Cardium Therapeutics, Inc.
Form S-3
August 15, 2007
Table of Contents

As filed with the Securities and Exchange Commission on August 15, 2007

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CARDIUM THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**27-0075787**
(State of incorporation)	**(IRS Employer Identification No.)**

3611 Valley Centre Drive, Suite 525

San Diego, California 92130

(858) 436-1000

(Address and telephone number of principal executive offices)

Tyler M. Dylan

Chief Business Officer

3611 Valley Centre Drive, Suite 525

San Diego, California 92130

(858) 436-1000

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

Copy to:

David A. Fisher, Esq.

Fisher Thurber LLP

4225 Executive Square, Suite 1600,

La Jolla, CA 92037

(858) 535-9400

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: ¨

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: ¨

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act of 1933, check the following box: ¨

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box: ¨

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	**Proposed Maximum Aggregate Offering Price[1]**	**Amount of Registration Fee[2]**
Common Stock, par value $0.0001 per share[3]	$ 50,000,000	$ 1,535

(1) There are being registered hereunder such indeterminate number of share of common stock as shall have an aggregate offering price not to exceed $50,000,000.
(2) The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act of 1933.
(3) Includes associated preferred stock purchase rights pursuant to the Rights Agreement dated as of July 10, 2006, between the Registrant and Computershare Trust Company, as Rights Agent

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

Table of Contents

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 15, 2007

$50,000,000

of

Common Stock

We may from time to time sell common stock in one or more offerings for a maximum aggregate offering price of $50,000,000.

Each time we sell any of these securities, we will provide the specific terms related to such sales in supplements to this prospectus. The prospectus supplements may also add, update or change information contained in this prospectus. Before you invest, you should carefully read this prospectus and any prospectus supplement, as well as the documents incorporated by reference in this prospectus and described under the heading Where You Can Find More Information.

We will sell these securities directly, through agents, dealers or underwriters as designated from time to time, or through a combination of these methods. If any agents, dealers or underwriters are involved in the sale of these securities, the applicable prospectus supplement will set forth the names of the agents, dealers or underwriters and any applicable fees, commissions or discounts.

Our common stock is quoted on the American Stock Exchange under the symbol CXM . On August 14, 2007, the closing sale price of our common stock was $2.60 per share. You are urged to obtain current market quotations for the common stock.

This prospectus may not be used to consummate sales of securities unless accompanied by a prospectus supplement.

An investment in our securities involves a high degree of risk. You should carefully consider the risk factors described in the applicable prospectus supplement and certain of our filings with the Securities and Exchange Commission, as described under Risk Factors on page 4.

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.

The date of this prospectus is , 2007

Table of Contents

TABLE OF CONTENTS

Table of Contents

BUSINESS SUMMARY

This summary highlights certain information about Cardium and its business. This summary does not contain all of the information that is important to an investment decision. You should carefully read the entire prospectus and any prospectus supplement, including Risk Factors beginning below on page 4, before deciding to invest in our common stock.

Our Business

We are a medical technology company primarily focused on the development and commercialization of novel biologic therapeutics and medical devices for cardiovascular and ischemic disease. Since we were initially funded in October 2005, we have made three strategic acquisitions and assembled a portfolio of innovative late-stage cardiovascular and regenerative medicine product candidates, together with medical devices having U.S. Food and Drug Administration (FDA) clearances that are marketed and sold through our direct sales force. We have established a pipeline of innovative products that are divided into three operating units, Cardium Biologics, InnerCool Therapies, Inc. and the Tissue Repair Company.

As our current products and product candidates become successfully advanced, we intend to continue to pursue opportunistic acquisitions designed to enhance long-term stockholder value. At the same time, as technologies and product candidates are advanced and businesses are further developed, we may consider various corporate development transactions to enhance and monetize stockholder value such as corporate partnerings, spin-out transactions and equity distribution.

