

Cardium Therapeutics, Inc.  
Form 10KSB  
March 31, 2006  
Table of Contents

---

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

---

**FORM 10-KSB**

**ANNUAL REPORT**

**under Section 13 or 15(d)**

**of the Securities Exchange Act of 1934**

**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2005**

**000-14136**

(Commission file number)

**CARDIUM THERAPEUTICS, INC.**

(Name of small business issuer in its charter)

**Delaware**  
(State of incorporation)

**27-0075787**  
(IRS Employer Identification No.)

**3611 Valley Centre Drive, Suite 525**

**San Diego, California 92130**  
(Address of principal executive offices)

**(858) 436-1000**  
(Issuer's telephone number)

**Securities registered under Section 12(b) of the Exchange Act:**

**None**

**Securities registered under Section 12(g) of the Exchange Act:**

**Common Stock, \$0.0001 par value per share**

Check whether Cardium Therapeutics, Inc. (Cardium) is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act.

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

Check whether Cardium (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that Cardium was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  No

Check if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-B contained in this form, and no disclosure will be contained, to the best of Cardium's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB.

Indicate by check mark whether Cardium is a shell company (as defined in Rule 12b-2 of the Exchange Act.):  Yes  No

Cardium's revenues for its most recent fiscal year ended December 31, 2005 were \$0.

The aggregate market value of Cardium's common stock held by non-affiliates of Cardium as of March 13, 2006 was approximately \$59,991,352 (based on the closing sale price of \$2.50 reported by Nasdaq on March 13, 2006). For this purpose, all of Cardium's officers and directors and their affiliates were assumed to be affiliates of Cardium.

As of March 28, 2006, 31,749,801 shares of Cardium's common stock were outstanding.

### **DOCUMENTS INCORPORATED BY REFERENCE**

None.

Transitional Small Business Disclosure Format (Check one):  Yes  No

---

**Table of Contents**

**TABLE OF CONTENTS**

	<b>Page</b>
<b><u>SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS</u></b>	1
<b><u>PART I</u></b>	
Item 1. <u>Description of Business</u>	2
Item 2. <u>Description of Property</u>	20
Item 3. <u>Legal Proceedings</u>	20
Item 4. <u>Submission of Matters to a Vote of Security Holders</u>	21
<b><u>PART II</u></b>	
Item 5. <u>Market for Common Equity and Related Stockholder Matters</u>	22
Item 6. <u>Management's Discussion and Analysis or Plan of Operation</u>	23
Item 7. <u>Financial Statements</u>	38
Item 8. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	52
Item 8A. <u>Controls and Procedures</u>	52
Item 8B. <u>Other Information</u>	52
<b><u>PART III</u></b>	
Item 9. <u>Directors, Executive Officers, Promoters and Control Persons; Compliance with Section 16(a) of the Exchange Act</u>	53
Item 10. <u>Executive Compensation</u>	58
Item 11. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	59
Item 12. <u>Certain Relationships and Related Transactions</u>	61
Item 13. <u>Exhibits</u>	61
Item 14. <u>Principal Accountant Fees and Services</u>	64
<b><u>SIGNATURES</u></b>	66

**Table of Contents**

**SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS**

Certain statements in this report, including information incorporated by reference, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, 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, estimates, appears, 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 and the development of our products, are forward-looking statements. Forward-looking statements in this report may include statements about:

future financial and operating results;

the conduct and outcome of regulatory submissions and clinical trials;

the performance of Innercool's Celsius Control System, Generx and other product candidates and their potential to attract development partners and/or generate revenues;

our beliefs and opinions about the safety and efficacy of our products and product candidates and the results of our clinical studies and trials;

the development or commercialization of competitive products or medical procedures;

our development of new products and product candidates;

our growth, expansion and acquisition strategies, the success of such strategies, and the benefits we believe can be derived from such strategies;

the outcome of litigation matters;

our intellectual property rights and those of others, including actual or potential competitors;

the ability to enter into acceptable relationships with one or more contract manufacturers or other service providers on which we may depend and the ability of such contract manufacturers or other service providers to manufacture biologics or devices or to provide services of an acceptable quality on a cost-effective basis;

our personnel, consultants and collaborators;

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

operations outside the United States;

current and future economic and political conditions;

overall industry and market performance;

the impact of accounting pronouncements;

management's goals and plans for future operations; and

other assumptions described in this report underlying or relating to any forward-looking statements.

The forward-looking statements in this report speak only as of the date of this report 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 report as they identify certain important factors that could cause actual results to differ materially from those

## **Table of Contents**

expressed in or implied by the forward-looking statements. These factors include, among others, the risks described under Item 6 and elsewhere in this report, as well as in other reports and documents we file with the United States Securities and Exchange Commission.

Unless the context requires otherwise, all references in this report to the Company, Cardium, we, our, and us refer to Cardium Therapeutics, and, as applicable, Innercool Therapies, Inc. and our other wholly-owned subsidiaries.

## **PART I**

### **ITEM 1. DESCRIPTION OF BUSINESS**

#### **Overview**

Cardium Therapeutics, Inc. is a medical technology company primarily focused on the development, manufacture and sale of innovative products for cardiovascular and related indications, which are leading healthcare priorities for adults in the United States, Europe and elsewhere. Cardium is based in San Diego and was incorporated as a Delaware corporation in December 2003.

In October 2005, we acquired a portfolio of biologic growth factors and related delivery techniques from the Schering AG Group, Germany, which we plan to develop as cardiovascular-directed growth factor therapeutics for various interventional cardiology applications, including potential treatments for ischemic heart disease. In March 2006, we also acquired the technologies and products of Innercool Therapies, Inc., a medical technology company in the emerging field of therapeutic hypothermia, whose systems and products are designed to rapidly and controllably cool the body in order to reduce cell death and damage following acute ischemic events such as cardiac arrest and stroke, and to potentially lessen or prevent associated injuries such as adverse neurologic outcomes. Innercool Therapies is operated as a wholly-owned subsidiary of Cardium.

Among the product candidates we acquired from Schering are Generx and Corgentin. Generx (alferminogene tadenovex) is a DNA-based, myocardial-derived growth factor therapeutic being developed for potential use by interventional cardiologists 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. Angina, which is often felt as severe chest pain, can significantly limit patients' mobility and quality of life and is a disorder that affects millions of adults in the United States and elsewhere.

