III consists of additional controlled testing at multiple clinical sites to establish clinical safety and effectiveness in an expanded patient population of geographically dispersed test sites to evaluate the overall benefit-risk relationship for administering the product and to provide an adequate basis for product labeling. Phase IV clinical trials may be conducted after approval to gain additional experience from the treatment of patients in the intended therapeutic indication.

After completion of clinical trials of a new drug product, FDA and foreign regulatory authority marketing approval must be obtained. Assuming that the clinical data support the product s safety and effectiveness for its intended use, a new drug application, or NDA, is submitted to the FDA for its review. Generally, it takes one to three years to obtain approval. If questions arise during the FDA review process, approval may take a significantly longer period of time. The testing and approval processes require substantial time and effort and we may not receive approval on a timely basis, if at all, or the approval that we receive may be for a narrower indication than we had originally sought, potentially undermining the commercial viability of the product. Even if regulatory approvals are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. For marketing outside the United States, we also will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for pharmaceutical products. The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country.

None of our pharmaceutical products under development have been approved for marketing in the United States or elsewhere. We may not be able to obtain regulatory approval for any such products under development in a timely manner, if at all. Failure to obtain requisite governmental approvals or failure to obtain approvals of the scope requested will delay or preclude us, or our licensees or marketing partners, from marketing our products, or limit the commercial use of our products, and thereby would have a material adverse effect on our business, financial condition, and results of operations. See Risk Factors The results of pre-clinical trials and previous clinical trials for our products may not be predictive of future results, and our current and planned clinical trials may not satisfy the requirements of the FDA or other non-U.S. regulatory authorities.

Device Development

Devices are subject to varying levels of premarket regulatory control, the most comprehensive of which requires that a clinical evaluation be conducted before a device receives approval for commercial distribution. The FDA classifies medical devices into one of three classes: Class I devices are relatively simple and can be manufactured and distributed with general controls; Class II devices are somewhat more complex and require greater scrutiny; Class III devices are new and frequently help sustain life.

In the United States, a company generally can obtain permission to distribute a new device in one of two ways. The first applies to any device that is substantially equivalent to a device first marketed prior to May 1976, or to another device marketed after that date, but which was substantially equivalent to a pre-May 1976 device. These devices are either Class I or Class II devices. To obtain FDA permission to distribute the device, the company generally must submit a section 510(k) submission, and receive an FDA order finding substantial equivalence to a predicate device (pre-May 1976 or post-May 1976 device that was substantially equivalent to a pre-May 1976 device) and permitting commercial distribution of that device for its intended use. A 510(k) submission must provide information supporting a claim of substantial equivalence to the predicate device. If clinical data from human experience are required to support the 510(k) submission, these data must be gathered in compliance with investigational device exemption, or IDE, regulations for investigations performed in the United States. The 510(k) process is normally used for products of the type that the Company proposes distributing. The FDA review process for premarket notifications submitted

pursuant to section 510(k) takes, on average, about 90 days, but it can take substantially longer if the FDA has concerns, and there is no guarantee that the FDA will clear the device for marketing, in which case the device cannot be distributed in the United States. There is also no guarantee that the FDA will deem the applicable device subject to the 510(k) process, as opposed to the more time-consuming, resource-intensive and problematic, pre market approval, or PMA, process described below.

The second, more comprehensive, approval process applies to a new device that is not substantially equivalent to a pre-1976 product or that is to be used in supporting or sustaining life or preventing impairment. These devices are

normally Class III devices. For example, most implantable devices are subject to the approval process. Two steps of FDA approval are generally required before a company can market a product in the United States that is subject to approval, as opposed to clearance. First, a company must comply with IDE regulations in connection with any human clinical investigation of the device. These regulations permit a company to undertake a clinical study of a non-significant risk device without formal FDA approval. Prior express FDA approval is required if the device is a significant risk device. Second, the FDA must review the company s PMA application, which contains, among other things, clinical information acquired under the IDE. The FDA will approve the PMA application if it finds there is reasonable assurance that the device is safe and effective for its intended use. The PMA process takes substantially longer than the 510(k) process and it is conceivable that the FDA would not agree with our assessment that a device that we propose to distribute should be a Class I or Class II device. If that were to occur we would be required to undertake the more complex and costly PMA process. However, for either the 510(k) or the PMA process, the FDA could require us to run clinical trials, which would pose all of the same risks and uncertainties associated with the clinical trials of drugs, described above.

Even when a clinical study has been approved by the FDA or deemed approved, the study is subject to factors beyond a manufacturer s control, including, but not limited to the fact that the institutional review board at a given clinical site might not approve the study, might decline to renew approval which is required annually, or might suspend or terminate the study before the study has been completed. Also, the interim results of a study may not be satisfactory, leading the sponsor to terminate or suspend the study on its own initiative or the FDA may terminate or suspend the study. There is no assurance that a clinical study at any given site will progress as anticipated; there may be an insufficient number of patients who qualify for the study or who agree to participate in the study or the investigator at the site may have priorities other than the study. Also, there can be no assurance that the clinical study will provide sufficient evidence to assure the FDA that the product is safe and effective, a prerequisite for FDA approval of a PMA, or substantially equivalent in terms of safety and effectiveness to a predicate device, a prerequisite for clearance under 510(k). Even if the FDA approves or clears a device, it may limit its intended uses in such a way that manufacturing and distributing the device may not be commercially feasible.

After clearance or approval to market is given, the FDA and foreign regulatory agencies, upon the occurrence of certain events, are authorized under various circumstances to withdraw the clearance or approval or require changes to a device, its manufacturing process or its labeling or additional proof that regulatory requirements have been met.

A manufacturer of a device approved through the PMA is not permitted to make changes to the device which affect its safety or effectiveness without first submitting a supplement application to its PMA and obtaining FDA approval for that supplement. In some instances, the FDA may require clinical trials to support a supplement application. A manufacturer of a device cleared through the 510(k) process must submit another premarket notification if it intends to make a change or modification in the device that could significantly affect the safety or effectiveness of the device, such as a significant change or modification in design, material, chemical composition, energy source or manufacturing process. Any change in the intended uses of a PMA device or a 510(k) device requires an approval supplement or cleared premarket notification. Exported devices are subject to the regulatory requirements of each country to which the device is exported, as well as certain FDA export requirements.

A company that intends to manufacture medical devices is required to register with the FDA before it begins to manufacture the device for commercial distribution. As a result, we and any entity that manufactures products on our behalf will be subject to periodic inspection by the FDA for compliance with the FDA s Quality System Regulation requirements and other regulations. In the European Community, we will be required to maintain certain International Organization for Standardization, or ISO, certifications in order to sell products and we or our manufacturers undergo periodic inspections by notified bodies to obtain and maintain these certifications. These regulations require us or our manufacturers to manufacture products and maintain documents in a prescribed manner with respect to design, manufacturing, testing and control activities. Further, we are required to comply with various FDA and other agency

requirements for labeling and promotion. The Medical Device Reporting regulations require that we provide information to the FDA whenever there is evidence to reasonably suggest that a device may have caused or contributed to a death or serious injury or, if a malfunction were to occur, could cause or contribute to a death or serious injury. In addition, the FDA prohibits us from promoting a medical device for unapproved indications.

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Our instrumentation products are subject to regulation by the FDA and similar international health authorities. We also have an obligation to adhere to the FDA s cGMP regulations. Additionally, we are subject to periodic FDA inspections, quality control procedures, and other detailed validation procedures. If the FDA finds deficiencies in the validation of our manufacturing and quality control practices, they may impose restrictions on marketing specific products until corrected.

Regulation by governmental authorities in the United States and other countries may be a significant factor in how we develop, test, produce and market our molecular diagnostic test products. Diagnostic tests like ours do not fall squarely within the regulatory approval process for pharmaceutical or device products as described above, and the regulatory pathway is not as clear. It is possible that diagnostic products developed by us or our collaborators will be regulated as medical devices by the FDA and comparable agencies of other countries and require either premarket approval, or PMA, or 510(k) clearance from the FDA prior to marketing. Nevertheless, some companies that have successfully commercialized diagnostic tests for various conditions and disease states have not sought clearance or approval for such tests through the traditional or PMA processes, and have instead utilized a process involving laboratory developed tests, or LDTs, through a laboratory certified under The Clinical Laboratory Improvement Amendments of 1988, or CLIA. CLIA is a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for diagnostic, preventative or treatment purpose. In such instances, the CLIA lab is solely responsible for the development, validation and commercialization of the assay. Such LDT testing is currently under the purview of CMS and state agencies that provide oversight of the safe and effective use of LDTs. Although the FDA has consistently claimed that it has the regulatory authority to regulate LDTs that are validated by the developing laboratory and performed only by that laboratory, it has generally exercised enforcement discretion in not otherwise regulating most tests developed and performed by high complexity CLIA-certified laboratories. Recently, however, the FDA indicated that it was reviewing the regulatory requirements that will apply to LDTs, and held a two-day public meeting on July 19 and July 20, 2010 to obtain input from stakeholders on how it should apply its authority to implement a reasonable, risk-based, and effective regulatory framework for LDTs. Although the FDA did not indicate when or how those changes would be implemented, it left little doubt that the changes are forthcoming.

Impact of Regulation

The FDA in the course of enforcing the FDCA may subject a company to various sanctions for violating FDA regulations or provisions of the FDCA, including requiring recalls, issuing Warning Letters, seeking to impose civil money penalties, seizing devices that the agency believes are non-compliant, seeking to enjoin distribution of a specific type of device or other product, seeking to revoke a clearance or approval, seeking disgorgement of profits and seeking to criminally prosecute a company and its officers and other responsible parties.

The levels of revenues and profitability of biopharmaceutical companies may be affected by the continuing efforts of government and third party payers to contain or reduce the costs of health care through various means. For example, in certain foreign markets, pricing or profitability of therapeutic and other pharmaceutical products is subject to governmental control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental control. In addition, in the United States and elsewhere, sales of therapeutic and other pharmaceutical products are dependent in part on the availability and adequacy of reimbursement from third party payers, such as the government or private insurance plans. Third party payers are increasingly challenging established prices, and new products that are more expensive than existing treatments may have difficulty finding ready acceptance unless there is a clear therapeutic benefit. We cannot assure you that any of our products will be considered cost effective, or that reimbursement will be available or sufficient to allow us to sell them competitively and profitably.

Our instrumentation products are subject to regulation by the FDA and similar international health authorities. We also have an obligation to adhere to the FDA s cGMP regulations. Additionally, we are subject to periodic FDA inspections, quality control procedures, and other detailed validation procedures. If the FDA finds deficiencies in the validation of our manufacturing and quality control practices, they may impose restrictions on marketing specific products until corrected.

Anti-Kickback Laws

We are also subject to various federal, state, and international laws pertaining to health care fraud and abuse, including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal to solicit, offer, receive or pay

any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug or the use of a service or device. Federal and state false claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented for payment to third-party payors (including Medicare and Medicaid), claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. If the government were to allege against or convict us of violating these laws, there could be a material adverse effect on us, including our stock price. Even an unsuccessful challenge could cause adverse publicity and be costly to respond to, which could have a materially adverse effect on our business, results of operations and financial condition. We will consult counsel concerning the potential application of these and other laws to our business and our sales, marketing and other activities and will make good faith efforts to comply with them. However, given their broad reach and the increasing attention given by law enforcement authorities, we cannot assure you that some of our activities will not be challenged or deemed to violate some of these laws.

Foreign Corrupt Practices Act

We are also subject to the U.S. Foreign Corrupt Practices Act, or FCPA, which prohibits corporations and individuals from paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect their transactions and to devise and maintain an adequate system of internal accounting controls. Our international activities create the risk of unauthorized payments or offers of payments by our employees, consultants, sales agents or distributors, even though they may not always be subject to our control. We discourage these practices by our employees and agents. However, our existing safeguards and any future improvements may prove to be less than effective, and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Any failure by us to adopt appropriate compliance procedures and ensure that our employees and agents comply with the FCPA and applicable laws and regulations in foreign jurisdictions could result in substantial penalties or restrictions on our ability to conduct business in certain foreign jurisdictions.

Recent Developments

As of December 31, 2010, we had cash and cash equivalents of approximately $18.0 million compared to $15.2 million as of September 30, 2010. The increase of approximately $2.8 million was primarily due to the receipt of an upfront license payment of $6.0 million we received in December 2010 in connection with our license agreement with TESARO, Inc. and draw downs on our credit facilities in Chile to fund our operations in Chile. This increase was primarily offset by higher purchases of inventory, our investments and continuing operating expenses. The cash and cash equivalents amount as of December 31, 2010 is preliminary, and the audit of our December 31, 2010 financial statements is not complete. As a result, this amount may differ from the amount that will be reflected in our audited consolidated financial statements as of December 31, 2010.

Corporate Information

We were originally incorporated in Delaware in October 1991 under the name Cytoclonal Pharmaceutics, Inc., which was later changed to eXegenics, Inc. On March 27, 2007, we were part of a three-way merger with Froptix Corporation, or Froptix, a research and development company, and Acuity Pharmaceuticals, Inc., or Acuity, a research and development company. This transaction was accounted for as a reverse merger between Froptix and eXegenics, with the combined company then acquiring Acuity. eXegenics was previously involved in the research, creation, and development of drugs for the treatment and prevention of cancer and infectious diseases; however, eXegenics had been a public shell company without any operations since 2003. On June 8, 2007, we changed our name to OPKO

Health, Inc.

Our shares are publicly traded on the NYSE Amex under the ticker OPK . Our principal executive offices are located in Miami, Florida. We also have leased lab space at The Scripps Research Institute and Florida Atlantic University in Jupiter, Florida, and leased offices in Santiago, Chile. We also have offices and a manufacturing facility in Guadalajara, Mexico, a leased manufacturing facility in Hialeah, Florida, and a research and development office in the United Kingdom at the University of Kent. Our Internet website address is www.opko.com. Information on our internet site is not incorporated by reference in this prospectus.