Cardium Biologics

The following describes the leading product candidates in Cardium Biologic s drug development pipeline:

Generx™ (alferminogene tadenovec). Our lead product candidate, Generx, is a late-stage DNA-based growth factor therapeutic that is in a new class of cardiovascular biologics being developed to leverage the body s natural healing processes in response to repeated ischemic stress (insufficient blood flow and myocardial oxygen supply due to coronary heart disease). Generx is being developed as a one-time treatment to promote and stimulate the growth of collateral circulation in the hearts of patients with ischemic conditions such as recurrent angina. The natural biologic response to repeated transient ischemia is angiogenesis, the growth of new collateral blood vessels, which is orchestrated by a complex and not fully understood cascade involving many myocardial-derived growth factors. These newly formed vessels can effectively augment blood flow and oxygen delivery to parts of the patient s heart downstream from a blockage in a coronary artery. In many patients however, including those with recurrent angina, coronary collateral vessel formation is insufficient to meet the heart s needs during stress. Currently available anti-anginal drugs, which may provide symptomatic relief, are generally designed to alter the oxygen demand of the heart muscle or dilate vessels to temporarily relieve angina. Generx is an angiogenic therapeutic that is designed to promote the heart s natural response of collateral growth and to increase blood flow in the microcirculation. Generx is expected to commence a Phase 3 clinical study in the first half of 2007 that will be a randomized, placebo-controlled, double blind trial in approximately 300 women at multiple medical centers in the U.S. An additional follow-up study of Generx in men with recurrent angina due to myocardial ischemia is expected to commence later. Generx is the first and only DNA-based cardiovascular therapeutic to be advanced to Phase 3, and is believed to be the only current Phase 3 product candidate for the potential treatment of stable angina, a chronic medical condition affecting millions of patients in the U.S. and elsewhere.

Table of Contents

Corgentin [Ad5IGF-I]. Corgentin, our lead pre-clinical product candidate, is a next-generation DNA-based therapeutic based on myocardial produced insulin-like growth factor-I (ad5IGF-I) which could be developed for administration in an acute care setting by interventional cardiologists as a treatment for heart attack patients immediately following percutaneous coronary intervention. Corgentin is designed to enhance myocardial healing in and around the infarct zone when used as an adjunct to existing vascular-directed pharmacologic and interventional therapies. To further confirm the utility of the Corgentin approach and establish its commercialization potential, we are planning additional pre-clinical studies in the porcine acute myocardial infarction model, closely mimicking the clinical setting. If confirmatory, we may seek to initiate clinical studies on our own or with a corporate development partner.

Genvascor [Ad5eNOS]. Genvascor is a pre-clinical, DNA-based, endothelial nitric oxide synthase (eNOS) therapeutic. This product candidate is being designed to induce production of nitric oxide directed at mediating the effects of multiple growth factors to enhance neovascularization and increased blood flow for the treatment of patients with critical limb ischemia due to advanced peripheral vascular disease. We may seek to develop additional pre-clinical information through sponsored studies and, if confirmatory, we may consider the further development of Genvascor either alone or through a corporate collaboration.

Innercool Therapies

Our InnerCool Therapies subsidiary is focused on the emerging field of temperature modulation or therapeutic hypothermia, which is designed to rapidly and controllably cool the body in order to reduce cell death and damage following acute ischemic events such as cardiac arrest or stroke, and to potentially lessen or prevent associated injuries such as adverse neurological outcomes. InnerCool s Celsius Control System has received FDA 510(k) clearance for use in inducing, maintaining and reversing mild hypothermia in neurosurgical patients, both in surgery and in recovery or intensive care. The system has also received FDA clearance for use in cardiac patients in order to achieve or maintain normal body temperatures during surgery and in recovery/intensive care, and as an adjunctive treatment for fever control in patients with cerebral infarction and intracerebral hemorrhage. InnerCool has also received a CE mark allowing the Celsius Control System to be marketed in the European Community, and a TGA approval allowing the system to be marketed in Australia.