Generx is our lead product candidate and has advanced to Phase 2b/3 clinical studies. Corgentin, a pre-clinical product candidate, is a next-generation therapeutic based on myocardial-derived insulin-like Growth Factor-I (mdIGF-I). Corgentin is being designed to be a one-time cardiomyocyte-directed treatment to promote the repair and restoration of damaged cardiomyocytes and enhance cardiac function following a heart attack (acute myocardial infarction) through the beneficial cardiac effects of prolonged IGF-I protein expression.

In addition, we have secured the rights to Genvascor, a pre-clinical, DNA-based, endothelial nitric oxide synthase (eNOS) therapeutic. Genvascor is being designed to induce production of nitric oxide and is directed at mediating the effects of multiple growth factors to enhance neovascularization and increased blood flow for the potential treatment of patients with critical limb ischemia due to advanced peripheral arterial occlusive disease (PAOD). We may elect to develop Genvascor alone or in collaboration with a development partner.

**Table of Contents**

The following chart summarizes certain attributes of the above-described product candidates we acquired from Schering, along with their potential indications and mechanisms of action:

<b>Product</b>	<b>Growth Factor</b>	<b>Indication</b>	<b>Mechanism of Action</b>
Generx	Fibroblast Growth	Recurrent angina due to	Promote and enhance the growth of
	Factor-4 (FGF-4)	coronary disease	collateral circulation in ischemic
Corgentin	Insulin-like Growth	Acute coronary syndrome	heart disease
	Factor-I (IGF-I)	following myocardial	Improve recovery of injured myocardium
Genvascor	Endothelial Nitric	infarction	and restore function following
	Oxide Synthase	Critical limb ischemia	heart attack
	(eNOS)	due to advanced peripheral	Promote multiple vasculo-protective effects
		arterial occlusive disease	and mediate growth factors to enhance
			neovascularization and increased
			blood flow to the ischemic limb

In March 2006, Cardium, through its newly-formed, wholly-owned subsidiary, Innercool Therapies, Inc., a Delaware corporation, acquired substantially all of the assets and the business of Innercool Therapies, Inc., an unaffiliated California corporation, then in the development stage, engaged in the business of researching, developing, manufacturing, marketing, selling and distributing products and services related to endovascular temperature control therapy. Innercool's business is focused on the emerging field of therapeutic hypothermia, principally through the development, manufacture and marketing of endovascular, catheter-based, therapeutic systems designed to rapidly and controllably cool the body. It's Celsius Control System which was among the assets acquired in the acquisition, is used in surgical and intensive care hospital units and has received 501(k) clearance from the Food and Drug Administration (FDA) 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 to achieve or maintain normal body temperatures in surgery and in recovery or 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 approval from the Therapeutic Goods Administration (TGA) allowing the system to be marketed in Australia. Innercool is using a distributor to facilitate marketing and sales in Australia but has not yet entered into any distribution or other arrangements with respect to the European market.

**Business Strategy**

Building upon our core products and product candidates, our strategic goal is to develop a portfolio of medical products at various stages of development and secure additional financial resources to commercialize these products in a timely and effective manner. The key elements of our strategy are to:

initiate a late-stage clinical study (AGENT-5) for Generx;

seek to broaden and accelerate the development and sales of Innercool's Celsius Control System and, at the same time, expand our therapeutic hypothermia technology into other medical indications and applications;

leverage our financial resources and focused corporate infrastructure through the use of contract manufacturers to produce clinical supplies and product components and a contract research organization to manage or assist planned clinical studies;

advance the pre-clinical development of Corgentin and potentially seek partnering opportunities for the Corgentin and Genvascor product candidates;



## **Table of Contents**

seek to broaden and expand our product base and financial resources through other corporate development transactions in an attempt to enhance stockholder value, which could include acquiring other companies or product opportunities and/or securing additional capital; and

seek to monetize the economic value of our product portfolio by establishing strategic collaborations at appropriate valuation inflection points.

We recognize that the practical realities of cardiovascular drug development in the current regulatory environment require sizable financial investment. In view of this, we plan to pursue clinical and product development strategies intended to facilitate collaborations and partnerships for joint development of our products at appropriate valuation inflection points during their clinical development cycle. In the future, we plan to aggressively seek access to other therapeutics and/or medical device opportunities, as well as medical-related technologies, to further strengthen and broaden our portfolio, and will consider the opportunistic acquisition of other companies having financial and development resources that offer the potential to enhance our near- and longer-term stockholder value.

## **Corporate History**

In 1995, Christopher Reinhard, our co-founder, Chairman, Chief Executive Officer, President and Treasurer, co-founded Collateral Therapeutics, Inc., a former Nasdaq-listed company, to commercialize medical discoveries and technology licensed from the University of California, San Diego related to the potential therapeutic application of methods of gene therapy to stimulate cardiac angiogenesis. In 1996, Collateral Therapeutics and the Schering AG Group, Germany, entered into a strategic research and development collaboration to commercially develop angiogenic gene therapy products based on Collateral Therapeutics' technology platform, which included a portfolio of therapeutic genes, vectors and methods of gene therapy to enhance cardiac function. This research and development collaboration yielded two product candidates based on the human Fibroblast Growth Factor-4 gene (FGF-4) that entered clinical trials.

During the collaboration with Schering, Mr. Reinhard and other members of Collateral Therapeutics' management team, several of whom have joined Cardium, successfully worked with Schering to promote Collateral Therapeutics' lead product candidate through several human clinical trials that were principally funded and conducted by Schering. In 2002, as a result of the success of the Collateral Therapeutics/Schering collaboration and following positive Phase 1/2 and Phase 2a clinical studies for Generx, Schering acquired Collateral Therapeutics for approximately \$160 million. This acquisition included all of Collateral Therapeutics' intellectual property and assets, including the rights to the lead product candidate, Generx. After completing the sale of Collateral Therapeutics to Schering, Mr. Reinhard continued as Chief Executive of Collateral Therapeutics through December 2004.