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We currently manage our operations in two reportable segments, pharmaceutical and instrumentation segments. The pharmaceutical segment consists of two operating segments, (i) our pharmaceutical research and development segment which is focused on the research and development of pharmaceutical products, diagnostic tests, and vaccines, and (ii) the pharmaceutical operations we acquired in Chile and Mexico through the acquisition of OPKO Chile and Exakta-OPKO. The instrumentation segment consists of ophthalmic instrumentation devices and the activities related to the research, development, manufacture, and commercialization of those products.

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The Offering

Common Stock offered by us	**27,000,000 shares**
Common Stock to be outstanding after this offering	**282,412,706 shares**

Overallotment Option

We have granted the underwriters an option to purchase up to 4,050,000 additional shares of our common stock to cover overallotments, if any. This option is exercisable, in whole or in part, for a period of 30 days from the date of this prospectus supplement.

Use of Proceeds

We expect to use the net proceeds from this offering for general corporate purposes, including research and development expenses, clinical trials, acquisitions of new technologies or businesses, and other business opportunities. See Use of Proceeds.

NYSE Amex Listing

Our common stock is listed on the NYSE Amex under the symbol OPK.

Risk Factors

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-15 of this prospectus supplement.

Insider Participation

As part of this offering, entities affiliated with two of our directors and executive officers, Dr. Phillip Frost, our Chairman and Chief Executive Officer and our principal stockholder, and Dr. Jane H. Hsiao, our Vice Chairman and Chief Technical Officer, as well as entities associated with an existing stockholder have agreed to purchase an aggregate of 5,333,000 shares of the common stock offered in this offering at the public offering price.

Outstanding Shares

The number of shares of common stock to be outstanding immediately after this offering is based on 255,412,706 shares outstanding as of December 31, 2010 and excludes as of this date:

- 14,708,146 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2010 at a weighted average exercise price of $2.31 per share;
- 11,106,725 shares of common stock reserved for future issuance under our 2007 Equity Incentive Plan as of December 31, 2010;
-

897,438 shares of our common stock issuable upon conversion of outstanding shares of our Series A Preferred Stock as of December 31, 2010;

- 12,096,770 shares of our common stock issuable upon conversion of outstanding shares of our Series D Preferred Stock as of December 31, 2010; and

- 29,194,867 shares of our common stock subject to warrants outstanding at a weighted average exercise price of $0.89 per share as of December 31, 2010.

Except as otherwise indicated, all information in this prospectus assumes:

- No exercise by the underwriters of their over-allotment option; and

- No exercise of outstanding options or warrants to purchase shares of common stock and no conversion of shares of Series A or Series D Preferred Stock into common stock.

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RISK FACTORS

Investments in the equity securities of publicly traded companies involve significant risks. Our business, prospects, financial condition or operating results could be materially adversely affected by the risks identified below, as well as other risks not currently known to us or that we currently consider immaterial. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing the risks described below, you should also refer to the information contained in our Annual Report on Form 10-K and Form 10-K/A for the fiscal year ended December 31, 2009 and Quarterly Reports on Form 10-Q and Form 10-Q/A for the quarterly periods ended on March 31, 2010, June 30, 2010 and September 30, 2010, which are incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, and other documents that we file from time to time with the SEC.

Risks Related To Our Business

We have a history of operating losses and we do not expect to become profitable in the near future.

We are a healthcare company with a limited operating history. We are not profitable and have incurred losses since our inception. We do not anticipate that we will generate revenue from the sale of proprietary pharmaceutical products or our molecular diagnostic products for some time and we have generated limited revenue from our pharmaceutical operations in Chile and Mexico and from our instrumentation business. We have not yet submitted any pharmaceutical products or molecular diagnostic products for marketing approval or clearance by regulatory authorities and we do not currently have rights to any pharmaceutical product candidates that have been approved for marketing, other than those products sold by our Chilean and Mexican subsidiaries. We continue to incur research and development and general and administrative expenses related to our operations and, to date, we have devoted most of our financial resources to research and development, including our pre-clinical development activities and clinical trials. We expect to continue to incur losses from our operations for the foreseeable future, and we expect these losses to increase as we continue our research activities and conduct development of, and seek regulatory approvals and clearances for, our product candidates, and prepare for and begin to commercialize any approved or cleared products. If our product candidates fail in clinical trials or do not gain regulatory approval or clearance, or if our product candidates do not achieve market acceptance, we may never become profitable. In addition, if we are required by the U.S. Food and Drug Administration, or the FDA, to perform studies in addition to those we currently anticipate, our expenses will increase beyond expectations and the timing of any potential product approval may be delayed. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

Our technologies are in an early stage of development and are unproven.

The effectiveness of our technologies is not well-known in, or accepted generally by, the clinical medical community. There can be no assurance that we will be able to successfully employ our technologies as therapeutic, diagnostic, or preventative solutions for any disease or condition. Our failure to establish the efficacy or safety of our technologies would have a material adverse effect on our business.

In addition, we have a limited operating history. Our operations to date have been primarily limited to organizing and staffing our company, developing our technology, and undertaking pre-clinical studies and clinical trials of our product candidates. We have not yet obtained regulatory approvals for any of our pharmaceutical product or molecular diagnostic candidates. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

Our product research and development activities may not result in commercially viable products.

Most of our product candidates, including our molecular diagnostic products and vaccine technologies, are in the early stages of development and are prone to the risks of failure inherent in drug, diagnostic, and medical device product development. These risks further include the possibility that such products would:

- be found to be ineffective, unreliable, or otherwise inadequate or otherwise fail to receive regulatory approval;
- be difficult or impossible to manufacture on a commercial scale;
- be uneconomical to market or otherwise not be effectively marketed;

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- fail to be successfully commercialized if adequate reimbursement from government health administration authorities, private health insurers, and other organizations for the costs of these products is unavailable;

- be impossible to commercialize because they infringe on the proprietary rights of others or compete with products marketed by others that are superior; or

- fail to be commercialized prior to the successful marketing of similar products by competitors.

The results of pre-clinical trials and previous clinical trials for our products may not be predictive of future results, and our current and planned clinical trials may not satisfy the requirements of the FDA or other non-U.S. regulatory authorities.

Positive results from pre-clinical studies and early clinical trial experience should not be relied upon as evidence that later-stage or large-scale clinical trials will succeed. We may be required to demonstrate with substantial evidence through well-controlled clinical trials that our product candidates either (i) are safe and effective for use in a diverse population of their intended uses or (ii) with respect to Class I or Class II devices only, are substantially equivalent in terms of safety and effectiveness to devices that are already marketed under section 510(k) of the Food, Drug and Cosmetic Act. Success in early clinical trials does not mean that future clinical trials will be successful because product candidates in later-stage clinical trials may fail to demonstrate sufficient safety and efficacy to the satisfaction of the FDA and other non-U.S. regulatory authorities despite having progressed through initial clinical trials.

Further, our drug candidates may not be approved or cleared even if they achieve their primary endpoints in Phase III clinical trials or registration trials. In addition our device candidates, as well as our molecular diagnostic candidates, may not be approved or cleared, as the case may be, even though clinical or other data are, in our view, adequate to support a device or diagnostic test approval or clearance. The FDA or other non-U.S. regulatory authorities may disagree with our trial design and our interpretation of data from pre-clinical studies and clinical trials. In addition, any of these regulatory authorities may change requirements for the approval or clearance of a product candidate even after reviewing and providing comment on a protocol for a pivotal clinical trial that has the potential to result in FDA and other non-U.S. regulatory authorities approval. Any of these regulatory authorities may also approve or clear a product candidate for fewer or more limited indications or uses than we request or may grant approval or clearance contingent on the performance of costly post-marketing clinical trials. The FDA or other non-U.S. regulatory authorities may not approve the labeling claims necessary or desirable for the successful commercialization of our product candidates.

The results of our clinical trials may show that our product candidates may cause undesirable side effects, which could interrupt, delay or halt clinical trials, resulting in the denial of regulatory approval by the FDA and other non-U.S. regulatory authorities.

In light of widely publicized events concerning the safety risk of certain drug products, regulatory authorities, members of Congress, the Government Accounting Office, medical professionals, and the general public have raised concerns about potential drug safety issues. These events have resulted in the withdrawal of drug products, revisions to drug labeling that further limit use of the drug products, and establishment of risk management programs that may, for instance, restrict distribution of drug products. The increased attention to drug safety issues may result in a more cautious approach by the FDA to clinical trials. Data from clinical trials may receive greater scrutiny with respect to safety, which may make the FDA or other regulatory authorities more likely to terminate clinical trials before completion, or require longer or additional clinical trials that may result in substantial additional expense and a delay or failure in obtaining approval or approval for a more limited indication than originally sought.

We will require substantial additional funding, which may not be available to us on acceptable terms, or at all.

We are advancing and intend to continue to advance multiple product candidates through clinical and pre-clinical development. We believe we have sufficient cash and cash equivalents on hand or available to us through lines of credit to meet our anticipated cash requirements for operations and debt service for the next 12 months. We have based this estimate on assumptions that may prove to be wrong or subject to change, and we may be required to use our available capital resources sooner than we currently expect or curtail aspects of our operations in order to preserve our capital. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials. Our future capital requirements will depend on a number of factors, including the continued progress of our research and development

of product candidates, the timing and outcome of clinical trials and regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining, defending, and enforcing patent claims and other intellectual property rights, the status of competitive products, the availability of financing, and our success in developing markets for our product candidates.

We will need to raise substantial additional capital to engage in and continue our clinical and pre-clinical development, and commercialization activities. Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through public or private equity offerings, debt financings, or strategic collaborations. Our ability to obtain additional capital may depend on prevailing economic conditions and financial, business and other factors beyond our control. Disruptions in the United States and global financial markets may adversely impact the availability and cost of credit, as well as our ability to raise money in the capital markets. Economic conditions have been, and continue to be, volatile. Continued instability in these market conditions may limit our ability to replace, in a timely manner, maturing liabilities and access the capital necessary to fund and grow our business. There can be no assurance that additional capital will be available to us on acceptable terms, or at all, which could adversely impact our business, results of operations, liquidity, capital resources and financial condition. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of, or eliminate one or more of our clinical trials or research and development programs. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience additional significant dilution, and debt financing, if available, may involve restrictive covenants. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or our product candidates or grant licenses on terms that may not be favorable to us. We may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time.

Our business is substantially dependant on our ability to develop, launch and generate revenue from our molecular diagnostic program.

Our business is substantially dependant on our ability to develop and launch simple diagnostic tests based on our molecular diagnostics platform for Alzheimer s disease, cancers and other conditions for which we are developing tests. We are committing significant research and development resources to the development of such diagnostic tests, and there is no guarantee that we will be able to successfully launch these or other diagnostic tests on anticipated timelines or at all. We have limited experience in developing, manufacturing, selling, marketing or distributing tests based on the molecular diagnostic platform. If we are not able to successfully develop, market or sell diagnostic tests we develop for any reason, including the failure to obtain any required regulatory approvals, we will not generate any revenue from the sale of such tests. Even if we are able to develop effective diagnostic tests for sale in the marketplace, a number of factors could impact our ability to sell such tests or generate any significant revenue from the sale of such tests, including without limitation:

- our ability to establish and maintain adequate infrastructure to support the commercial launch and sale of our diagnostic tests ourselves or through a CLIA certified laboratory, including establishing adequate laboratory space, information technology infrastructure, sample collection and tracking systems, electronic ordering and reporting systems and other infrastructure and hiring adequate laboratory and other personnel;

- the success of the validation studies for our diagnostic tests under development and our ability to publish study results in peer-reviewed journals;

- the availability of alternative and competing tests or products and technological innovations or other advances in medicine that cause our technologies to be less competitive;

- the accuracy rates of such tests, including rates of false-negatives and/or false-positives;
- concerns regarding the safety or effectiveness or clinical utility of our diagnostic tests;
- changes in the regulatory environment affecting health care and health care providers, including changes in laws regulating laboratory testing and/or device manufacturers;
- the extent and success of our sales and marketing efforts and ability to drive adoption of our diagnostic tests;
- coverage and reimbursement levels by government payors and private insurers;
- pricing pressures and changes in third-party payor reimbursement policies; and
- intellectual property rights held by others or others infringing our intellectual property rights.

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If our competitors develop and market products that are more effective, safer or less expensive than our future product candidates, our commercial opportunities will be negatively impacted.

The pharmaceutical, molecular diagnostic, and instrumentation industries are highly competitive and require an ongoing, extensive search for technological innovation. Numerous companies, including major pharmaceutical companies, specialty pharmaceutical companies and specialized biotechnology companies, are engaged in the development, manufacture and marketing of pharmaceutical products competitive with those that we intend to commercialize ourselves and through our partners, including without limitation, Merck, Genentech, Allergan, Alcon Laboratories, Novartis, Alnylam, Regeneron, and QLT. Competitors to our molecular diagnostics business are many and include major diagnostic companies, reference laboratories, molecular diagnostic firms, universities and research institutions. Most of these companies have substantially greater financial and other resources, larger research and development staffs and more extensive marketing and manufacturing organizations than ours. Large pharmaceutical companies, in particular, have extensive experience in clinical testing and in obtaining regulatory approvals or clearances for drugs or medical devices. These companies also have significantly greater research and marketing capabilities than we do. Compared to us, many of our potential competitors have substantially greater capital resources, development resources, including personnel and technology, clinical trial experience, regulatory experience, expertise in prosecution of intellectual property rights, manufacturing and distribution experience, and sales and marketing experience.