Studies for additional indications with InnerCool s Celsius Control System are expected to be conducted in collaboration with the National Institutes of Health and other collaborating institutions. Potential future applications of the technology include endovascular cooling for cardiac arrest, acute ischemic stroke and myocardial infarction (heart attack), and acute traumatic injury. We plan to accelerate the commercialization of the Celsius Control System and broaden and expand its temperature modulation technology into other medical indications and applications. Since its acquisition by Cardium, InnerCool s sales force has been expanded, a new cGMP manufacturing facility has been secured to increase production capabilities, and a next-generation console for the Celsius Control System have been developed. InnerCool is also in the process of finalizing a new external temperature modulation system, which is designed to provide a complementary tool for use in less-acute patients and in clinical settings that do not require very rapid cooling or re-warming, or which are best suited to prolonged temperature management. Both the new Celsius Control System and the new external temperature modulation system are expected to be launched in 2007.

Tissue Repair Company

Excellarate™ is the lead product candidate of the Tissue Repair Company, our wholly-owned subsidiary. Excellarate is a DNA-activated collagen gel for topical treatment formulated with an adenovector delivery carrier encoding human platelet-derived growth factor-B (PDGF-B) and is designed to stimulate angiogenesis and

Table of Contents

granulation tissue formation through the recruitment and proliferation of chemotactic cells such as monocytes and fibroblasts, which are necessary for the stimulation of a variety of wound healing processes. Excellarate is initially being developed as a single administration for the treatment of non-healing, neuropathic diabetic foot ulcers. Based on the prior pre-clinical and toxicology database, and results from the Phase 1/2 clinical study, we anticipate that Excellarate may be advanced into a randomized, double-blind, placebo-controlled, multi-center Phase 2b clinical study commencing in the second half of 2007.

Excellarate is based on Tissue Repair Company s Gene Activated Matrix™ technology, which is a technology designed to provide a therapeutic level of protein synthesis at a particular site in the body and can be used in soft tissue such as skin, ligament, tendons and cartilage, as well as hard tissue such as bone. The technology is distinctive in that it is an immobilized form of local gene delivery that allows for control of gene uptake. Gene Activated Matrix technology consists of a biocompatible matrix comprising a gene or DNA vector encoding a growth factor or other therapeutic protein. Other potential applications of Gene Activated Matrix technology include therapeutic angiogenesis (cardiovascular ischemia, peripheral arterial disease) and orthopedic products, including hard tissue (bone) and soft tissue (ligament, tendon, cartilage) repair.

Corporate Information

Our principal executive offices are located at 3611 Valley Centre Drive, Suite 525, San Diego, California 92130, and our telephone number is (858) 436-1000. Our website is located at *www.cardiumthx.com.* Information on our website is not part of this prospectus.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using what is referred to as a shelf registration process. Under this shelf registration process, we may from time to time sell common stock in one or more offerings up to a total dollar amount of $50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell common stock, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. In the prospectus supplement, we may also add, update or change any of the information contained in this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part. This prospectus, together with applicable prospectus supplements, includes all material information relating to this offering. If there is any inconsistency between the information in this prospectus and the information in the accompanying prospectus supplement, you should rely on the information in the prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from the information contained or incorporated by reference in this prospectus or any prospectus supplement. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus or any prospectus supplement. This prospectus may only be used where it is legal to sell these securities. This prospectus is not an offer to sell, or a solicitation of an offer to buy, in any state where the offer or sale is prohibited. You should assume the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

References to Cardium, we, us or our refer to Cardium Therapeutics, Inc.

Table of Contents

RISK FACTORS

An investment in the securities offered through this prospectus involves certain risks. Before making an investment decision, you should carefully consider the specific risk factors set forth under the caption Risk Factors in the applicable prospectus supplement and under the caption Risk Factors in our filing with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, incorporated by reference in this prospectus. To the extent that a particular offering implicates additional significant risks, we will include a discussion of those risks in the applicable prospectus supplement.

SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus, including information incorporated by reference, are forward-looking statements within the meaning of Section 27A of the 33 Act, Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), and the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect current views about future events and financial performance based on certain assumptions. They include opinions, forecasts, intentions, plans, goals, projections, guidance, expectations, beliefs or other statements that are not statements of historical fact. Words such as may, will, should, could, would, expects, plans, believes, anticipates, intends, approximates, predicts, or projects, or the negative or other variation of such words, and similar expressions may identify a statement as a forward-looking statement. Any statements that refer to projections of our future financial performance, our anticipated growth and trends in our business, our goals, strategies, focus and plans, and other characterizations of future events or circumstances, including statements expressing general optimism about future operating results, are forward-looking statements.

The forward-looking statements in this prospectus speak only as of the date of this prospectus and caution should be taken not to place undue reliance on any such forward-looking statements. Forward-looking statements are subject to certain events, risks, and uncertainties that may be outside of our control. When considering forward-looking statements, you should carefully review the risks, uncertainties and other cautionary statements in this prospectus as they identify certain important factors that could cause actual results to differ materially from those expressed in or implied by the forward-looking statements. These factors include, among others, the risks described under Risk Factors and elsewhere in this prospectus, as well as in other reports and documents we file with the SEC.

USE OF PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of securities offered hereby for general corporate purposes, which may include the development and commercialization of our product candidates and the acquisitions of businesses, products, technologies or licenses that are complementary to our business. For each offering of securities hereunder, the prospectus supplement relating to that offering will set forth our intended use of the net proceeds received from the sale of those securities.

PLAN OF DISTRIBUTION

We may sell the common stock through underwriters or dealers, through agents, or directly to one or more purchasers. A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if any;

Table of Contents

the purchase price of the securities and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and other items constituting agents or underwriters compensation;

any public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchange or market on which the securities may be listed.

Only the underwriters named in a prospectus supplement are underwriters of the securities offered by that prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We have been advised that under the rules and regulations of the NASD, no broker may receive discounts, concessions or commissions in excess of 8% in connection with the sale of any securities registered hereunder. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Table of Contents

DESCRIPTION OF COMMON STOCK

For a description of the material terms and provisions of our common stock, please see the applicable prospectus supplement, as well as the description of our capital stock in our Registration Statement on Form 8-A filed with the SEC on August 1, 2007, which is incorporated by reference in this prospectus.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by our legal counsel, Fisher Thurber LLP, La Jolla, California

EXPERTS

Marcum & Kliegman LLP, independent registered public accounting firm, has audited our consolidated financial statements and schedule included in our Annual Report on Form 10-KSB for the year ended December 31, 2006, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and schedule are incorporated by reference in reliance on Marcum & Kliegman LLP s report, given on their authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with the SEC, which means that we can disclose important information to you by referring you to those documents filed separately with the SEC. The information incorporated by reference is an important part of this prospectus, and information that we subsequently file will automatically update and supersede information in this prospectus and in our other filings with the SEC.

We incorporate by reference into this prospectus the documents listed below, which we have already filed with the SEC, and any future filings we make under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act, excluding any information in those documents that is deemed by the rules of the SEC to be furnished but not filed, until this offering is completed:

(a) Our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the SEC on March 15, 2007;

(b) Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2007, filed with the SEC on May 15, 2007;

(c) Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2007, filed with the SEC on August 14, 2007;

(d) Our Current Reports on Form 8-K, filed with the SEC on February 6, 2007, March 6, 2007, March 21, 2007, March 23, 2007, May 22, 2007, July 20, 2007 and August 1, 2007;

(e) Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 24, 2007; and

(f) The description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on August 1, 2007, including all amendments or reports filed for the purpose of updating such description.

Table of Contents

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any or all of the foregoing documents incorporated by reference in this prospectus, including any exhibits that are specifically incorporated by reference in such documents. Requests should be made to:

Dennis M. Mulroy, Chief Financial Officer

Cardium Therapeutics, Inc.

3611 Valley Centre Parkway, Suite 525

San Diego, California 92130

(858) 436-1000

You should rely only on the information provided or incorporated by reference in this prospectus or any supplement to this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front cover of the document.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other documents with the SEC. You may read and copy any document we file 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 Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to you on the SEC s Internet site at *http://www.sec.gov.* In addition, electronic copies of our most recently filed reports are available through our website at *http://www.cardiumthx.com.*

This prospectus is part of a registration statement that we filed with the SEC. This prospectus, which is a part of the registration statement, does not contain all of the information contained in the registration statement, including the exhibits to the registration statement. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC s Internet site.