Following its acquisition of Collateral Therapeutics, Schering initiated a multi-center Phase 2b/3 clinical program that was designed to evaluate up to 1,000 patients in a U.S. study and a concurrent European study. However, although Phase 1/2 and subsequent Phase 2 clinical data were encouraging, Schering announced in January 2004 that an interim analysis of the Generx Phase 2b/3 (AGENT-3) U.S. clinical study suggested that the Phase 2b/3 (AGENT-3) study as designed appeared to not be sufficient to demonstrate efficacy and it elected to discontinue enrollment pending a review of the study. Schering also reported, however, that the study revealed no evidence of serious safety concerns.

In December 2003, Mr. Reinhard and Dr. Tyler Dylan, who had been Executive Vice President and General Counsel of Collateral Therapeutics, founded Cardium to develop other product candidates that had been advanced by Collateral Therapeutics before its acquisition by Schering, including the Corgentin product candidate for use after acute myocardial infarction (heart attack). On June 15, 2004, Schering announced its intention to move out of cardiovascular research and development activities (including biologics as well as small molecule drugs) in order to refocus on its core business areas.

## **Table of Contents**

In November 2004, Cardium completed a retrospective subgroup analysis of data from the AGENT-3 clinical study, which provided positive efficacy insights and reconfirmed the positive safety data. In light of this retrospective analysis, Cardium elected to pursue the acquisition, development and commercialization of Schering's portfolio of cardiovascular growth factor therapeutic assets.

In October 2005, Cardium completed a reverse merger with Aries Ventures Inc., a Nevada corporation. Before the close of the reverse merger, Aries Ventures was a publicly traded shell company that had no business operations or significant non-cash assets. As a result of the reverse merger, Cardium became Aries Ventures' wholly-owned operating subsidiary, Cardium's former stockholders became significant stockholders of Aries Ventures and Cardium's management replaced Aries Ventures' management.

Concurrently with the closing of the reverse merger, we completed a private placement of a total of 19,325,651 shares of Aries Ventures common stock at a purchase price of \$1.50 per share and received net proceeds of \$25,542,389. In connection with the private placement, we issued warrants to purchase an aggregate of 2,856,818 shares of common stock to lead investors in the private placement, the placement agent and a former officer, director and significant stockholder of Aries Ventures.

Upon the close of the reverse merger and with the proceeds from the private placement, we acquired Schering's portfolio of cardiovascular growth factor therapeutic assets for a purchase price of approximately \$4,000,000 and other consideration as described below in connection with the Schering agreement.

In January 2006, we completed a corporate reorganization in which Aries Ventures was merged with and into Cardium, with Cardium as the surviving entity. As a result, we are now in our present form a publicly-traded, Delaware corporation named Cardium Therapeutics, Inc.

In late 2005, the American Heart Association revised its treatment guidelines to recommend the use of therapeutic cooling as part of the critical care procedures for patients with an out-of-hospital cardiac arrest following ventricular fibrillation. In March 2006, Cardium, through a newly-formed, wholly-owned subsidiary, Innercool Therapies, Inc., a Delaware corporation, completed the acquisition of substantially all of the assets and business of Innercool Therapies, Inc., a privately-held, unaffiliated California corporation engaged in the business of researching, developing, manufacturing, marketing, selling and distributing products and services related to endovascular cooling and temperature control therapy. As partial consideration for Innercool's products and other assets received, Cardium issued to the seller 2,500,000 shares of Cardium's common stock. Cardium will operate the acquired business through its Innercool Therapies subsidiary.

## **Product Candidates and Clinical Development**

### ***Coronary Heart Disease and Cardium's Approach to Treatment***

According to the American Heart Association, approximately 6.5 million adults in the United States experience angina pectoris associated with coronary heart disease (AHA, Heart Disease and Stroke Statistics 2006). The prevalence of angina is even higher in many areas of the European Union and elsewhere than it is in the United States. Angina, which is frequently experienced as chest pain, can severely limit patients' daily activities, and represents a substantial healthcare burden throughout the industrialized world.

Cardium's approach to the potential treatment of angina focuses on the use of adenovectors comprising DNA sequences that are capable of initiating or enhancing the growth of blood vessels in the heart—a process referred to as angiogenesis. Cardium's methods employ a standard cardiac catheter to gradually infuse an angiogenic adenovector into the coronary circulation. The intracoronary route of delivery is not only readily accessible from outside of the heart but it directly supplies the underlying heart muscle as well as the coronary endothelium, to which adenovectors can bind and from which blood vessels can develop. Cardiac infusion catheters and the intracoronary delivery route are also beneficial because they are now routinely used by cardiologists for performing standard diagnostic procedures such as angiography.

## **Table of Contents**

Adenovectors are the most widely-studied DNA delivery vehicles in human clinical trials; and, in the context of heart disease, angiogenic adenovectors are believed to be particularly useful as biologics in that they do not integrate into the human genome but can bind to and remain in the heart for a sufficient period of time to promote the development of new blood vessels. Naturally-occurring biological receptors for adenovectors are believed to facilitate its binding to a broad area of heart muscle supplied by the infused coronary circulation. Employing this readily-accessible coronary delivery route to the myocardium avoids the need for any mechanical devices or approaches that require entry into the heart chambers or piercing of the surrounding heart muscle, or that result in delivery and gene expression concentrated along needle tracks in the injected myocardium.

Cardium's methods are applicable to multiple angiogenic DNAs including VEGFs, FGFs and other DNA sequences capable of promoting angiogenesis. Of these, the FGF-4 angiogenic DNA employed in Cardium's Generx product candidate was selected as being advantageous for promoting blood vessel growth in the heart. In particular, FGFs are believed to activate a number of downstream angiogenic factors, including VEGFs and related proteins that can contribute to the process of forming stable blood vessel growth in ischemic areas of need such as oxygen-deprived tissue downstream of narrow or blocked coronary arteries and/or smaller blood vessels located within the heart muscle.

While angioplasty and stenting as well as coronary artery bypass graft (CABG) surgeries can be performed for mechanically opening or surgically bypassing blockages of the large epicardial blood vessels that surround the myocardium, neither angioplasty nor CABG are believed to be capable of also addressing blockages or limitations affecting the mid-sized to smaller blood vessels that are located deeper within the heart muscle. These deeper blood vessels, which form the underlying coronary microcirculation, are directly responsible for conveying oxygenated blood into close proximity with the adjacent heart tissue. In addition, microcirculatory impedance or resistance to flow at the downstream level is believed to contribute substantially to reducing overall blood flow through the myocardium which may be a contributory cause of ischemia in patients with heart disease. In that regard, many patients continue to experience angina even after surgical and other interventions have been performed to mechanically open or bypass accessible portions of the large upstream blood vessels that initially conduct blood flow into the heart.