We believe that our ability to successfully compete will depend on, among other things:

- the results of our clinical trials;
- our ability to recruit and enroll patients for our clinical trials;
- the efficacy, safety and reliability of our product candidates;
- the speed at which we develop our product candidates;
- our ability to design and successfully execute appropriate clinical trials;
- the timing and scope of regulatory approvals or clearances;
- our ability to commercialize and market any of our product candidates that may receive regulatory approval or clearance;
- appropriate coverage and adequate levels of reimbursement under private and governmental health insurance plans, including Medicare;
- our ability to protect intellectual property rights related to our products;
- our ability to have our partners manufacture and sell commercial quantities of any approved products to the market; and
- acceptance of future product candidates by physicians and other health care providers.

If our competitors market products that are more effective, safer, easier to use or less expensive than our future product candidates, if any, or that reach the market sooner than our future product candidates, if any, we may not

achieve commercial success. In addition, the biopharmaceutical, molecular diagnostic, and medical device industries are characterized by rapid technological change. Because our research approach integrates many technologies, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete or less competitive.

Our product development activities could be delayed or stopped.

We do not know whether our current or planned pre-clinical and clinical studies will be completed on schedule, or at all. Furthermore, we cannot guarantee that our planned pre-clinical and clinical studies will begin on time or at all. The commencement of our planned clinical trials could be substantially delayed or prevented by several factors, including:

- a limited number of, and competition for, suitable patients with the particular types of disease required for enrollment in our clinical trials or that otherwise meet the protocol s inclusion criteria and do not meet any of the exclusion criteria;

- a limited number of, and competition for, suitable sites to conduct our clinical trials;

- delay or failure to obtain FDA or other non-U.S. regulatory authorities approval or agreement to commence a clinical trial;

- delay or failure to obtain sufficient supplies of the product candidate for our clinical trials;
- requirements to provide the drugs or medical devices required in our clinical trial protocols or clinical trials at no cost or cost, which may require significant expenditures that we are unable or unwilling to make;
- delay or failure to reach agreement on acceptable clinical trial agreement terms or clinical trial protocols with prospective sites or investigators; and
- delay or failure to obtain institutional review board, or IRB, approval to conduct or renew a clinical trial at a prospective site.

The completion of our clinical trials could also be substantially delayed or prevented by several factors, including:

- slower than expected rates of patient recruitment and enrollment;
- failure of patients to complete the clinical trial;
- unforeseen safety issues;
- lack of efficacy evidenced during clinical trials;
- termination of our clinical trials by one or more clinical trial sites;
- inability or unwillingness of patients or medical investigators to follow our clinical trial protocols; and
- inability to monitor patients adequately during or after treatment.

Our clinical trials may be suspended or terminated at any time by the FDA, other regulatory authorities, the IRB for any given site, or us. Additionally, changes in regulatory requirements and guidance may occur and we may need to amend clinical trial protocols to reflect these changes with appropriate regulatory authorities. Amendments may require us to resubmit our clinical trial protocols to IRBs for re-examination, which may impact the costs, timing, or successful completion of a clinical trial. Any failure or significant delay in commencing or completing clinical trials for our product candidates could materially harm our results of operations and financial condition, as well as the commercial prospects for our product candidates.

The regulatory approval process is expensive, time consuming and uncertain and may prevent us or our collaboration partners from obtaining approvals for the commercialization of some or all of our product candidates.

The research, testing, manufacturing, labeling, approval, selling, marketing, and distribution of drug products or medical devices are subject to extensive regulation by the FDA and other non-U.S. regulatory authorities, which regulations differ from country to country. In general, we are not permitted to market our product candidates in the United States until we receive approval of a new drug application, or NDA, a clearance letter under the premarket notification process, or 510(k) process, or an approval of a pre-market approval, or PMA, from the FDA. We have not submitted a NDA or PMA application or premarket notification, nor have we received marketing approval or clearance for any of our proprietary pharmaceutical or diagnostic product candidates. Obtaining approval of a NDA or PMA can be a lengthy, expensive, and uncertain process. With respect to medical devices, while the FDA reviews and clears a premarket notification in as little as three months, there is no guarantee that our products will qualify for this more expeditious regulatory process, which is reserved for Class I and II devices, nor is there any assurance that even

if a device is reviewed under the 510(k) process that the FDA will review it expeditiously or determine that the device is substantially equivalent to a lawfully marketed non-PMA device. If the FDA fails to make this finding, then we cannot market the device. In lieu of acting on a premarket notification, the FDA may seek additional information or additional data which would further delay our ability to market the product. Furthermore, we are not permitted to make changes to a device approved through the PMA or 510(k) which affects the safety or efficacy of the device without first submitting a supplement application to the PMA and obtaining FDA approval or cleared premarket notification for that supplement. In some cases, the FDA may require clinical trials to support a supplement application. In addition, failure to comply with FDA, non-U.S. regulatory authorities, or other applicable United States and non-U.S. regulatory requirements may, either before or after product approval or clearance, if any, subject our company to administrative or judicially imposed sanctions, including, but not limited to the following:

- restrictions on the products, manufacturers, or manufacturing process;
- adverse inspectional observations (Form 483), warning letters, or non-warning letters incorporating inspectional observations;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals or clearances;

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- product seizures, detentions, or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements; and
- refusal to approve or clear pending NDAs or supplements to approved NDAs, applications or pre-market notifications.

Regulatory approval of an NDA or NDA supplement, PMA, PMA supplement or clearance pursuant to a pre-market notification is not guaranteed, and the approval or clearance process, as the case may be, is expensive and may, especially in the case of an NDA or PMA application, take several years. The FDA also has substantial discretion in the drug and medical device approval and clearance process. Despite the time and expense exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional pre-clinical studies and clinical trials. The number of pre-clinical studies and clinical trials that will be required for FDA approval or clearance varies depending on the drug or medical device candidate, the disease or condition that the drug or medical device candidate is designed to address, and the regulations applicable to any particular drug or medical device candidate. The FDA can delay, limit or deny approval or clearance of a drug or medical device candidate for many reasons, including:

- a drug candidate may not be deemed safe or effective;
- a medical device candidate may not be deemed to be substantially equivalent to a lawfully marketed non-PMA device, in the case of a premarket notification;
- the FDA may not find the data from pre-clinical studies and clinical trials sufficient;
- the FDA may not approve our or our third-party manufacturer s processes or facilities; or
- the FDA may change its approval or clearance policies or adopt new regulations.

Regulation by governmental authorities in the United States and other countries may be a significant factor in how we develop, test, produce and market our molecular diagnostic test products. Diagnostic tests like ours do not fall squarely within the regulatory approval process for pharmaceutical or device products as described above, and the regulatory pathway is not as clear. It is possible that diagnostic products developed by us or our collaborators will be regulated as medical devices by the FDA and comparable agencies of other countries and require either PMA or 510(k) clearance from the FDA prior to marketing. Some companies that have successfully commercialized diagnostic tests for various conditions and disease states have not sought clearance or approval for such tests through the traditional 510(k) or PMA processes, and have instead utilized a process involving laboratory developed tests, or LDTs, through a laboratory certified under The Clinical Laboratory Improvement Amendments of 1988, or CLIA. CLIA is a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for diagnostic, preventative or treatment purpose. In such instances, the CLIA lab is solely responsible for the development, validation and commercialization of the assay. Such LDT testing is currently under the purview of CMS and state agencies that provide oversight of the safe and effective use of LDTs. Although the FDA has consistently claimed that is has the regulatory authority to regulate LDTs that are validated by the developing laboratory and performed only by that laboratory, it has generally exercised enforcement discretion in not otherwise regulating most tests developed and performed by high complexity CLIA-certified laboratories.

Recently, however, the FDA indicated that it was reviewing the regulatory requirements that will apply to LDTs, and held a two-day public meeting on July 19 and July 20, 2010 to obtain input from stakeholders on how it should apply its authority to implement a reasonable, risk-based, and effective regulatory framework for LDTs. Although the FDA did not indicate when or how those changes would be implemented, it left little doubt that the changes are forthcoming.

Our product candidates may have undesirable side effects and cause our approved drugs to be taken off the market.

If a product candidate receives marketing approval and we or others later identify undesirable side effects caused by such products:

- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication, or field alerts to physicians and pharmacies;

- regulatory authorities may withdraw their approval of the product and require us to take our approved drug off the market;

- we may be required to change the way the product is administered, conduct additional clinical trials, or change the labeling of the product;
- we may have limitations on how we promote our drugs;
- sales of products may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase our commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenues from its sale.

Our inability to address quality control issues in a timely manner could delay the production and sale of our instrumentation products.

We are committed to providing high quality products to our customers, and we plan to meet this commitment by working diligently to continue implementing updated and improved quality systems and concepts throughout our organization. We cannot assure you that we will not have quality control issues in the future, which may result in warning letters and citations from the FDA. If we receive any warning letters from the FDA in the future, there can be no assurances regarding the length of time or cost it will take us to resolve such quality issues to our satisfaction and to the satisfaction of the FDA. If our remedial actions are not satisfactory to the FDA, we may have to devote additional financial and human resources to our efforts, and the FDA may take further regulatory actions against us including, but not limited to, assessing civil monetary penalties or imposing a consent decree on us, which could result in further regulatory constraints, including the governance of our quality system by a third party. Our inability to resolve these issues or the taking of further regulatory action by the FDA may weaken our competitive position and have a material adverse effect on our business, results of operations and financial condition.

We manufacture products in Mexico through our Mexican subsidiary. Any quality control issues at our Mexican facility may weaken our competitive position and have a material adverse effect on our business results of operations and financial condition.

We may not meet regulatory quality standards applicable to our manufacturing and quality processes, which could have an adverse effect on our business, results of operations and financial condition.

As a medical device manufacturer, we are required to register with the FDA and are subject to periodic inspection by the FDA for compliance with its Quality System Regulation, or QSR, requirements, which require manufacturers of medical devices to adhere to certain regulations, including testing, quality control and documentation procedures. Compliance with applicable regulatory requirements is subject to continual review and is monitored rigorously through periodic inspections by the FDA. In addition, most international jurisdictions have adopted regulatory approval and periodic renewal requirements for medical devices, and we must comply with these requirements in order to market our products in these jurisdictions. In the European Community, we are required to maintain certain ISO certifications in order to sell our products and must undergo periodic inspections by notified bodies to obtain and maintain these certifications. Further, some emerging markets rely on the FDA s Certificate for Foreign Government, or CFG, in lieu of their own regulatory approval requirements. Our, or our manufacturers failure to meet QSR ISO, or any other regulatory requirements or industry standards could delay production of our products and lead to fines, difficulties in obtaining regulatory clearances, recalls or other consequences, which could, in turn, have a material

adverse effect on our business, results of operations, and our financial condition.

Even if we obtain marketing approvals or clearances for our product candidates, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our product candidates, which could materially impair our ability to generate anticipated revenues.

Once regulatory approval has been granted to market a product, the approved or cleared product and its manufacturer are subject to continual review. Any approved or cleared product may only be promoted for its indicated uses. In addition, if the FDA or other non-U.S. regulatory authorities approve any of our product candidates for marketing, the labeling, packaging, adverse event reporting, storage, advertising, and promotion for the product will be subject to extensive regulatory requirements. We and the manufacturers of our products are also required to comply with current Good Manufacturing Practices, or cGMP regulations, or the FDA s QSR regulations, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Moreover, device manufacturers are required to report adverse events by

filing Medical Device Reports with the FDA, which reports are publicly available. Further, regulatory agencies must approve manufacturing facilities before they can be used to manufacture our products, and these facilities are subject to ongoing regulatory inspection. If we fail to comply with the regulatory requirements of the FDA and other non-U.S. regulatory authorities, or if previously unknown problems with our products, manufacturers, or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions. Furthermore, any limitation on indicated uses for a product candidate or our ability to manufacture and promote a product candidate could significantly and adversely affect our business, results of operations, and financial condition.

In addition, the FDA and other non-U.S. regulatory authorities may change their policies and additional regulations may be enacted that could prevent or delay marketing approval or clearance of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we would likely not be permitted to market our future product candidates and we may not achieve or sustain profitability, which would materially impair our ability to generate anticipated revenues.

Even if we receive regulatory approval or clearance to market our product candidates, the market may not be receptive to our products.

Even if our product candidates obtain marketing approval or clearance, our products may not gain market acceptance among physicians, patients, health care payors and/or the medical community. We believe that the degree of market acceptance will depend on a number of factors, including:

- timing of market introduction of competitive products;
- safety and efficacy of our product compared to other products;
- prevalence and severity of any side effects;
- potential advantages or disadvantages over alternative treatments;
- strength of marketing and distribution support;
- price of our products, both in absolute terms and relative to alternative treatments;
- availability of coverage and reimbursement from government and other third-party payors;
- potential product liability claims;
- limitations or warnings contained in a product s regulatory authority-approved labeling; and
- changes in the standard of care for the targeted indications for any of our product candidates, which could reduce the marketing impact of any claims that we could make following applicable regulatory authority approval.

In addition, our efforts to educate the medical community and health care payors on the benefits of our product candidates may require significant resources and may never be successful. If our products do not gain market acceptance, it would have a material adverse effect on our business, results of operations, and financial condition.

If our future product candidates are not covered and eligible for reimbursement from government and third party payors, we may not be able to generate significant revenue or achieve or sustain profitability.

The coverage and reimbursement status of newly approved or cleared drugs, diagnostic tests or medical devices is uncertain, and failure of our pharmaceutical and diagnostic products and procedures using our medical devices to be adequately covered by insurance and eligible for adequate reimbursement could limit our ability to market any future product candidates we may develop and decrease our ability to generate revenue from any of our existing and future product candidates that may be approved or cleared.