Table of Contents

Part II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses to be incurred in connection with the issuance and distribution of the securities being registered hereby, other than underwriting discounts and commissions. Cardium Therapeutics, Inc. will bear all of such expenses. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	$ 1,535
Legal fees and expenses	10,000
Printing expenses	5,000
Accounting fees and expenses	4,500
NASD	5,500
Miscellaneous expenses	1,965
Total	$ 28,500

Item 15. Indemnification of Directors and Officers

Cardium s certificate of incorporation provides that it may indemnify, to the full extent authorized or permitted by law, any person made, or threatened to be made, a defendant or witness to any action, suit or proceeding (whether civil or criminal or otherwise) by reason of the fact that he, his testator or intestate, is or was director or officer of Cardium or by reason of the fact that such director of officer, at the request of Cardium, is or was serving any other corporation, partnership, joint venture, employee benefit plan or other enterprise, in any capacity. Under Delaware law, a director or officer who has been successful on the merits or otherwise in defense of any action, suit or proceeding or in defense of any claim, issue or matter therein shall be indemnified against expenses (including attorneys fees) actually and reasonably incurred. In other circumstances, a director, officer, employee or agent of Cardium may be indemnified against expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interest of Cardium. The bylaws of Cardium provide that costs and expenses (including attorneys fees) incurred by or on behalf of a director, officer, employee or agent of Cardium in defending or investigating any action, suit, proceeding or investigation shall be paid by Cardium in advance of the final disposition of such matter, if such director, officer, employee or agent undertakes in writing to repay any such advances if it is ultimately determined that he or she was not entitled to indemnification.

Cardium s certificate of incorporation further provides that Cardium may buy and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of Cardium, or is serving at the request of Cardium as a director, officer, employee or agent of any corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not Cardium would have the power to indemnify him against such liability under the provisions of the law. Cardium has in effect a directors and officers liability insurance policy protecting its directors and officers against liability by reason of their being or having been directors or officers of Cardium.

Under the terms of Cardium s charter, no director of Cardium shall be personally liable to Cardium or its stockholders for monetary damages for any breach of fiduciary duty by such a director as a director. Notwithstanding the foregoing, a director shall be liable to the extent provided by applicable law (i) for any breach of the director s duty of loyalty to Cardium or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for any unlawful payment of dividends or unlawful stock purchase or redemption, or (iv) for any transaction from which such director derived an improper personal benefit.

Table of Contents

Cardium has entered into indemnification agreements with each of its directors and anticipates that it will enter into similar arrangements with any future directors. Cardium may also enter into similar arrangements with certain of its officers who are not also directors. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware law with respect to indemnification of directors.

Item 16. Exhibits

The following exhibit index shows those exhibits filed with this registration statement and those incorporated by reference:

Description	Incorporated By Reference to
Form of Underwriting Agreement	[To be filed by amendment or by a report filed under the Securities Exchange Act of 1934, as amended, and incorporated by reference herein]
Second Amended and Restated Certificate of Incorporation of the Registrant as filed with the Delaware Secretary of State on January 13, 2006	Exhibit 3(i) of the Registrant s Registration Statement on Form SB-2 (File No. 333-131104), filed with the SEC on January 18, 2006
Amended and Restated By-laws of the Registrant as adopted on January 12, 2006	Exhibit 3(i) of the Registrant s Registration Statement on Form SB-2 (File No. 333-131104), filed with the SEC on January 18, 2006
Form of the Registrant s Common Stock Certificate	Exhibit 4.5 of the Registrant s Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, filed with the SEC on March 31, 20
Rights Agreement dated as of July 10, 2006, between Cardium Therapeutics, Inc. and Computershare Trust Company, Inc., as Rights Agent	Exhibit 4.1 of the Registrant s Registration Statement on Form 8-A, filed with the SEC on July 11, 2006
Form of Rights Certificate	Exhibit 4.2 of the Registrant s Registration Statement on Form 8-A, filed with the SEC on July 11, 2006