### ***Generx Clinical Studies***

Generx has been evaluated in studies of 663 patients (including 450 Generx-treated patients and 213 controls) in four multi-center, double-blind, placebo-controlled clinical studies. These studies have been conducted at over 100 U.S., Canadian, European and South American medical centers.

Results from two multi-center, randomized, double-blind, placebo-controlled studies (Phase 1/2 and Phase 2), conducted by Schering AG and/or its affiliates, including Berlex Laboratories, in collaboration with Collateral Therapeutics, have provided important safety and preliminary efficacy information. Based on intracoronary administration to 450 patients, Generx appears to be safe and well tolerated with no significant adverse side effects. Results from the Phase 1/2 study (AGENT-1) demonstrated that, in patients whose baseline exercise treadmill tests (ETT) were equal to, or less than 10 minutes, Generx showed a significant improvement in ETT time compared to patients that received the placebo control. A Phase 2 study (AGENT-2), designed to assess enhancement of myocardial perfusion (blood flow to the heart) following intracoronary delivery of Generx in patients with documented reversible ischemia measured by stress adenosine single-photon emission computed tomography (SPECT) imaging, demonstrated that Generx provided improvement in myocardial perfusion in patients with moderate to severe angina.

Positive data from AGENT-1 and AGENT-2 supported the advancement of the Generx development program into two large-scale Phase 2b/3 trials worldwide (AGENT-3 and AGENT-4), which were designed to enroll up to 1,000 patients at more than 100 medical centers in the U.S., Canada, South America and Europe. Based on an interim analysis of 307 patients in the U.S.-based AGENT-3 study, the clinical data further confirmed the product's positive safety profile and suggested improvements to study design in view of the level

**Table of Contents**

of placebo response observed among generally healthier patients. However, enrollment in the studies was stopped because, as designed, the studies were not considered sufficient to provide statistical evidence of efficacy. An independent Data Safety Monitoring Board monitored the studies and reported that there was no evidence of safety concerns. A detailed subgroup analysis of the AGENT-3 data confirmed that there were statistically significant improvements in the primary end-point (i.e. exercise treadmill testing or ETT) in key patient populations. This subgroup analysis is believed to provide support for further clinical trial evaluation to demonstrate the safety and effectiveness of Genex in certain patient populations with myocardial ischemia and associated symptomatic recurrent angina.

The following chart summarizes the clinical development of Genex:

Date	Trial	Study Objective	No. of Patients	Clinical Results
1999	AGENT 1	First in Man U.S. Phase 1/2 Clinical Study	79	Positive Safety & Preliminary Efficacy
2001	AGENT 2	Phase 2a Clinical Study Multi-Center, Randomized, Placebo-Controlled, U.S. Mechanism of Action Study	52	Positive Safety & Preliminary Efficacy, Positive Info. About Mechanism of Action (Cardiac Perfusion)
2004	AGENT 3	Evaluation of Cardiac Perfusion Multi-Center, Randomized, Placebo-Controlled, U.S. Phase 2b/3 Clinical Study	416	Positive Safety, Terminated Early Based on Protocol Design (High Placebo Response Among Generally Healthier Patients on Exercise Treadmill)
2004	AGENT 4	Evaluate Safety & Efficacy Multi-Center, Randomized, Placebo-Controlled, Europe, Canada, South America Phase 2b/3 Clinical Study	116	Positive Safety, Terminated Early Based on Protocol Design
2005	AGENT 3 (Review)	Evaluate Safety & Efficacy Retrospective Analysis of Phase 2b/3 Clinical Study Results	(416)	Positive Safety and Statistically

Significant Efficacy in Patients

(>55 years of age)

with Severe Angina or

Limited Exercise Capacity

Total

663

2006

AGENT 5

Planned Clinical Study Based on

Meta-Analyses of AGENT 1

through AGENT 4 Studies

***Comparative Anti-Anginal Therapeutic Approaches***

Clinical Study Designed to

Provide Confirmatory

Safety and Efficacy Data

During the past two decades several drugs have been approved by the FDA for the management of chronic stable angina pectoris, including beta-blockers, nitrates and calcium channel blockers. These drugs were approved based upon improvement in total ETT time and, in general, have demonstrated placebo-corrected increases of approximately 20 to 50 seconds. Very few medications to treat angina have been approved over the

**Table of Contents**

past 15 years. Currently, CV Therapeutics' product Ranolazine, which is a fatty acid oxidation inhibitor, is being introduced as a potential new alternative to or addition to existing therapies. The clinical trial experience in AGENT-3 suggests that in patients with more severe angina, Generx, after a one-time administration, can produce sustained increases in total ETT time that are clinically meaningful when considered in the context of these available therapies. Most importantly, the effects of Generx have been demonstrated in patients who are already receiving one or more chronic anti-anginal medications.

Looking comparatively, the Ranolazine clinical trial data suggest that the magnitude of its effect is similar to the currently available drugs. For example, in the CARISA trial, Ranolazine achieved an approximately 24 second improvement in total ETT time over placebo at trough drug levels (as defined in the trial protocol). In addition to drug therapy, mechanical revascularization procedures such as percutaneous coronary intervention (PCI) and coronary artery bypass surgery graft (CABG) surgery are commonly employed interventional procedures used to manage patients with chronic angina. While there have been few published controlled clinical trials of PCI or CABG surgery that have collected ETT data, two studies that have directly compared PCI and CABG surgery using ETT have shown sustained improvements in total ETT time of approximately 90 to 114 seconds for PCI and 132 to 174 seconds for CABG surgery.