There is significant uncertainty related to the third-party coverage and reimbursement of newly approved or cleared drugs, diagnostic products, or medical devices. Many medical devices are not directly covered by insurance; instead, the procedure using the device is subject to a coverage determination by the insurer. The commercial success of our existing and future product candidates in both domestic and international markets will depend in part on the availability of coverage and adequate reimbursement from third-party payors, including government payors, such as the Medicare and Medicaid programs, managed care organizations, and other third-party payors. The government and other third-party payors are increasingly attempting to contain health care costs by limiting both insurance coverage and the level of reimbursement for new drugs, diagnostic tests, or devices and, as a result, they may not cover or provide adequate payment for our product candidates. These payors may conclude that our product

candidates are less safe, less effective, or less cost-effective than existing or later-introduced products. These payors may also conclude that the overall cost of the procedure using one of our devices exceeds the overall cost of the competing procedure using another type of device, and third-party payors may not approve our product candidates for insurance coverage and adequate reimbursement. The failure to obtain coverage and adequate or any reimbursement for our product candidates, or health care cost containment initiatives that limit or restrict reimbursement for our product candidates, may reduce any future product revenue. Even though a drug (not administered by a physician) may be approved by the FDA, this does not mean that a Prescription Drug Plan, or PDP, a private insurer operating under Medicare part D, will list that drug on its formulary or will set a reimbursement level. PDPs are not required to make every FDA-approved drug available on their formularies. If our drug products are not listed on sufficient number of PDP formularies or if the PDPs levels of reimbursement are inadequate, the Company s business, results of operations, and financial condition could be materially adversely affected.

If we fail to attract and retain key management and scientific personnel, we may be unable to successfully develop or commercialize our product candidates.

We will need to expand and effectively manage our managerial, operational, financial, development, and other resources in order to successfully pursue our research, development, and commercialization efforts for our product candidates. Our success depends on our continued ability to attract, retain, and motivate highly qualified management and pre-clinical and clinical personnel. The loss of the services or support of any of our senior management, particularly Dr. Phillip Frost, our Chairman of the Board and Chief Executive Officer, could delay or prevent the development and commercialization of our product candidates. We do not maintain key man insurance policies on the lives of any of our employees. We will need to hire additional personnel as we continue to expand our research and development activities and build a sales and marketing function.

We have scientific and clinical advisors who assist us in formulating our research, development, and clinical strategies. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. In addition, these advisors may have arrangements with other companies to assist those companies in developing products or technologies that may compete with ours.

We may not be able to attract or retain qualified management and scientific personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical, medical device, and other similar businesses. If we are unable to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will impede significantly the achievement of our research and development objectives, our ability to raise additional capital and our ability to implement our business strategy, which will adversely affect our business, results of operations and financial condition. In particular, if we lose any members of our senior management team, we may not be able to find suitable replacements in a timely fashion or at all and our business may be harmed as a result.

As we evolve from a company primarily involved in development to a company also involved in commercialization, we may encounter difficulties in managing our growth and expanding our operations successfully.

As we advance our product candidates through clinical trials, research, and development we will need to expand our development, regulatory, manufacturing, marketing, and sales capabilities or contracts with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with such third parties, as well as additional collaborators and suppliers. Maintaining these relationships and managing our future growth will impose significant added responsibilities on members of our management. We must be able to: manage our development efforts effectively; manage our clinical trials effectively; hire, train and integrate additional management, development, administrative and sales and marketing personnel; improve our managerial, development,

operational and finance systems; implement and manage an effective marketing strategy; and expand our facilities, all of which may impose a strain on our administrative and operational infrastructure.

Furthermore, we may acquire additional businesses, products or product candidates that complement or augment our existing business. Integrating any newly acquired business or product could be expensive and time-consuming. We may not be able to integrate any acquired business or product successfully or operate any acquired business profitably. Our future financial performance will depend, in part, on our ability to manage any future growth effectively and our ability to integrate any acquired businesses. We may not be able to accomplish these tasks, and

our failure to accomplish any of them could prevent us from successfully growing our company, which would have a material adverse effect on our business, results of operations and financial condition.

If we fail to acquire and develop other products or product candidates at all or on commercially reasonable terms, we may be unable to diversify or grow our business.

We intend to continue to rely on acquisitions and in-licensing as the source of our products and product candidates for development and commercialization. The success of this strategy depends upon our ability to identify, select, and acquire pharmaceutical and diagnostic products, drug delivery technologies, and medical device product candidates. Proposing, negotiating, and implementing an economically viable product acquisition or license is a lengthy and complex process. We compete for partnering arrangements and license agreements with pharmaceutical, biotechnology and medical device companies, and academic research institutions. Our competitors may have stronger relationships with third parties with whom we are interested in collaborating and/or may have more established histories of developing and commercializing products. Most of our competitors also have substantially greater financial and other resources than us. As a result, our competitors may have a competitive advantage in entering into partnering arrangements with such third parties, as such partnering arrangements are often decided in an auction process in which the highest bidder wins. In addition, even if we find promising product candidates, and generate interest in a partnering or strategic arrangement to acquire such product candidates, we may not be able to acquire rights to additional product candidates or approved products on terms that we find acceptable, or at all.

We expect that any product candidate to which we acquire rights will require additional development efforts prior to commercial sale, including extensive clinical testing and approval or clearance by the FDA and other non-U.S. regulatory authorities. All product candidates are subject to the risks of failure inherent in pharmaceutical, diagnostic test or medical device product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. Even if the product candidates are approved or cleared for marketing, we cannot be sure that they would be capable of economically feasible production or commercial success. If we fail to acquire or develop other product candidates that are capable of economically feasible production and commercial success, our business, results of operations and financial condition and cash flows may be materially adversely affected.

We have no experience or capability manufacturing large clinical-scale or commercial-scale products and have no pharmaceutical manufacturing facility other than our facility in Guadalajara, Mexico; we therefore rely on third parties to manufacture and supply our pharmaceutical product candidates.

If our manufacturing partners are unable to produce our products in the amounts that we require, we may not be able to establish a contract and obtain a sufficient alternative supply from another supplier on a timely basis and in the quantities we require. We expect to continue to depend on third-party contract manufacturers for the foreseeable future.

Our product candidates require precise, high quality manufacturing. Any of our contract manufacturers will be subject to ongoing periodic unannounced inspection by the FDA and other non-U.S. regulatory authorities to ensure strict compliance with QSR regulations for devices or cGMPs for drugs, and other applicable government regulations and corresponding standards relating to matters such as testing, quality control, and documentation procedures. If our contract manufacturers fail to achieve and maintain high manufacturing standards in compliance with QSR or cGMPs, we may experience manufacturing errors resulting in patient injury or death, product recalls or withdrawals, delays or interruptions of production or failures in product testing or delivery, delay or prevention of filing or approval of marketing applications for our products, cost overruns, or other problems that could seriously harm our business.

Any performance failure on the part of our contract manufacturers could delay clinical development or regulatory approval or clearance of our product candidates or commercialization of our future product candidates, depriving us of potential product revenue and resulting in additional losses. In addition, our dependence on a third party for manufacturing may adversely affect our future profit margins. Our ability to replace an existing manufacturer may be difficult because the number of potential manufacturers is limited and the FDA must approve any replacement manufacturer before it can begin manufacturing our product candidates. Such approval would result in additional non-clinical testing and compliance inspections. It may be difficult or impossible for us to identify and engage a replacement manufacturer on acceptable terms in a timely manner, or at all.

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We currently have limited marketing staff and no pharmaceutical or diagnostic sales or distribution capabilities in the United States. If we are unable to develop our sales, marketing and distribution capability on our own or through collaborations with marketing partners, we will not be successful in commercializing our pharmaceutical or diagnostic product candidates in the United States.

We currently have no pharmaceutical or diagnostic test marketing, sales or distribution capabilities other than through our Mexican and Chilean subsidiaries for sales in those countries. If our pharmaceutical product candidates are approved, we intend to establish our sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time-consuming. Any failure or delay in the development of any of our internal sales, marketing, and distribution capabilities would adversely impact the commercialization of our products. With respect to our existing and future pharmaceutical product candidates, we may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. To the extent that we enter into co-promotion or other licensing arrangements, our product revenue is likely to be lower than if we directly marketed or sold our products. In addition, any revenue we receive will depend in whole or in part upon the efforts of such third parties, which may not be successful and are generally not within our control. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our existing and future product candidates. If we are not successful in commercializing our existing and future product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

Independent clinical investigators and contract research organizations that we engage to conduct our clinical trials may not be diligent, careful or timely.

We depend on independent clinical investigators to conduct our clinical trials. Contract research organizations may also assist us in the collection and analysis of data. These investigators and contract research organizations will not be our employees, and we will not be able to control, other than by contract, the amount of resources, including time, that they devote to products that we develop. If independent investigators fail to devote sufficient resources to the development of product candidates or clinical trials, or if their performance is substandard, it will delay the marketing approval or clearance and commercialization of any products that we develop. Further, the FDA requires that we comply with standards, commonly referred to as good clinical practice, for conducting, recording and reporting clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial subjects are protected. If our independent clinical investigators and contract research organizations fail to comply with good clinical practice, the results of our clinical trials could be called into question and the clinical development of our product candidates could be delayed. Failure of clinical investigators or contract research organizations to meet their obligations to us or comply with federal regulations and good clinical practice procedures could adversely affect the clinical development of our product candidates and harm our business, results of operations, and financial condition.

The success of our business may be dependent on the actions of our collaborative partners.

We expect to enter into collaborative arrangements with established multi-national pharmaceutical and medical device companies, which will finance or otherwise assist in the development, manufacture and marketing of products incorporating our technology. We anticipate deriving some revenues from research and development fees, license fees, milestone payments, and royalties from collaborative partners. Our prospects, therefore, may depend to some extent upon our ability to attract and retain collaborative partners and to develop technologies and products that meet the requirements of prospective collaborative partners. In addition, our collaborative partners may have the right to abandon research projects, guide strategy regarding prosecution of relevant patent applications and terminate applicable agreements, including funding obligations, prior to or upon the expiration of the agreed-upon research

terms. There can be no assurance that we will be successful in establishing collaborative arrangements on acceptable terms or at all, that collaborative partners will not terminate funding before completion of projects, that our collaborative arrangements will result in successful product commercialization, or that we will derive any revenues from such arrangements. To the extent that we are unable to develop and maintain collaborative arrangements, we would need substantial additional capital to undertake research, development, and commercialization activities on our own.

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Our license agreement with TESARO, Inc. is important to our business. If TESARO does not successfully develop and commercialize rolapitant, our business could be adversely affected.

In December 2010, we exclusively out-licensed the development, manufacture and commercialization of rolapitant to TESARO, Inc., an oncology-focused biopharmaceutical company founded by executives with a demonstrated track record in launching successful products for the CINV market. TESARO is initially pursuing development and commercialization of rolapitant for CINV. Under the terms of the license, we are eligible to receive payments of up to $121.0 million, including an up-front payment of $6.0 million, and additional payments based upon net sales and achievement of specified regulatory and commercialization milestones. In addition, TESARO will pay us double digit tiered royalties on sales of licensed product. Further, we will share with TESARO future profits from the commercialization of licensed products in Japan, and we will have an option to market the products in Latin America. If TESARO fails to successfully develop and commercialize rolapitant, we may not receive any milestone or royalty payments under the license agreement, which could have a material adverse impact on our financial condition.

If we are unable to obtain and enforce patent protection for our products, our business could be materially harmed.

Our success depends, in part, on our ability to protect proprietary methods and technologies that we develop or license under the patent and other intellectual property laws of the United States and other countries, so that we can prevent others from unlawfully using our inventions and proprietary information. However, we may not hold proprietary rights to some patents required for us to commercialize our product candidates. Because certain U.S. patent applications are confidential until patents issue, such as applications filed prior to November 29, 2000, or applications filed after such date for which nonpublication has been requested, third parties may have filed patent applications for technology covered by our pending patent applications without our being aware of those applications, and our patent applications may not have priority over those applications. For this and other reasons, we or our third-party collaborators may be unable to secure desired patent rights, thereby losing desired exclusivity. If licenses are not available to us on acceptable terms, we may not be able to market the affected products or conduct the desired activities, unless we challenge the validity, enforceability, or infringement of the third-party patent or otherwise circumvent the third-party patent.

Our strategy depends on our ability to rapidly identify and seek patent protection for our discoveries. In addition, we will rely on third-party collaborators to file patent applications relating to proprietary technology that we develop jointly during certain collaborations. The process of obtaining patent protection is expensive and time-consuming. If our present or future collaborators fail to file and prosecute all necessary and desirable patent applications at a reasonable cost and in a timely manner, our business will be adversely affected. Despite our efforts and the efforts of our collaborators to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary.

The issuance of a patent does not guarantee that it is valid or enforceable. Any patents we have obtained, or obtain in the future, may be challenged, invalidated, unenforceable, or circumvented. Moreover, the U.S. Patent and Trademark Office, or USPTO, may commence interference proceedings involving our patents or patent applications. In addition, court decisions may introduce uncertainty in the enforceability or scope of patents owned by biotechnology, pharmaceutical, and medical device companies. Any challenge to, finding of unenforceability or invalidation or circumvention of, our patents or patent applications would be costly, would require significant time and attention of our management, and could have a material adverse effect on our business, results of operations and financial condition.

Our pending patent applications may not result in issued patents. The patent position of pharmaceutical, biotechnology, and medical device companies, including ours, is generally uncertain and involves complex legal and

factual considerations. The standards that the U.S. Patent and Trademark Office and its foreign counterparts use to grant patents are not always applied predictably or uniformly and can change. There is also no uniform, worldwide policy regarding the subject matter and scope of claims granted or allowable in pharmaceutical, biotechnology, or medical device patents. Accordingly, we do not know the degree of future protection for our proprietary rights or the breadth of claims that will be allowed in any patents issued to us or to others. The legal systems of certain countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Therefore, the enforceability or scope of our owned or licensed patents in the United States or in foreign countries cannot be predicted with certainty, and, as a result, any patents that we own or license may not provide sufficient protection against competitors. We may not be able to obtain or

maintain patent protection for our pending patent applications, those we may file in the future, or those we may license from third parties, including the University of Pennsylvania, the University of Texas Southwestern Medical Center and Academia Sinica.