Opinion of Fisher Thurber LLP	Filed herewith
Consent of Marcum & Kliegman LLP	Filed herewith
Consent of Fisher Thurber LLP	Filed herewith (included in Exhibit 5.1)
Power of Attorney	Included on the signature page hereto

Item 17. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the Securities Act);

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in

Table of Contents

the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of Securities Exchange Act of 1934, as amended (the Exchange Act), that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The Registrant hereby undertakes that, for the purposes of determining any liability under the Securities Act, each filing of the Registrant s annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to Delaware law, the Registrant s charter, its bylaws, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(d) The Registrant hereby further undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on August 14, 2007.

CARDIUM THERAPEUTICS, INC.

By: /s/ CHRISTOPHER J. REINHARD
Christopher J. Reinhard
Chairman, Chief Executive Officer, President and Treasurer
(principal executive officer)

By: /s/ DENNIS M. MULROY
Dennis M. Mulroy

Chief Financial Officer

(principal accounting and financial officer)

Table of Contents

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Christopher J. Reinhard, his true and lawful attorney-in-fact and agent, acting alone, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any registration statement of the same offering which is effective upon filing pursuant to Rule 462(b) under the Securities Act, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all said attorney-in-fact and agent, acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Christopher J. Reinhard **Christopher J. Reinhard**	Chairman, Chief Executive Officer, President and Treasurer	August 14, 2007
/s/ Dennis M. Mulroy **Dennis M. Mulroy**	Chief Financial Officer	August 14, 2007
/s/ Tyler M. Dylan **Tyler M. Dylan**	Director, Chief Business Officer, Executive Vice President, General Counsel and Secretary	August 14, 2007
/s/ Edward W. Gabrielson **Edward W. Gabrielson**	Director	August 14, 2007
/s/ Murray H. Hutchinson **Murray H. Hutchinson**	Director	August 14, 2007
/s/ Gerald J. Lewis **Gerald J. Lewis**	Director	August 14, 2007
/s/ Lon Edward Otremba **Lon Edward Otremba**	Director	August 14, 2007
/s/ Ronald I. Simon **Ronald I. Simon**	Director	August 14, 2007
/s/ Andrew M. Leitch **Andrew M. Leitch**	Director	August 14, 2007

Table of Contents

EXHIBIT INDEX

Description	Incorporated By Reference to
Form of Underwriting Agreement	[To be filed by amendment or by a report filed under the Securities Exchange Act of 1934, as amended, and incorporated by reference herein]
Second Amended and Restated Certificate of Incorporation of the Registrant as filed with the Delaware Secretary of State on January 13, 2006	Exhibit 3(i) of the Registrant s Registration Statement on Form SB-2 (File No. 333-131104), filed with the SEC on January 18, 2006
Amended and Restated By-laws of the Registrant as adopted on January 12, 2006	Exhibit 3(i) of the Registrant s Registration Statement on Form SB-2 (File No. 333-131104), filed with the SEC on January 18, 2006
Form of the Registrant s Common Stock Certificate	Exhibit 4.5 of the Registrant s Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, filed with the SEC on March 31, 20
Rights Agreement dated as of July 10, 2006, between Cardium Therapeutics, Inc. and Computershare Trust Company, Inc., as Rights Agent	Exhibit 4.1 of the Registrant s Registration Statement on Form 8-A, filed with the SEC on July 11, 2006
Form of Rights Certificate	Exhibit 4.2 of the Registrant s Registration Statement on Form 8-A, filed with the SEC on July 11, 2006
Opinion of Fisher Thurber LLP	Filed herewith
Consent of Marcum & Kliegman LLP	Filed herewith

Consent of Fisher Thurber LLP	Filed herewith (included in Exhibit 5.1)
Power of Attorney	Included on the signature page hereto