**Comparative Clinical Data Based on****Total Exercise Treadmill Time: Change from Baseline**

Study	Treatment Group	# of Patients	Mean ETT Change	
			in Seconds	p-Value
<b>DNA-Based Angiogenic Therapy</b>	Placebo	27	28.1 (11.5%)	
	Generx 10e9 v.p. dosage	27	92.0 (38.3%)	0.03
	Generx 10e10 v.p. dosage	37	75.3 (31.2%)	0.02
<b>AGENT-3/4</b>				
Age > 55, Baseline				
ETT ≤ 300 Seconds @ Six Months				
<b>Small Molecule Drug</b>	Placebo	258	91.7 (21.9%)	
	Ranolazine 750 mg	272	115.4 (27.7%)	0.03
	Ranolazine 1000 mg	261	115.8 (27.9%)	0.03
<b>Ranolazine</b>				
*CARISA Study <sup>(1)</sup>				
<b>CV Therapeutics Mechanical</b>	Coronary Artery	46	132.0 (29.7%)	
	Bypass Surgery			
<b>Revascularizations</b>	PCI Angioplasty	40	114.0 (23.5%)	
American Heart Journal <sup>(2)</sup>				
<b>Mechanical</b>	Coronary Artery	78	174.0 (34.9%)	
<b>Revascularizations</b>	Bypass Surgery			
	PCI Angioplasty	92	90.0 (19.4%)	
ACIP Study <sup>(3)</sup>				

\* CARISA data are least square means and other study data are arithmetic means.

<sup>(1)</sup> Chaitman BR, Pepine CJ, Parker JO, Skopal J, Chumakova G, et al. Effects of ranolazine with atenolol, amlodipine, or diltiazem on exercise tolerance and angina frequency in patients with severe chronic angina: a randomized controlled trial. JAMA 2004;291(3):309-316.

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

- (2) Mulcahy D, Keegan J, Phadke K, Wright C, Sparrow J, Purcell H, Fox K. Effects of coronary artery bypass surgery and angioplasty on the total ischemic burden: a study of exercise testing and ambulatory ST segment monitoring. *Am Heart J* 1992;123(3):597-603.
- (3) Bourassa MG, Knatterud GL, Pepine CJ, Sopko G, Rogers WJ, et al. Asymptomatic Cardiac Ischemia Pilot (ACIP) Study. Improvement of cardiac ischemia at 1 year after PTCA and CABG. *Circ* 1995;92(9 Suppl):II1-7.

## **Table of Contents**

These data confirmed earlier studies and suggested that the treatment could benefit patients with more serious angina that typically occurs as a result of advanced coronary artery disease. This may allow targeting patients who have had previous interventions such as angioplasty or bypass surgery, but have recurrent angina despite drug therapy. Furthermore, based on this substantial human clinical experience with Generx, coupled with unique insights regarding a particularly responsive patient population for what is considered to be the key efficacy end-point, we believe that Generx has the potential to obtain approvable clinical data in a pivotal trial in the foreseeable future and ahead of potential competition.

We plan to further build on Schering's six-year clinical development activities and advance forward with AGENT-5, a newly redesigned, late-stage clinical study that would be structured and powered to serve as the basis for advancing Generx toward a regulatory submission seeking marketing approval from the FDA.

### ***Generx Clinical Development Strategy***

Since 1995, members of our executive management team, during their employment with Collateral Therapeutics and Schering, have had considerable experience in accomplishing regulatory clearance in pre-clinical research, pre-clinical toxicology, manufacturing, distribution and global clinical development of Generx that should allow us to begin our clinical development program in a more favorable position than most of our competitors. As part of the acquisition of Schering's portfolio of cardiovascular growth factor therapeutic assets, we are receiving from Schering an active IND in the United States, Canada and several European and South American countries, and information about manufacturing and analytical processes approved by the FDA and the European Regulatory Agency.

We plan to initiate AGENT-5, a multi-center, randomized, double-blind, placebo-controlled study to prospectively evaluate the efficacy and safety of mdFGF-4 in the patient population identified as responders in meta-analyses of the prior clinical studies conducted by Schering AG and its affiliates (particularly including the AGENT-2 and AGENT-3 clinical studies).

### ***Corgentin Pre-Clinical Development***

Corgentin, a pre-clinical product candidate, is a next-generation DNA-based therapeutic based on myocardial derived insulin-like growth factor-I (mdIGF-I). Corgentin is being designed as a one time cardiomyocyte-derived treatment to promote the repair and restoration of damaged cardiomyocytes and enhance cardiac function following a heart attack (acute myocardial infarction) through the beneficial cardiac effects of prolonged IGF-I protein expression. We believe that myocardial derived IGF-I offers the potential to improve post-infarct cardiac healing through DNA-based, targeted myocardial cell delivery and resulting sustained cardiac-restorative bioactivity. Corgentin would be delivered using our methods of intracoronary cardiac administration. The biological properties of IGF-I, including inhibition of apoptosis, adaptive cardiomyocyte hypertrophy, recruitment of cardiac progenitor cells, as well as the induction of angiogenesis and enhancement of cardiac function, provide the rationale for the development of a therapy directed at myocardial repair and restoration. This biology predicts Corgentin's potential to improve functional recovery and prevent ventricular dysfunction and the associated progression to congestive heart failure following myocardial infarction and reperfusion.

The safety of systemic IGF-I protein therapy has been confirmed in multiple human clinical studies for a number of medical indications. While there is abundant published scientific literature validating the multiple beneficial cardiac effects of IGF-I, systemic IGF-I protein delivery generally lacks the ability to target cardiomyocytes for effective therapy. We believe that by targeting the heart with intracoronary, DNA-coded, myocardial-directed delivery, using the methods pioneered for the Generx development program by Collateral Therapeutics and Schering, mdIGF-I has the potential to induce a positive biologic response. The targeted cardiomyocytes are expected to produce sustained therapeutic protein levels in the myocardium where it is needed. We estimate that over 1,000 patients have been treated with various dose levels of IGF-I protein, and 450 patients have received Generx via intracoronary administration of DNA-based myocardial delivery of the FGF-4



## **Table of Contents**

angiogenic growth factor. We believe the safety and preliminary efficacy from these studies provide further support for the clinical potential of Corgentin.