While we believe that our patent rights are enforceable, we cannot assure you that any patents that have issued, that may issue, or that may be licensed to us will be enforceable or valid, or will not expire prior to the commercialization of our product candidates, thus allowing others to more effectively compete with us. Therefore, any patents that we own or license may not adequately protect our product candidates or our future products, which could have a material adverse effect on our business, results of operations, and financial condition.

We do not have an exclusive arrangement in place with The Scripps Research Institute or Dr. Tom Kodadek with respect to technology or intellectual property that may be material to our business. If any such technology or intellectual property is developed by The Scripps Research Institute or its employees, including Dr. Kodadek, and we are unable to license such technology or intellectual property, or such technology or intellectual property is licensed to or acquired by other parties, our business and competitive position may be materially harmed.

Our success depends, in part, on our ability to develop and protect proprietary methods, products and technologies. Dr. Tom Kodadek, who currently serves as our Director of Chemistry & Molecular Biology is a staff member and employee of The Scripps Research Institute, or TSRI, a private, non-profit research organization. Dr. Kodadek, as our consultant, supervises our research and development efforts with respect to our molecular diagnostics program, and the creation of intellectual property that is important to our business. We have entered into consulting arrangements with TSRI and Dr. Kodadek, with respect to Dr. Kodadek s services to us. We have the right to intellectual property resulting from Dr. Kodadek s services to us under these arrangements. However, we do not have an exclusive arrangement with Dr. Kodadek or TSRI, and Dr. Kodadek also provides services to TSRI and other third parties and may provide services to other third parties in the future. We do not have any rights to any technology or intellectual property that may be developed by TSRI and its employees, including Dr. Kodadek, outside of these arrangements. If TSRI or its employees, including Dr. Kodadek, develops technology or intellectual property that is material to our business and we are unable to license such technology or intellectual property on favorable terms, if at all, or such technology or intellectual property is licensed to or acquired by other parties, our business and competitive position may be harmed.

If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.

In addition to patent protection, we also rely on other proprietary rights, including protection of trade secrets, know-how, and confidential and proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we will seek to enter into confidentiality agreements with our employees, consultants, and collaborators upon the commencement of their relationships with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual s relationship with us be kept confidential and not disclosed to third parties. Our agreements with employees also generally provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property.

However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants, or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third

parties as to the rights in related inventions.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our confidential information. The disclosure of our trade secrets would impair our competitive position and may materially harm our business, financial condition, and results of operations.

We will rely heavily on licenses from third parties. Failure to comply with the provisions of these licenses could result in the loss of our rights under the license agreements.

Many of the patents and patent applications in our patent portfolio are not owned by us, but are licensed from third parties. For example, we rely on technology licensed from the University of Pennsylvania, UT Southwestern, and Academia Sinica, among others. Such license agreements give us rights for the commercial exploitation of the

patents resulting from the respective patent applications, subject to certain provisions of the license agreements. Failure to comply with these provisions could result in the loss of our rights under these license agreements. Our inability to rely on these patents and patent applications, which are the basis of our technology, would have a material adverse effect on our business, results of operations and financial condition.

We license patent rights to certain of our technology from third-party owners. If such owners do not properly maintain or enforce the patents underlying such licenses, our competitive position and business prospects will be harmed.

We have obtained licenses from, among others, the University of Pennsylvania, UT Southwestern, and Academia Sinica, that are necessary or useful for our business. In addition, we intend to enter into additional licenses of third-party intellectual property in the future. Although our goal is to obtain exclusivity in our licensing transactions, we cannot guarantee that no third parties will step forward and assert inventorship or ownership in our in-licensed patents. In some cases, we may rely on the assurances of our licensors that all ownership rights have been secured and that all necessary agreements are intact or forthcoming.

Our success will depend in part on our ability or the ability of our licensors to obtain, maintain, and enforce patent protection for our licensed intellectual property and, in particular, those patents to which we have secured exclusive rights in our field. We or our licensors may not successfully prosecute the patent applications which are licensed to us. Even if patents issue in respect of these patent applications, we or our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we have licensed, other companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business, results of operations and financial condition.

Some jurisdictions may require us, or those from whom we license patents, to grant licenses to third parties. Such compulsory licenses could be extended to include some of our product candidates, which may limit our potential revenue opportunities.

Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, most countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may be limited to monetary relief from an infringement and may be unable to enjoin infringement, which could materially diminish the value of the patent. If we or those from who we license patents are required to issue compulsory licenses, it could materially adversely affect our business, results of operation and financial condition.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties.

Other entities may have or obtain patents or proprietary rights that could limit our ability to develop, manufacture, use, sell, offer for sale or import products, or impair our competitive position. In addition, other entities may have or obtain patents or proprietary rights that cover our current research and preclinical studies. While there are statutory exemptions to patent infringement for those who are using third party patented technology in the process of pursuing FDA regulatory approval, the U.S. case law pertaining to such exemptions changes over time. Lawsuits involving such exemptions are very fact intensive and it is currently unclear under U.S. case law whether preclinical studies would always qualify for such an exemption, and whether such exemptions would apply to research tools. To the extent that our current research and preclinical studies may be covered by the patent rights of others, the risk of suit may continue after such patents expire because the statute of limitations for patent infringement runs for six years. To the extent that a third party develops and patents technology that covers our products, we may be required to obtain

licenses to that technology, which licenses may not be available or may not be available on commercially reasonable terms, if at all. If licenses are not available to us on acceptable terms, we will not be able to market the affected products or conduct the desired activities, unless we challenge the validity, enforceability or infringement of the third-party patent, or circumvent the third-party patent, which would be costly and would require significant time and attention of our management. Third parties may have or obtain by license or assignment valid and enforceable patents or proprietary rights that could block us from developing products using our technology. Our failure to obtain a license to any technology that we require may materially harm our business, financial condition, and results of operations.

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If we become involved in patent litigation or other proceedings related to a determination of rights, we could incur substantial costs and expenses, substantial liability for damages or be required to stop our product development and commercialization efforts.

Third parties may sue us for infringing their patent rights. Likewise, we may need to resort to litigation to enforce a patent issued or licensed to us or to determine the scope and validity of proprietary rights of others. In addition, a third-party may claim that we have improperly obtained or used its confidential or proprietary information. Furthermore, in connection with our third-party license agreements, we generally have agreed to indemnify the licensor for costs incurred in connection with litigation relating to intellectual property rights. The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial, and the litigation would divert our management s efforts. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue our operations. Our involvement in patent litigation and other proceedings could have a material adverse effect on our business, results of operations, and financial condition.

If any parties successfully claim that our creation or use of proprietary technologies infringes upon their intellectual property rights, we might be forced to pay damages, potentially including treble damages, if we are found to have willfully infringed on such parties patent rights. In addition to any damages we might have to pay, a court could require us to stop the infringing activity or obtain a license. Any license required under any patent may not be made available on commercially acceptable terms, if at all. In addition, such licenses are likely to be non-exclusive and, therefore, our competitors may have access to the same technology licensed to us. If we fail to obtain a required license and are unable to design around a patent, we may be unable to effectively market some of our technology and products, which could limit our ability to generate revenues or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations.

Adverse results in material litigation matters or governmental inquiries could have a material adverse effect upon our business and financial condition.

We may from time to time become subject in the ordinary course of business to material legal action related to, among other things, intellectual property disputes, professional liability, contractual and employee-related matters, as well as inquiries from governmental agencies and Medicare or Medicaid carriers requesting comment and information on allegations of billing irregularities and other matters that are brought to their attention through billing audits, third parties or other sources. The health care industry is subject to substantial federal and state government regulation and audit. Legal actions could result in substantial monetary damages as well as damage to the Company s reputation with customers, which could have a material adverse effect upon our results of operations and financial position.

Medicare legislation and future legislative or regulatory reform of the health care system may affect our ability to sell our products profitably.

In the United States, there have been a number of legislative and regulatory initiatives, at both the federal and state government levels, to change the healthcare system in ways that, if approved, could affect our ability to sell our products profitably. While many of the proposed policy changes require congressional approval to implement, we cannot assure you that reimbursement payments under governmental and private third party payer programs will remain at levels comparable to present levels or will be sufficient to cover the costs allocable to patients eligible for reimbursement under these programs. Any changes that lower reimbursement rates under Medicare, Medicaid or private pay programs could negatively affect our business.

In addition, there are efforts underway to attempt the passage of significant healthcare reform legislation. Any such health care reform may have an adverse effect on our business through decreasing funds available to our customers and to us. Limitations or restrictions on Medicare and Medicaid payments to our customers could adversely impact the liquidity of our customers, resulting in their inability to pay us, or to timely pay us, for our products and services. This inability could have a material adverse effect on our financial position, results of operations and liquidity.

We are unable to predict what additional legislation or regulation, if any, relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect such legislation or regulation would have on our business.

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Risks Related To International Operations

Failure to obtain regulatory approval outside the United States will prevent us from marketing our product candidates abroad.

We intend to market certain of our existing and future product candidates in non-U.S. markets. In order to market our existing and future product candidates in the European Union and many other non-U.S. jurisdictions, we must obtain separate regulatory approvals. We have had limited interactions with non-U.S. regulatory authorities, the approval procedures vary among countries and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval or clearance. Approval or clearance by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one or more non-U.S. regulatory authority does not ensure approval by other regulatory authorities in other countries or by the FDA. The non-U.S. regulatory approval process may include all of the risks associated with obtaining FDA approval or clearance. We may not obtain non-U.S. regulatory approvals on a timely basis, if at all. We may not be able to file for non-U.S. regulatory approvals and may not receive necessary approvals to commercialize our existing and future product candidates in any market, which would have a material adverse effect on our business, results of operations and financial condition.

Non-U.S. governments often impose strict price controls, which may adversely affect our future profitability.

We intend to seek approval to market certain of our existing and future product candidates in both the United States and in non-U.S. jurisdictions. If we obtain approval in one or more non-U.S. jurisdictions, we will be subject to rules and regulations in those jurisdictions relating to our product. In some countries, particularly countries of the European Union, each of which has developed its own rules and regulations, pricing is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug or medical device candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our existing and future product candidates to other available products. If reimbursement of our future product candidates is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may be unable to generate revenues and achieve or sustain profitability, which would have a material adverse effect on our business, results of operations and financial condition.

We may be exposed to liabilities under the Foreign Corrupt Practices Act, and any determination that we violated the Foreign Corrupt Practices Act could have a material adverse effect on our business.

We are subject to the Foreign Corrupt Practice Act, or FCPA, and other laws that prohibit U.S. companies or their agents and employees from providing anything of value to a foreign official or political party for the purposes of influencing any act or decision of these individuals in their official capacity to help obtain or retain business, direct business to any person or corporate entity or obtain any unfair advantage. We have operations and agreements with third parties and we generate sales internationally. Our international activities create the risk of unauthorized and illegal payments or offers of payments by our employees, consultants, sales agents or distributors, even though they may not always be subject to our control. We discourage these practices by our employees and agents. However, our existing safeguards and any future improvements may prove to be less than effective, and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Any failure by us to adopt appropriate compliance procedures and ensure that our employees and agents comply with the FCPA and applicable laws and regulations in foreign jurisdictions could result in substantial penalties or restrictions on our ability to conduct business in certain foreign jurisdictions.

Violations of the FCPA may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition. In addition, the U.S. government may seek to hold our Company liable for successor liability FCPA violations committed by companies in which we invest or that we acquire.

We are subject to risks associated with doing business globally.

Our operations, both within and outside the United States, are subject to risks inherent in conducting business globally and under the laws, regulations and customs of various jurisdictions and geographies. These risks include fluctuations in currency exchange rates, changes in exchange controls, loss of business in government tenders that are held annually in many cases, nationalization, increasingly complex labor environments, expropriation and other governmental actions, changes in taxation, including legislative changes in U.S. and international taxation of income

earned outside of the United States, importation limitations, export control restrictions, violations of U.S. or local laws, including the U.S. Foreign Corrupt Practices Act, dependence on a few government entities as customers, pricing restrictions, economic destabilization, political and economic instability, disruption or destruction in a significant geographic region due to the location of manufacturing facilities, distribution facilities or customers regardless of cause, including war, terrorism, riot, civil insurrection or social unrest, or natural or man-made disasters, including famine, flood, fire, earthquake, storm or disease. Failure to comply with the laws and regulations that affect our global operations, could have an adverse effect on our business, financial condition or results of operations.

Risks Related To Acquisitions

Acquisitions, investments and strategic alliances that we have made or may make in the future may use significant resources, result in disruptions to our business or distractions of our management, may not proceed as planned, and could expose us to unforeseen liabilities. We intend to continue to expand our business through the acquisition of, investments in and strategic alliances with companies, technologies, products, and services. Acquisitions, investments and strategic alliances involve a number of special problems and risks, including, but not limited to:

- difficulty integrating acquired technologies, products, services, operations, and personnel with the existing businesses;
- diversion of management s attention in connection with both negotiating the acquisitions and integrating the businesses;
- strain on managerial and operational resources as management tries to oversee larger operations;
- difficulty implementing and maintaining effective internal control over financial reporting at businesses that we acquire, particularly if they are not located near our existing operations;
- exposure to unforeseen liabilities of acquired companies;
- potential costly and time-consuming litigation, including stockholder lawsuits;
- potential issuance of securities to equity holders of the company being acquired with rights that are superior to the rights of holders of our common stock, or which may have a dilutive effect on our stockholders;
- the need to incur additional debt or use cash; and
- the requirement to record potentially significant additional future operating costs for the amortization of intangible assets.

As a result of these or other problems and risks, businesses we acquire may not produce the revenues, earnings, or business synergies that we anticipated, and acquired products, services, or technologies might not perform as we expected. As a result, we may incur higher costs and realize lower revenues than we had anticipated. We may not be able to successfully address these problems and we cannot assure you that the acquisitions will be successfully identified and completed or that, if acquisitions are completed, the acquired businesses, products, services, or technologies will generate sufficient revenue to offset the associated costs or other negative effects on our business.

Any of these risks can be greater if an acquisition is large relative to our size. Failure to manage effectively our growth through acquisitions could adversely affect our growth prospects, business, results of operations, financial condition and cash flows.

Funding may not be available for us to continue to make acquisitions, investments and strategic alliances in order to grow our business.

We have made and anticipate that we may continue to make acquisitions, investments and strategic alliances with complementary businesses, technologies, products and services to expand our business. Our growth plans rely, in part, on the successful completion of future acquisitions. At any particular time, we may need to raise substantial additional capital or to issue additional equity to finance such acquisitions, investments, and strategic alliances. There is no assurance that we will be able to secure additional funding on acceptable terms, or at all, or obtain the stockholder approvals necessary to issue additional equity to finance such acquisitions, investments, and strategic alliances. If we are unsuccessful in obtaining the financing, our business would be adversely impacted.

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Risks Related To Ownership Of Our Common Stock

The market price of our common stock may fluctuate significantly.

The market price of our common stock may fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- the announcement of new products or product enhancements by us or our competitors;
- results of our clinical trials and other development efforts;
- developments concerning intellectual property rights and regulatory approvals;
- variations in our and our competitors results of operations;
- changes in earnings estimates or recommendations by securities analysts, if our common stock is covered by analysts;
- developments in the biotechnology, pharmaceutical, and medical device industry;
- the results of product liability or intellectual property lawsuits;
- future issuances of common stock or other securities, including debt;
- sales of stock by our officers, directors or affiliates;
- the addition or departure of key personnel;
- announcements by us or our competitors of acquisitions, investments, or strategic alliances; and
- general market conditions and other factors, including factors unrelated to our operating performance.

Further, the stock market in general, and the market for biotechnology, pharmaceutical, diagnostic, and medical device companies in particular, has recently experienced extreme price and volume fluctuations. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock.

Trading of our common stock is limited and restrictions imposed by securities regulation and certain lockup agreements may further reduce our trading, making it difficult for our stockholders to sell shares.

Our common stock began trading on the American Stock Exchange, now known as the NYSE Amex, in June 2007. To date, the liquidity of our common stock is limited, not only in terms of the number of shares that can be bought and sold at a given price, but also through delays in the timing of transactions and changes in security analyst and media coverage, if at all.

A substantial percentage of the outstanding shares of our common stock (including outstanding shares of our preferred stock on an as converted basis) are restricted securities and/or are subject to lockup agreements which limit sales for a period of time. These factors may result in lower prices for our common stock than might otherwise be obtained and

could also result in a larger spread between the bid and ask prices for our common stock. In addition, without a large float, our common stock is less liquid than the stock of companies with broader public ownership and, as a result, the trading prices of our common stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate his investment in our common stock. Further, the limited liquidity could be an indication that the trading price is not reflective of the actual fair market value of our common stock. Trading of a relatively small volume of our common stock may have a greater impact on the trading price of our stock than would be the case if our public float were larger.

Future sales of our common stock could reduce our stock price.

Some or all of the restricted shares of our common stock issued to former stockholders of Froptix and Acuity in connection with the acquisition or held by other of our stockholders may be offered from time to time in the open market pursuant to an effective registration statement, or beginning April 2, 2008, pursuant to Rule 144. In addition, as described herein, a substantial number of our shares of common stock were subject to lockup agreements which expired on March 27, 2009. We have also issued or agreed to issue a substantial number of securities in private placement transactions with two year lockup restrictions expiring in each of December 2009, August 2010, and February 2011. In connection with our Series D Preferred Stock offering, shares were issued with a three year lockup restriction that expires in September 2012. Sales of a substantial number of shares of our common stock in the public market pursuant to Rule 144 or after the lockup agreements lapse, or the perception that such sales could occur, could adversely affect the price of our common stock.

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Directors, executive officers, principal stockholders and affiliated entities own a majority of our capital stock, and they may make decisions that you do not consider to be in the best interests of our stockholders.

As of December 31, 2010, our directors, executive officers, principal stockholders, and affiliated entities beneficially owned, in the aggregate a majority of our outstanding voting securities. Frost Gamma Investments Trust, or the Gamma Trust, of which Phillip Frost, M.D., the Company s Chairman and CEO, is the sole trustee, is deemed to beneficially own in the aggregate approximately 48% of the Company s common stock as of December 31, 2010. As a result, Dr. Frost acting alone or with other members of management, would have the ability to control the election of our Board of Directors, the adoption or amendment of provisions in the Company s Certificate of Incorporation, the approval of mergers and other significant corporate transactions, and the outcome of issues requiring approval by our stockholders. This concentration of ownership may also have the effect of delaying or preventing a change in control of our company that may be favored by other stockholders. This could prevent transactions in which stockholders might otherwise recover a premium for their shares over current market prices. One or more of our directors and officers or their affiliated entities may purchase shares of common stock in the offering.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and operating results. In addition, current and potential stockholders could lose confidence in our financial reporting, which could have a material adverse effect on the price of our common stock.

Section 404 of the Sarbanes-Oxley Act of 2002 requires annual management assessments of the effectiveness of our internal control over financial reporting and a report by our independent registered public accounting firm on the effectiveness of internal control over financial reporting as of December 31, 2010. We are required to report, among other things, control deficiencies that constitute material weaknesses or changes in internal control that, or that are reasonably likely to, materially affect internal control over financial reporting. A material weakness is a significant deficiency or combination of significant deficiencies that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. In connection with our November 2010 restatement of our previously issued consolidated financial statements as of and for the three and nine months ended September 30, 2009, and as of and for the year ended December 31, 2009, we determined that a deficiency in controls relating to the accounting for a beneficial conversion feature on, and the classification of, convertible preferred stock existed as of the previous assessment date and further concluded that such a deficiency represented a material weakness as of December 31, 2009. As a result, we concluded that our internal control over financial reporting was not effective as of December 31, 2009. Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. If we cannot provide reliable financial reports or prevent fraud, our results of operation could be harmed. Our failure to maintain the effective internal control over financial reporting could cause the cost related to remediation to increase and could cause our stock price to decline. In addition, we may not be able to accurately report our financial results, may be subject to regulatory sanction, and investors may lose confidence in our financial statements. We can provide no assurance that we will at all times in the future be able to report that our internal control is effective.

Compliance with changing regulations concerning corporate governance and public disclosure may result in additional expenses.

There have been changing laws, regulations, and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new regulations promulgated by the Securities and Exchange Commission and rules promulgated by the NYSE Amex, the other national securities exchanges and the NASDAQ. These new or changed laws, regulations, and standards are subject to varying interpretations in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and

higher costs necessitated by ongoing revisions to disclosure and governance practices. As a result, our efforts to comply with evolving laws, regulations, and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Our board members, Chief Executive Officer, Chief Financial Officer, and Principal Accounting Officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified board members and executive officers, which could harm our business. If our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies, we could be subject to liability under applicable laws

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or our reputation may be harmed, which could materially adversely affect our business, results of operations and financial condition.

The conversion of shares of our preferred stock or exercise of warrants we have issued may result in dilution to the holders of our common stock and cause the price of our common stock to decline.

As of December 31, 2010, we had 897,438 outstanding shares of Series A Preferred Stock and 1,209,677 outstanding shares of Series D Preferred Stock, which were convertible as of such date into 897,438 and 12,096,770 shares of our common stock, respectively. In addition, as of December 31, 2010, we had outstanding warrants to purchase 29,194,867 shares of our common stock. The conversion of outstanding shares of our Series A Preferred Stock and Series D Preferred Stock and the exercise of warrants may result in substantial dilution to our existing stockholders and could have a material adverse effect on our stock price. The possibility of the issuance of shares of our common stock upon the conversion of our preferred stock or the exercise of warrants could cause our stock price to decline as well. In addition, our preferred stockholders have dividend priority and liquidation preferences over shares of our common stock. Thus, the rights of the holders of common stock are and will be subject to, and may be adversely affected by, the rights of the holders of our preferred stock. As of December 31, 2010, our Series A Preferred Stock and Series D Preferred Stock had liquidation preferences of $2.5 million and $33.0 million, respectively.

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could significantly harm our business or the development of our product candidates and decrease the price of our common stock.

Investors in this offering will experience immediate and substantial dilution in the net tangible book value per share of the common stock they purchase.

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. See the section entitled Dilution in this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

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FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated herein and therein by reference, and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward-looking statements.

All statements, other than statements of historical fact, included or incorporated herein regarding our strategies, future operations, financial position, future revenues, projected costs, plans, prospects and objectives are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as anticipate, believe, could, estimate, expect, intend, may, plan, potential, predict, project, should, will, would and similar statements involve risks, uncertainties and other factors that may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. Risks, uncertainties and other factors that might cause or contribute to such differences include, but are not limited to, those discussed in the section entitled Risk Factors in this prospectus supplement. Given these risks, uncertainties and other factors, many of which are beyond our control, you should not place undue reliance on these forward-looking statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this prospectus supplement, even if new information becomes available in the future.

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USE OF PROCEEDS

We estimate that the net proceeds from the sale of 27,000,000 shares of common stock that we are offering will be approximately $96.4 million, or approximately $110.7 million if the underwriters exercise in full their option to purchase 4,050,000 additional shares of common stock, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We expect to use the net proceeds to us from the sale of the common stock offered by this prospectus supplement and the accompanying prospectus for general corporate purposes, including research and development expenses, clinical trials, acquisitions of new technologies or businesses, and other business opportunities. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short and long-term interest bearing instruments. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of the offering. Accordingly, we will retain broad discretion over the use of these proceeds.

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DILUTION

Our net tangible book value as of September 30, 2010 was approximately $3.9 million, or $0.02 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities and Series D Preferred Stock, by the number of shares of our common stock outstanding as of September 30, 2010. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of 27,000,000 shares of our common stock in this offering at the public offering price of $3.75 per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2010 would have been approximately $100.3 million, or $0.36 per share. This represents an immediate increase in net tangible book value of $0.34 per share to existing stockholders and immediate dilution in net tangible book value of $3.39 per share to new investors purchasing our common stock in this offering. The following table illustrates this dilution on a per share basis:

Public offering price per share		$ 3.75
Net tangible book value per share as of September 30, 2010	$ 0.02	
Increase per share attributable to new investors	0.34	
As adjusted net tangible book value per share as of September 30, 2010 after this offering		0.36
Dilution in net tangible book value per share to new investors		$ 3.39

If the underwriters exercise in full their option to purchase 4,050,000 additional shares of our common stock at the public offering price of $3.75 per share, the as adjusted net tangible book value after this offering would be $0.40 per share, representing an increase in net tangible book value of $0.38 per share to existing stockholders and immediate dilution in net tangible book value of $3.35 per share to new investors purchasing our common stock in this offering.

The above discussion and table are based on 255,313,174 shares outstanding as of September 30, 2010, and exclude as of such date:

- 14,723,100 shares of common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of $2.31 per share as of September 30, 2010;
- 11,133,725 shares of common stock reserved for issuance under our 2007 Equity Incentive Plan as of September 30, 2010;
- 955,029 shares of our common stock issuable upon conversion of outstanding shares of our Series A Preferred Stock as of September 30, 2010;
- 12,096,770 shares of our common stock issuable upon conversion of outstanding shares of our Series D Preferred Stock as of September 30, 2010; and
- 29,194,867 shares of our common stock subject to warrants outstanding at an exercise price of $0.89 per share.

To the extent that outstanding options or warrants are exercised, investors purchasing our common stock in this offering will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement dated March 9, 2011, by and among us and Jefferies & Company, Inc. and J.P. Morgan Securities LLC as representatives of the several underwriters, we have agreed to sell to the underwriters, and the underwriters have severally agreed to purchase from us the number of shares of our common stock indicated in the table below:

Underwriter	Number of Shares of Common Stock
Jefferies & Company, Inc.	9,787,500
J.P. Morgan Securities LLC	9,787,500
UBS Securities LLC	3,375,000
Lazard Capital Markets LLC	2,700,000
Ladenburg Thalmann & Co. Inc.	1,350,000
Total	27,000,000

Jefferies & Company, Inc. and J.P. Morgan Securities LLC are acting as joint book-running managers of this offering.

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares if any of them are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that they currently intend to make a market in our common stock. However, the underwriters are not obligated to do so and may discontinue any market-making activities at any time without notice. No assurance can be given as to the liquidity of the trading market for our common stock.

The underwriters are offering the shares of our common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of our common stock to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at that price less a concession not in excess of $0.12375 per share. After the offering, the public offering price and concession to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as

set forth on the cover page of this prospectus supplement.

The underwriters will not receive any underwriting discount or commissions on the sale of 5,333,000 shares of common stock to entities associated with certain stockholders, including two our of directors and executive officers.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering (other than in connection with the sale of 5,333,000 shares of common stock to entities associated with certain stockholders, including two our of directors and executive officers for which the underwriters will not receive any underwriting discount or

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commissions). Such amounts are shown assuming both no exercise and full exercise of the underwriters option to purchase additional shares.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	$ 3.75000	$ 3.75000	$ 101,250,000	$ 116,437,500
Underwriting discounts and commissions payable by us	$ 0.20625	$ 0.20625	$ 4,468,819	$ 5,304,131
Proceeds to us, before expenses	$ 3.54375	$ 3.54375	$ 96,781,181	$ 111,133,369

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $400,000.