Collateral Therapeutics *in vitro* pre-clinical development studies provided data supporting the myocardial benefits of IGF-I in cell-based assays by protecting cardiomyocytes against apoptosis, inducing adaptive cardiomyocyte hypertrophy and inducing proliferation of human coronary artery endothelial cells. Our *in vivo* proof-of-concept pilot study in pigs, based on our coronary occlusion/reperfusion myocardial infarct model, tested intracoronary mdIGF-I administration to promote myocardial repair following a significant heart attack (myocardial infarction). This double-blind, randomized, placebo-controlled study was designed to simulate the clinical approach in which Corgentin could be administered after emergency reperfusion therapy to a heart attack patient. Following infarction, echocardiographic analysis documented recovery and restoration of ventricular function and reversal of early left ventricular remodeling in the Corgentin-treated group, compared to placebo. Post-mortem analysis of the hearts provided histological evidence of the potential for post-infarct myocardial protection with this therapy. The initial clinical studies for Corgentin would be designed to seek product registration for use in patients with acute ST-elevation myocardial infarction undergoing percutaneous coronary intervention with or without associated fibrinolysis.

### ***Corgentin Therapeutic Approach for Heart Attack***

We will seek to advance the current standard of care for patients with acute coronary syndrome through the development of Corgentin to enhance myocardial healing in and around the infarct zone when used as an adjunct to existing vascular-directed pharmacologic and interventional therapies. As currently envisioned, Corgentin would be developed as a potential treatment to be administered for heart attack patients immediately following percutaneous coronary intervention. The objective of this treatment approach is focused on enhancing myocardial repair and restoration for heart cells that have been injured as a result of the heart attack. Today's current standard of care is vascular-directed, focusing on restoring blood flow, while Corgentin would seek to broaden treatment to include a cardiomyocyte-directed therapy to repair cells that have been injured as a result of a heart attack.

It should be noted that even with the best of care and successful early intervention, about 30% of heart attack patients will eventually go on to develop congestive heart failure with decompensated coronary syndrome and the potential for eventual left ventricular remodeling. This explains in large part why heart failure remains an epidemic health problem despite improved treatments for acute cardiac events. A therapeutic approach such as Corgentin has the potential to change the clinical outcome for heart attack patients by slowing or preventing the development of decompensated coronary syndrome and subsequent heart failure.

To further confirm the utility of the Corgentin approach and establish its commercialization potential, we plan to develop additional pre-clinical information through sponsored studies. If confirmatory, we may then consider initiating clinical studies, on our own or with a corporate development partner.

### ***Genvascor Pre-Clinical Development***

As part of our acquisition of Schering AG's portfolio of cardiovascular growth factor therapeutic assets, we also secured the rights to Genvascor, 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 arterial occlusive disease. We may seek to develop additional pre-clinical information through sponsored studies and, if confirmatory, anticipate we would seek to further develop Genvascor either alone or through a corporate collaboration.

Nitric oxide (NO) is believed to play an important role in angiogenesis by mediating some of the effect of vascular endothelial growth factor (VEGF) and other growth factors and by inhibiting local anti-angiogenic mechanisms (*e.g.*, VEGF receptor down-regulation). In the setting of atherosclerotic arterial disease and the

## **Table of Contents**

presence of multiple concurrent cardiovascular risk factors, activation of vascular endothelial cells leads to reduced production of endothelial nitric oxide and impaired local angiogenesis. We believe that a treatment that re-establishes a sufficient level of bioavailable nitric oxide can potentially lead to enhanced neovascularization and increased blood flow to an ischemic limb. Based on its multiple vasculoprotective mechanisms, as well as the anti-inflammatory activity that nitric oxide exerts while also stimulating angiogenesis and arteriogenesis, treatment with Genvascor could lead to superior clinical efficacy to relieve peripheral limb ischemia over single growth factor treatments that are currently in development.

Critical limb ischemia due to advanced peripheral arterial occlusive disease (PAOD) is characterized by reduced blood flow and oxygen delivery with exercise or even at rest with severe disease, resulting in claudication (muscle pain) and eventual non-healing skin ulcers that can lead to gangrene. The estimated incidence of critical limb ischemia is 500-1000 per million per year in the United States. Progressive microcirculatory dysfunction and impairment of angiogenesis/arteriogenesis are crucial pathophysiologic determinants of critical limb ischemia. As critical limb ischemia progresses, deregulation of the microcirculation occurs, characterized by activation of white blood cells, platelet aggregation, plugging of capillaries, endothelial damage and release of free radicals, all of which promote further ischemia leading to tissue damage and eventual tissue necrosis. The prognosis of patients with critical limb ischemia is very poor. The survival rate for patients with significant tissue necrosis without major amputation is less than 50% after one year. Many patients presenting with ischemic pain and ulcers are not suitable candidates for surgical revascularization or angioplasty due to diffuse, distal occlusive vascular disease. Current pharmacotherapy has had little impact on limb salvage in patients with advanced critical limb ischemia and, likewise, little symptomatic effect.

Angiogenesis and collateral vessel formation in an extremity are complex processes that require the coordination of multiple factors. Therefore, the potential efficacy of treatments currently under development using a single growth factor may be limited. We believe that the delivery of the gene directed at the production of nitric oxide to mediate the effect of multiple growth factors to induce angiogenesis represents a promising new approach for the treatment of critical limb ischemia. Nitric oxide availability to the tissues can reverse ischemia through multiple mechanisms including stimulating impaired angiogenesis, ameliorating existing microvascular dysfunction, restoring vasomotor (vasodilator) activity of existing vessels and contributing to the remodeling and maturation of existing collateral vessels. This biology-based revascularization of ischemic limb tissues could possibly be efficacious for patients who are not amenable to percutaneous or surgical revascularization.

The proprietary endothelial nitric oxide synthase mutant we acquired in the Schering acquisition has an increased specific activity of the nitric oxide synthase enzyme, which induces the production of high local levels of nitric oxide. This production is not only independent of the level of endogenous growth factors present, but also is not inhibited by common concurrent risk factors such as hypercholesterolemia or increased oxidative stress, which are known to inhibit the activity of endogenous wildtype eNOS. The properties of this eNOS mutant, Genvascor, may predict a beneficial effect in chronic ischemic conditions. Significant improvement in revascularization and limb salvage has been shown with intramuscular delivery of Genvascor in eNOS-knock-out mouse models of chronic limb ischemia. Efficacy of Genvascor has also been demonstrated in mouse chronic limb ischemia models with reported functional deficiencies in eNOS due to diabetes, the most common cause of PAOD. Treatment with Genvascor therefore has the potential to be efficacious in patients with chronic limb ischemia who also exhibit severe endothelial nitric oxide deficiency, either due to genetic causes or due to metabolic or inflammatory factors. These properties may provide Genvascor a competitive advantage over single growth factor therapies in development as a novel therapy for symptomatic, severe PAOD.

## **Innercool Therapies**

Through our Innercool Therapies subsidiary, we are also focused on the emerging field of therapeutic hypothermia. Innercool develops, manufactures and markets endovascular, catheter-based therapeutic systems designed to rapidly and controllably cool the body. Innercool's Celsius Control System is used in surgical and intensive care hospital units and provides physicians with an endovascular technology that can rapidly and controllably lower patient body temperature and maintain a chosen target temperature for a desired period of time

## **Table of Contents**

before allowing the patient to return to normothermic levels. The system has received 501(k) clearance from the FDA for use in inducing, maintaining and reversing mild hypothermia in neurosurgical patients, both in surgery and in recovery or intensive care. The system also has received FDA clearance for use in cardiac patients to achieve or maintain normal body temperatures in surgery and in recovery or intensive care, and as an adjunctive treatment for fever control in patients with cerebral infarction and intracerebral hemorrhage.

The American Heart Association recently revised its treatment guidelines to recommend the use of therapeutic cooling as part of the critical care procedures for patients with an out-of-hospital cardiac arrest following ventricular fibrillation. Innercool's hypothermia systems are now being introduced at a number of medical centers in the United States, including those at Stanford University, Cornell, Columbia, the University of Michigan, Seattle's Harborview and Swedish medical centers, San Francisco General Hospital, and the University of California medical centers at San Diego and San Francisco.

Innercool's approach to therapeutic hypothermia is based on a single use metallic catheter and a fully-integrated endovascular cooling system, which allows for rapid and controlled cooling and re-warming. The Celsius Control System integrates a number of features including a slim catheter profile, a highly efficient metal-based heat transfer element, a built-in temperature monitoring sensor, and a programmable console capable of rapidly and controllably inducing, maintaining and reversing therapeutic cooling. The distal portion of the catheter incorporates a flexible metallic heat-exchanged region (called the Temperature Control Element or TCE), which can be cooled or warmed with saline solution circulated in a closed-loop manner from the console. When placed in the inferior vena cava, the TCE exchanges thermal energy with the blood, resulting in cooling or warming of the downstream organs and body. The Celsius Control System is particularly advantageous in that it can cool the body rapidly and controllably, yet does not infuse fluid into the patient, nor is blood circulated outside of the body. Innercool recently launched its new Accutrol Catheter, which integrates a temperature sensing probe directly into the catheter, avoiding the need for placing separate temperature probes that can be slow to respond and cumbersome to use, and may not reflect true core body temperature.

Therapeutic cooling is designed to protect endangered cells, prevent tissue death and preserve organ function following events associated with severe deprivation such as stroke or cardiac arrest. Therapeutic hypothermia is believed to work by protecting critical tissues and organs, such as the brain, heart and kidneys, following acute ischemic or inflammatory events, by lowering metabolism and preserving cellular energy stores, thereby potentially stabilizing cellular structure and preventing or reducing injuries at the cellular, tissue and organ level.

Studies for additional indications with Innercool's system are expected to be conducted in collaboration with the National Institutes of Health and others. Potential future applications of the technology include endovascular cooling for cardiac arrest, acute ischemic stroke and myocardial infarction (heart attack).

Innercool has received a CE mark allowing the Celsius Control System to be marketed in the European Community, and approval from the Therapeutic Goods Administration (TGA) that allows it to market the system in Australia.

## **Government Regulation**

New drugs and biologics, including gene therapy and other DNA-based products, are subject to regulation under the federal Food, Drug, and Cosmetic Act. In addition, biologics are also regulated under the Public Health Service Act. We believe that the pharmaceutical products we are attempting to develop will be regulated either as biological products or as new drugs. Both statutes and their corresponding regulations govern, among other things, the testing, manufacturing, distribution, safety, efficacy, labeling, storage, record keeping, advertising and other promotional practices involving biologics or new drugs. FDA approval or other clearances must be obtained before clinical testing, and before manufacturing and marketing, of biologics and drugs. Obtaining FDA approval has historically been a costly and time-consuming process. Different regulatory regimes are applicable in other major markets.

## **Table of Contents**

In addition, any gene therapy and other DNA-based products we develop will require regulatory approvals before human trials and additional regulatory approvals before marketing. New biologics are subject to extensive regulation by the FDA and the Center for Biological Evaluation and Research and comparable agencies in other countries. Currently, each human-study protocol is reviewed by the FDA and, in some instances, the National Institutes of Health, on a case-by-case basis. The FDA and the National Institutes of Health have published guidance documents with respect to the development and submission of gene therapy protocols.

To commercialize our product candidates, we must sponsor and file an investigational new drug (IND) application and be responsible for initiating and overseeing the human studies to demonstrate the safety and efficacy and, for a biologic product, the potency, which are necessary to obtain FDA approval of any such products. For our newly sponsored investigational new drug applications, we will be required to select qualified investigators (usually physicians within medical institutions) to supervise the administration of the products, and we will be required to ensure that the investigations are conducted and monitored in accordance with FDA regulations and the general investigational plan and protocols contained in the IND application.

The FDA receives reports on the progress of each phase of testing, and it may require the modification, suspension, or termination of trials if an unwarranted risk is presented to patients. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. The IND application process can thus result in substantial delay and expense. Human gene therapy products, a primary area in which we are seeking to develop products, are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials to establish the safety, efficacy and potency of human gene therapy products, or that the data generated in these studies will be acceptable to the FDA to support marketing approval.

After the completion of trials of a new drug or biologic product, FDA marketing approval must be obtained. If the product is regulated as a biologic, the Center for Biological Evaluation and Research will require the submission and approval, depending on the type of biologic, of either a biologic license application or a product license application and a license application before commercial marketing of the biologic. If the product is classified as a new drug, we must file a new drug application with the Center for Drug Evaluation and Research and receive approval before commercial marketing of the drug. The new drug application or biologic license applications must include results of product development, laboratory, animal and human studies, and manufacturing information. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the new drug application or biologic license applications for filing and, even if filed, that any approval will be granted on a timely basis, if at all. In the past, new drug applications and biologic license applications submitted to the FDA have taken, on average, one to two years to receive approval after submission of all test data. If questions arise during the FDA review process, approval can take more than two years.