Lazard Frères & Co. LLC referred this transaction to Lazard Capital Markets LLC and will receive a referral fee from Lazard Capital Markets LLC in connection therewith.

Listing

Our common stock is listed on the NYSE Amex under the trading symbol OPK.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an aggregate of 4,050,000 additional shares of our common stock from us at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter s initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total amount set forth on the cover page of this prospectus supplement.

No Sales of Similar Securities

We, our executive officers and directors and certain of our principal stockholders have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open put equivalent position within the meaning of Rule 16a-l(h) under the Securities Exchange Act of 1934, as amended, or

- otherwise dispose of any shares of our common stock, options or warrants to acquire shares of our common stock, or securities exchangeable or exercisable for or convertible into shares of our common stock currently or hereafter owned either of record or beneficially, or

- publicly announce an intention to do any of the foregoing for a period of 90 days after the date of this prospectus supplement without the prior written consent of Jefferies & Company, Inc. and J.P. Morgan Securities LLC.

These restrictions terminate after the close of trading of the shares of our common stock on and including the 90th day after the date of this prospectus supplement. However, subject to certain exceptions, in the event that either:

- during the last 17 days of the 90-day restricted period, we issue an earnings release or material news or a material event relating to us occurs, or

- prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period,

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then in each case the 90-day restricted period will be extended until the expiration of the 18-day period beginning on the date of the issuance of the earnings release or the occurrence of the material news or event, as applicable, unless Jefferies & Company, Inc. and J.P. Morgan Securities LLC waive, in writing, such extension.

Jefferies & Company, Inc. and J.P. Morgan Securities LLC may, in their sole discretion and at any time or from time to time before the termination of the 90-day period, without public notice, release all or any portion of the securities subject to lock-up agreements.

Stabilization

The underwriters have advised us that, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, certain persons participating in the offering may engage in transactions, including overallotment, stabilizing bids, syndicate covering transactions or the imposition of penalty bids, which may have the effect of stabilizing or maintaining the market price of our common stock at a level above that which might otherwise prevail in the open market. Overallotment involves syndicate sales in excess of the offering size, which creates a syndicate short position. Establishing short sales positions may involve either covered short sales or naked short sales. Covered short sales are sales made in an amount not greater than the underwriters option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares. Naked short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering. A stabilizing bid is a bid for the purchase of shares of our common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of our common stock. A syndicate covering transaction is the bid for or the purchase of shares of our common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriters purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if shares of our common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member. Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of our common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters websites and any information contained in any other website

maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

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Affiliations

Our Chairman of the Board of Directors and Chief Executive Officer, Dr. Phillip Frost, is the Chairman of the Board of Directors and principal shareholder of Ladenburg Thalmann Financial Services Inc., the parent company to Ladenburg Thalmann & Co. Inc., who is acting as co-manager for this offering. In addition, as of March 1, 2011, Dr. Frost and his affiliates beneficially own approximately 30.9% of Ladenburg Thalmann Financial Services Inc.

The underwriters or their affiliates from time to time may in the future provide investment banking, commercial lending and financial advisory services to us and our affiliates in the ordinary course of business. The underwriters and their affiliates, as applicable, will receive customary compensation in connection with such services. In the course of their businesses, the underwriters and their affiliates may actively trade our securities for their own account or for the accounts of customers, and, accordingly, the underwriters and their affiliates may at any time hold long or short positions in such securities.

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NOTICE TO INVESTORS

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (as defined below) (each, a Relevant Member State), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (a Relevant Implementation Date) an offer of our common stock to the public may not be made in that Relevant Member State prior to the publication of a prospectus in relation to our common stock which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that an offer of our common stock to the public in that Relevant Member State may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in the Relevant Member State:

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

- to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000 and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts;

- to fewer than 100 natural or legal persons per Relevant Member State (other than qualified investors as defined in the Prospectus Directive); or

- in any other circumstances falling within Article 3(2) of the Prospectus Directive.

However, no such offer of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer of our common stock to the public in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common stock to be offered so as to enable an investor to decide to purchase or subscribe our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State. The expression, Prospectus Directive, means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

United Kingdom

Shares of our common stock may not be offered or sold and will not be offered or sold to any persons in the United Kingdom other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or otherwise in circumstances which have not resulted or will not result in an offer to the public in the United Kingdom within the meaning of the Financial Services and Markets Act 2000, or the FSMA.

In addition, any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of shares of our common stock may only be communicated or caused to be communicated in circumstances in which Section 21(1) of the FSMA does not apply to us. Without limitation to

the other restrictions referred to herein, this prospectus supplement and the accompanying prospectus are directed only at (1) persons outside the United Kingdom or (2) persons who:

- are qualified investors as defined in section 86(7) of FSMA, being persons falling within the meaning of article 2.1(e)(i), (ii) or (iii) of the Prospectus Directive; and

- are either persons who fall within article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or Order, or are persons who fall within article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Order; or

- to whom they may otherwise lawfully be communicated in circumstances in which Section 21(1) of the FSMA does not apply.

Without limitation to the other restrictions referred to herein, any investment or investment activity to which this prospectus supplement and the accompanying prospectus relate is available only to, and will be engaged in only

with, such persons, and persons within the United Kingdom who receive this communication (other than persons who fall within (2) above) should not rely or act upon this communication.

Germany

Any offer or solicitation of securities within Germany must be in full compliance with the German Securities Prospectus Act (Wertpapierprospektgesetz WpPG). The offer and solicitation of securities to the public in Germany requires the publication of a prospectus that has to be filed with and approved by the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht BaFin). This prospectus supplement and the accompanying prospectus have not been and will not be submitted for filing and approval to the BaFin and, consequently, will not be published. Therefore, this prospectus supplement and the accompanying prospectus do not constitute a public offer under the German Securities Prospectus Act (Wertpapierprospektgesetz). This prospectus supplement and the accompanying prospectus, and any other document relating to our common stock, as well as any information contained therein, must therefore not be supplied to the public in Germany or used in connection with any offer for subscription of our common stock to the public in Germany, any public marketing of our common stock or any public solicitation for offers to subscribe for or otherwise acquire our common stock. This prospectus supplement and the accompanying prospectus, and other offering materials relating to the offer of our common stock, are strictly confidential and may not be distributed to any person or entity other than the designated recipients hereof.

Italy

This prospectus supplement and the accompanying prospectus have not been and will not be filed with or cleared by the Italian securities exchange commission (Commissione Nazionale per le societa e la Borsa the CONSOB) pursuant to Legislative Decree No. 58 of 24 February 1998 (as amended, the Finance Law) and to CONSOB Regulation No. 11971 of 14 May 1999 (as amended, the Issuers Regulation). Accordingly, copies of this prospectus supplement, the accompanying prospectus or any other document relating to our common stock may not be distributed, made available or advertised in Italy, nor may our common stock be offered, purchased, sold, promoted, advertised or delivered, directly or indirectly, to the public other than to (i) Professional Investors (such being the persons and entities as defined pursuant to article 31(2) of CONSOB Regulation No. 11522 of 1 July 1998, as amended, the Intermediaries Regulation) pursuant to article 100 of the Finance Law; or (ii) prospective investors where the offer of our common stock relies on the exemption from the investment solicitation rules pursuant to, and in compliance with the conditions set out by article 100 of the Finance Law and article 33 of the Issuers Regulation, or by any applicable exemption; provided that any such offer, sale, promotion, advertising or delivery of our common stock or distribution of the prospectus supplement or the accompanying prospectus, or any part thereof, or of any other document or material relating to our common stock in Italy is made: (a) by investment firms, banks or financial intermediaries authorized to carry out such activities in the Republic of Italy in accordance with the Finance Law, the Issuers Regulation, Legislative Decree No. 385 of 1 September 1993, the Intermediaries Regulation, and any other applicable laws and regulations; and (b) in compliance with any applicable notification requirement or duty which may, from time to time, be imposed by CONSOB, Bank of Italy or by any other competent authority.

France

This prospectus supplement and the accompanying prospectus have not been, and will not be, submitted to the clearance procedures of the Autorité des marchés financiers (the AMF) in France and may not be directly or indirectly released, issued or distributed to the public in France, or used in connection with any offer for subscription or sale of our common stock to the public in France, in each case within the meaning of Article L. 411-1 of the French Code monétaire et financier (the French Financial and Monetary Code). Shares of our common stock have not been, and will not be, offered or sold to the public in France, directly or indirectly, and will only be offered or sold in France (i) to qualified investors (investisseurs qualifiés) investing for their own account, in accordance with all applicable

rules and regulations, and in particular in accordance with Articles L. 411-2 and D. 411-2 of the French Financial and Monetary Code; (ii) to investment services providers authorized to engage in portfolio investment on behalf of third parties, in accordance with Article L.411-2 of the French Financial and Monetary Code; or (iii) in a transaction that, in accordance with all applicable rules and regulations, does not otherwise constitute an offer to the public (appel public à l épargne) in France within the meaning of

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Article L.411-1 of the French Financial and Monetary Code. This prospectus supplement and the accompanying prospectus are not to be further distributed or reproduced (in whole or in part) in France by any recipient, and this prospectus supplement and the accompanying prospectus have been distributed to the recipient on the understanding that such recipient is a qualified investor or otherwise meets the requirements set forth above, and will only participate in the issue or sale of shares of our common stock for their own account, and undertakes not to transfer, directly or indirectly, the shares of our common stock to the public in France, other than in compliance with all applicable laws and regulations and, in particular, with Articles L.411-1, L.411-2, D.411-1 and D.411-2 of the French Financial and Monetary Code.

Sweden

This prospectus supplement and the accompanying prospectus are not a prospectus under, and have not been prepared in accordance with the prospectus requirements provided for in, the Swedish Financial Instruments Trading Act [lagen (1991:980) om handel med finasiella instrument] or any other Swedish enactment. Neither the Swedish Financial Supervisory Authority nor any other Swedish public body has examined, approved or registered this prospectus supplement or the accompanying prospectus.

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LEGAL MATTERS

Holland & Knight LLP, Miami, Florida will pass upon the validity of the issuance of the common stock offered by this prospectus supplement and the accompanying prospectus. Certain legal matters relating to the offering will be passed upon for the underwriters by Cooley LLP, Palo Alto, California.

EXPERTS

The consolidated financial statements of OPKO Health, Inc. and subsidiaries appearing in OPKO Health, Inc. and subsidiaries Annual Report (Form 10-K/A) for the year ended December 31, 2009, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement or the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC s website at http://www.sec.gov. You may also read and copy any document we file at the SEC s Public Reference Room 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 the Public Reference Room.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus. Information contained in this prospectus supplement and the accompanying prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus supplement and the accompanying prospectus will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (other than information in current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of the prospectus supplement and prior to the termination of the offering of the common stock covered by this prospectus supplement (Commission File No. 333-172168):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2009 filed with the SEC on March 17, 2010, as amended by the First Amendment to Annual Report on Form 10-K filed with the SEC on November 10, 2010 and the Second Amendment to Annual Report on Form 10-K filed with the SEC on February 3, 2011;

- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed with the SEC on May 10, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed with the SEC on November 10, 2010;

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- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed with the SEC on August 9, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed with the SEC on November 10, 2010;

- our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed with the SEC on November 9, 2010;

- our Current Reports on Form 8-K filed with the SEC on February 18, 2010, April 15, 2010, May 7, 2010, June 1, 2010, November 9, 2010, December 14, 2010, February 1, 2011, and February 22, 2011, as amended by Form 8-K/A, filed with the SEC on February 22, 2011; and

- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2009 from our definitive proxy statement on Schedule 14A for our 2010 Annual Meeting of Stockholders filed with the SEC on April 27, 2010.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to OPKO Health, Inc., Attention: Corporate Secretary, 4400 Biscayne Boulevard, Miami, Florida 33137. Our telephone number is (305) 575-4100.

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PROSPECTUS

OPKO HEALTH, INC.

$250,000,000

Common Stock

We may from time to time offer to sell shares of our common stock. The aggregate public offering price of the securities that we may offer through this prospectus will be up to $250,000,000.

We will provide the specific terms of the securities offered by us in supplements to this prospectus at the time of sale. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement. Please read the prospectus and prospectus supplement carefully before you invest in our securities.

We may, from time to time, offer and sell these shares directly or through one or more underwriters, agents or dealers, through underwriting syndicates managed or co-managed by one or more underwriters, or directly to purchasers, on or off the NYSE Amex at prevailing market prices or at privately negotiated prices, on a continuous or delayed basis.

Our common stock is listed on the NYSE Amex under the trading symbol OPK. On February 10, 2011, the last reported sale price of our common stock was $4.51 per share on the NYSE Amex.

Investing in our securities involves certain risks. See Risk Factors on page 3.

We urge you to carefully read this prospectus and the accompanying prospectus supplement, together with the documents we incorporate by reference, which will describe the specific terms of the securities offered, before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February 11, 2011

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INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus and our consolidated financial statements and other documents incorporated by reference in this prospectus contain forward-looking statements that are subject to risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different than the results, performance or achievements expressed or implied by the forward-looking statements.

Forward-looking statements include statements about our expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not historical facts. Forward-looking statements can generally be identified by phrases such as believes, expects, potential, continues, may, should, seeks, predicts, anticipates, estimates, plans, could, designed, should be and other similar expressions that denote expectations of future or conditional events rather than statements of fact. Forward-looking statements also may relate to strategies, plans and objectives for, and potential results of, future operations, financial results, financial condition, business prospects, growth strategy and liquidity, and are based upon management s current plans and beliefs or current estimates of future results or trends. Our actual results could differ materially from those anticipated in forward-looking statements for many reasons, including the factors described in the sections entitled Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations in our most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K, as amended, filed with the SEC. Accordingly, you should not unduly rely on these forward-looking statements. Except as required by law, we undertake no obligation to publicly revise any forward-looking statements, whether as a result of new information, future events or for any other reason. However, you should carefully review the risk factors set forth in other reports or documents we file from time to time with the SEC.

ABOUT THIS PROSPECTUS

Unless the context requires otherwise, in this prospectus, the terms the Company , OPKO , we , our , ours , and us to OPKO Health, Inc., a Delaware corporation, including our wholly-owned subsidiaries.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer to sell shares of our common stock in one or more offerings up to a total dollar amount of $250,000,000. Each time we offer to sell our common stock, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. We may also add, update or change in any accompanying prospectus supplement or any free writing prospectus we may authorize to be delivered to you, any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in this prospectus or any prospectus supplement the statement in the document having the later date modifies or supersedes the earlier statement. You should carefully read both this prospectus and any applicable prospectus supplement together with additional information described under the heading Where You Can Find More Information before deciding to invest in any of the securities being offered.

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus forms a part. You should read the exhibits carefully for provisions that may be important to you.

The SEC allows us to incorporate by reference certain information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update, supplement and/or supersede the information in this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other document which also is or is deemed to be incorporated by reference into this prospectus modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so

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modified or superseded, to constitute a part of this prospectus. You should read the following summary together with the more detailed information regarding our Company, our common stock and our financial statements and notes to those statements appearing elsewhere in this prospectus or incorporated herein by reference.

You should rely only on the information contained in or incorporated by reference in this prospectus or any related prospectus supplement or free writing prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the date on the front of this prospectus. You should not consider this prospectus to be an offer or solicitation relating to our common stock in any jurisdiction in which such an offer or solicitation relating to our common stock is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to our common stock if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation

ABOUT OPKO HEALTH, INC.

We are a specialty healthcare company involved in the discovery, development and commercialization of products that address major unmet medical needs. Our objective is to establish industry-leading positions in large and rapidly growing medical markets by leveraging our preclinical and development expertise and our novel and proprietary technologies. We also actively explore opportunities to acquire complementary pharmaceuticals, compounds, technologies, and businesses, which could, individually or in the aggregate, materially increase the scale of our business.

Initially focused on the treatment and management of ophthalmic diseases, OPKO has since expanded into other areas of major unmet medical need such as oncology, infectious diseases, and neurological disorders. Our business presently consists of the development of a broad range of pharmaceutical products and diagnostic tests, and the development, commercialization and sale of ophthalmic diagnostic and imaging systems and instrumentation products, as well as the sale of pharmaceutical products, over-the-counter products and medical devices to government, private and institutional markets in Chile and Mexico. Our shares are publicly traded on the NYSE Amex under the ticker OPK . We were originally incorporated in Delaware in October 1991. Our principal executive offices are located at 4400 Biscayne Boulevard, Miami, Florida 33137 and our telephone number is (305) 575-4100. We also have offices in Santiago, Chile, laboratory facilities at the Scripps Research Institute and Florida Atlantic University in Jupiter Florida, a manufacturing facility in Hialeah, Florida, and a research and development office in the United Kingdom, as well as offices and a manufacturing facility in Guadalajara, Mexico. Our Internet website address is www.OPKO.com.

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RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to other information contained in this prospectus and any accompanying prospectus supplement, before investing in our securities, you should carefully consider the risks described under the heading Risk Factors , and under the same or similar headings in our most recent Annual Report on Form 10-K, as amended, for the fiscal year ended December 31, 2009 and any subsequent Quarterly Reports on Form 10-Q, as amended, and in any other documents incorporated by reference into this prospectus, as updated by our future filings with the SEC, pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These risks are not the only ones faced by us. Without limitation, you should also carefully consider the risks noted under the caption Information Concerning Forward-Looking Statements in this prospectus. Additional risks not known or that are presently deemed immaterial could also materially and adversely affect our financial condition, results of operations, our products, business and prospects. Additional risk factors may be included in a prospectus supplement relating to a particular offering of securities. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment. See Where You Can Find More Information section in this prospectus.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from the sale of the securities for general corporate purposes, including research and development expenses, clinical trials, acquisitions of new technologies or businesses, and other business opportunities. If we elect at the time of the issuance of the securities to make different or more specific uses of proceeds other than as described in this prospectus, the change in use of proceeds will be described in the applicable prospectus supplement.

DILUTION

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

- directly to purchasers;
- to or through underwriters or dealers;

- through agents; or
- through a combination of any of these methods.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- block trades in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;

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- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.

We may also sell the securities offered by this prospectus in at the market offerings within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, to or through a market maker, or into an existing trading market, on an exchange or otherwise.

A prospectus supplement will state the terms of the offering of the securities, including:

- the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;
- any delayed delivery arrangements;
- any underwriting discounts or agency fees and other items constituting underwriters or agents compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallowed or paid to underwriters, dealers, agents, or remarketing firms may be changed from time to time. Underwriters, dealers, agents, and remarketing firms that participate in the distribution of the offered securities may be underwriters as defined in the Securities Act. Any discounts or commissions they receive from us and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify any underwriters, agents, or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement or pricing supplement, as the case may be.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or pricing supplement, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial offering price and any discounts or concessions allowed, reallowed or paid to dealers may be changed from time to time.

We may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us. These firms will remarket the offered securities upon purchasing them in

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accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or pricing supplement, as the case may be, will identify any remarketing firm and will describe the terms of its agreement, if any, with us and its compensation.

In connection with offerings made through underwriters or agents, we may enter into agreements with such underwriters or agents pursuant to which we receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short sale transactions. If so, the underwriters or agents may use the securities received from us under these arrangements to close out any related open borrowings of securities.

Dealers

We may sell the offered securities to dealers as principals. We may negotiate and pay dealers commissions, discounts, or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale. Dealers engaged by us may allow other dealers to participate in resales.

Direct Sales

We may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We may authorize agents, dealers, or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or pricing supplement, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies, and educational and charitable institutions.

Indemnification; Other Relationships

We may have agreements with agents, underwriters, dealers, and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers, and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market-Making, Stabilization and Other Transactions

In connection with any offering of common stock, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. Covered short sales are sales of shares made in an amount up to the number of shares represented by the underwriters over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may

purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make naked short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

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In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Fees and Commissions

In compliance with the guidelines of the Financial Industry Regulatory Authority (the FINRA), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement or pricing supplement, as the case may be.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 2710(h).

TYPES OF SECURITIES TO BE OFFERED

We may offer, from time to time, shares of common stock through this prospectus. We will describe in a prospectus supplement, which we will deliver with this prospectus at the time of sale, the terms of the particular securities that we may offer in the future. The aggregate initial offering price of all securities sold will not exceed $250,000,000. When we sell securities, we will determine the amounts of securities we will sell and the prices and other terms on which we will sell them. We may sell securities to or through underwriters, through agents or dealers or directly to purchasers.

DESCRIPTION OF COMMON STOCK

The following summary of the terms of our common stock is not meant to be complete and is qualified in its entirety by reference to our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, and any amendments thereto. Copies of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, and any amendments thereto, are incorporated herein by reference and will be sent to you at no charge upon request. See Where You Can Find More Information below.

General

Our authorized capital stock consists of 510,000,000 shares of stock, of which: (i) 500,000,000 shares are designated as common stock, par value $0.01 per share; and (ii) 10,000,000 shares are designated as preferred stock, par value $0.01 per share. As of February 4, 2011, there were 255,649,034 shares of common stock, 722,700 shares of Series A preferred stock, 0 shares of Series C preferred stock, and 1,029,677 shares of Series D preferred stock outstanding. A description of the material terms and provisions of our Amended and Restated Certificate of Incorporation affecting the relative rights of the common stock and any preferred stock is set forth below.

Voting Rights

The holders of our common stock are entitled to one vote per share on all matters which they are entitled to vote upon at meetings of stockholders or upon actions taken by written consent pursuant to Delaware corporate law. The holders of our common stock do not have cumulative voting rights, which means that the holders of a plurality of the outstanding shares can elect all of our directors.

Dividend Rights

Subject to the rights of the holders of any shares of preferred stock currently outstanding or which may be issued in the future, the holders of the common stock are entitled to receive dividends from our funds legally available when,

as and if declared by our board of directors. No dividends have been paid to holders of our common stock since our incorporation, and no cash dividends are anticipated to be declared or paid in the reasonably foreseeable future.

Liquidation Rights

Subject to the rights of the holders of any shares of preferred stock currently outstanding or which may be issued in the future, the holders of the common stock are entitled to share ratably in all of our assets available for distribution to holders of common stock upon the liquidation, dissolution or winding-up of our affairs subject to the liquidation preference, if any, of any then outstanding shares of preferred stock.

Other Matters

Holders of our common stock do not have any preemptive, subscription, redemption or conversion rights. All of the shares of our common stock currently issued and outstanding are fully-paid and nonassessable.

Certain Amended and Restated Certificate of Incorporation and Bylaws Provisions

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or one of its committees or other matters properly brought by a stockholder under Rule 14a-8 promulgated under the Exchange Act.

Special Meetings

Our Amended and Restated Certificate of Incorporation and Bylaws provide that, except as otherwise required by law, special meetings of the stockholders may only be called by the chairman of the board of directors, the Chief Executive Officer, or by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders.

No Cumulative Voting

The Delaware General Corporation Law provides that stockholders are denied the right to cumulate votes in the election of directors unless our certificate of incorporation provides otherwise. Our Amended and Restated Certificate of Incorporation does not provide for cumulative voting of shares.

Delaware Anti-Takeover Law

We are a Delaware corporation subject to Section 203 of the Delaware General Corporation Law. Under Section 203, certain business combinations between a Delaware corporation whose stock generally is publicly traded or held of record by more than 2,000 stockholders and an interested stockholder are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

- the corporation has elected in its certificate of incorporation not to be governed by Section 203;
-

the business combination or the transaction which resulted in the stockholder becoming an interested stockholder was approved by the board of directors of the corporation before the date of the business combination or the date such stockholder became an interested stockholder, as applicable;

- upon consummation of the transaction that made such stockholder an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction excluding voting stock owned by directors who are also officers or held in employee benefit plans in which the employees do not have a confidential right to tender stock held by the plan in a tender or exchange offer; or

- the business combination is approved by the board of directors of the corporation and authorized at a meeting by two-thirds of the voting stock which the interested stockholder did not own.

The three-year prohibition also does not apply to some business combinations proposed by an interested stockholder following the announcement or notification of an extraordinary transaction involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation s directors. The term business combination is defined generally to include mergers or consolidations between a Delaware corporation and an interested stockholder, transactions with an interested stockholder involving the assets or stock of the corporation or its majority-owned subsidiaries, and transactions which increase an interested stockholder s percentage ownership of stock. The term interested stockholder is defined generally as those stockholders who become beneficial owners

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of 15% or more of a Delaware corporation s voting stock, together with the affiliates or associates of that stockholder.

Listing

Our common stock is listed on the NYSE Amex under the trading symbol OPK.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer and Trust Company.

LEGAL MATTERS

The validity of the issuance of the shares of common stock offered hereby will be passed on for us by Holland & Knight LLP, Miami, Florida.

EXPERTS

The consolidated financial statements of OPKO Health, Inc. and subsidiaries appearing in OPKO Health, Inc. and subsidiaries Annual Report (Form 10-K/A) for the year ended December 31, 2009, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You may read and copy this information at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the SEC s Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, including OPKO Health, who file electronically with the SEC. The address of the website is http://www.sec.gov.

We have filed with the SEC a registration statement (which term includes all amendments, exhibits, and schedules thereto) on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus is a part of the registration statement. This prospectus does not contain all the information set forth in the registration statement because certain information has been incorporated into the registration statement by reference in accordance with the rules and regulations of the SEC. Please review the documents incorporated by reference for a more complete description of the matters to which such documents relate. The registration statement may be inspected at the public reference facilities maintained by the SEC at 100 F Street NE, Washington, D.C. 20549 and is available to you on the SEC s web site.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information into this document. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this document, except for any information superseded by information that is included directly in this document or incorporated by reference subsequent to the date of this document.

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This prospectus incorporates by reference the documents listed below, shall be deemed to incorporate by reference all filings filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement, and incorporates by reference any future filings that we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than information in the documents or filings that is deemed to have been furnished and not filed), until all the securities offered under this prospectus are sold or this offering is terminated; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any current report on Form 8-K:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2009 filed on March 17, 2010, as amended by the First Amendment to Annual Report on Form 10-K filed on November 10, 2010 and the Second Amendment to Annual Report on Form 10-K filed on February 3, 2011;

- Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 10, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed on November 10, 2010;

- Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed on August 9, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed on November 10, 2010;

- Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed on November 9, 2010;

- Current Reports on Form 8-K filed on February 18, 2010, April 15, 2010, May 7, 2010, June 1, 2010, November 9, 2010, December 14, 2010, and February 1, 2011; and

- Definitive Proxy Statement (those portions incorporated by reference into OPKO Health s Form 10-K only) filed on April 27, 2010.

See the section Description of Common Stock above for a description of our common stock.

Any previous statement contained in a document we incorporate by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the SEC and incorporated by reference) modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded.

Documents incorporated by reference are available from the SEC as described above or from OPKO Health without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference as an exhibit in this document. You can obtain documents incorporated by reference in this prospectus at no cost by requesting them in writing or by telephone at the following address:

OPKO Health, Inc.
4400 Biscayne Boulevard
Miami, Florida 33137
(305) 575-4100
Attention: Secretary

You can also find the above-referenced filings on our website at www.opko.com. Except as provided above, no other information, including information on our internet site, is incorporated by reference in this prospectus.

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27,000,000 Shares

OPKO HEALTH, INC.

Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies
J.P. Morgan

Co-Lead Managers

UBS Investment Bank
Lazard Capital Markets

Co-Manager

Ladenburg Thalmann & Co. Inc.

March 9, 2011