Notwithstanding the submission of relevant data, the FDA may ultimately decide that the new drug application or biologic license application does not satisfy its regulatory criteria for approval and may require additional studies. In addition, the FDA may condition marketing approval on the conduct of specific post-marketing studies to further evaluate safety and effectiveness. Rigorous and extensive FDA regulation of pharmaceutical products continues after approval, particularly with respect to compliance with current Good Manufacturing Practices (GMPs), reporting of adverse effects, advertising, promotion and marketing. 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.

Ethical, social and legal concerns about gene therapy, genetic testing and genetic research could result in additional regulations restricting or prohibiting the processes we or our suppliers may use. Federal and state agencies, congressional committees and foreign governments have expressed interest in further regulating

## **Table of Contents**

biotechnology. More restrictive regulations or claims that our products are unsafe or pose a hazard could prevent us from commercializing any such products.

The approval and/or clearance for marketing of medical devices, such as those being developed by our Innercool Therapies subsidiary, is also subject to extensive controls by health regulatory and other authorities. Although some devices can be cleared for marketing pursuant to a procedure referred to as an FDA 501(k) clearance, other devices and/or indications may require additional clinical studies and may be subject to even more extensive regulatory and other controls.

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

We are also subject to a variety of other regulations in the United States, including those relating to bioterrorism, taxes, labor and employment, import and export, and intellectual property.

To the extent we have operations outside the United States, any such operations would be similarly regulated by various agencies and entities in the countries in which we operate. The regulations of these countries may conflict with those in the United States and may vary from country to country. In markets outside the United States, we may be required to obtain approvals, licenses or certifications from a country's ministry of health or comparable agency before we begin operations or the marketing of products in that country. Approvals or licenses may be conditioned or unavailable for certain products. These regulations may limit our ability to enter certain markets outside the United States.

## **Competition**

The pharmaceutical, biotechnology and medical device industries are intensely competitive. Our products and any product candidates developed by us would compete with existing drugs, therapies and medical devices or procedures and with others under development. There are many pharmaceutical companies, biotechnology companies, medical device companies, public and private universities and research organizations actively engaged in research and development of products for the treatment of cardiovascular and related diseases, and/or products for temperature control therapy. Many of these organizations have financial, technical, research, clinical, manufacturing and marketing resources that are greater than ours. If a competing company develops or acquires rights to a more efficient, more effective, or safer competitive therapy for treatment of the same or similar diseases we have targeted, or one that offers significantly lower costs of treatment, our business, financial condition and results of operations could be materially adversely affected. In view of the relatively early stage of the industry, we believe that the most significant competitive factor in the field of gene therapy and biologics is the effectiveness and safety of a product candidate, as well as its relative safety, efficacy and cost as compared to other products, product candidates or approaches that may be useful for treating a particular disease condition.

We believe that our product development programs will be subject to significant competition from companies using alternative technologies, as well as to increasing competition from companies that develop and apply technologies similar to ours. Other companies may succeed in developing products earlier than we do, obtaining approvals for these products from the FDA more rapidly than we do or developing products that are safer, more effective or less expensive than those under development or proposed to be developed by us. We cannot assure you that research and development by others will not render our technology or product candidates

## **Table of Contents**

obsolete or non-competitive or result in treatments superior to any therapy developed by us, or that any therapy developed by us will be preferred to any existing or newly developed technologies.

We are aware of products currently under development by competitors targeting the same or similar cardiovascular and vascular diseases as our Genex product development. These include biologic treatments using forms of genes and therapeutic proteins. For example, Coraetus Genetics, Inc., pursuant to a development agreement with Boston Scientific, has initiated a clinical study to evaluate a non-viral delivery of vascular endothelial growth factor-2 (VEGF-2) DNA in the form of naked plasmid for the direct injection into the heart muscle of patients with severe angina. They are conducting a Phase 2 clinical study with plans to enroll patients with Class III or IV angina that are not suitable for traditional revascularization procedures. Additionally, GenVec, Inc. recently announced the initiation of a Phase 2 clinical study of BioByPass Angiogen, which uses Vascular Endothelial Growth Factor-121 (VEGF-121) as a treatment for patients with severe coronary artery disease. This study will reportedly evaluate the effects of ETT time, heart function and quality of life in patients. Angiogen will apparently be administered to patients using direct injection into heart muscle using a guidance system (NOGA). GenVec previously announced a research collaboration with Cordis Corporation, a Johnson & Johnson company, to utilize the NOGA guidance delivery for its Angiogen product. We will also face competition from entities using other traditional methods, including new drugs and mechanical therapies, to treat cardiovascular and vascular disease.

In the areas of temperature control therapy, as practiced by our Innercool Therapies subsidiary, there are a number of actual or potential competitive approaches including alternative endovascular approaches based on inflatable balloon devices, such as the CoolGard thermal regulating system developed by Alsius Corporation, and the Reprieve system being developed by Radiant Medical Inc. Alsius is currently marketing its CoolGard device, although it has recently recalled a number of units. Radiant is studying its Reprieve device in COOL MI, an international study reportedly designed to demonstrate that lowering a patient's body temperature in connection with treatment of a heart attack can reduce subsequent damage to the heart and that earlier, faster and deeper cooling results in a clinically significant reduction in heart damage. Other approaches being developed for therapeutic cooling include the use of specialized cooling pads such as those employed in the Artic Sun system being developed by Medivance, and other devices such as cooling blankets and helmets.

## **Manufacturing Strategy**

To leverage our experience and available financial resources, except as noted below with respect to Innercool Therapies, we do not plan to develop company-owned and operated manufacturing facilities. We plan to outsource all product manufacturing to a contract manufacturer of clinical drug products that operates at a manufacturing facility in compliance with current good manufacturing practices (GMPs). We may also seek to refine the current manufacturing process and final product formulation to achieve improvements in storage temperatures and the like.

Our management team already has experience with production of Adenovirus vector ( Adenovector ), DNA-based therapies, which is believed to be useful in understanding the unique requirements of our business. Schering, using their experience in the production of clinical grade, DNA-based drug products, has developed an adenovector manufacturing process employing the use of master viral banks and master cell banks. Technical transfer of process materials and methodologies from Schering to Cardium is expected to take place, combining the expertise of both companies.

The FDA has established guidelines and standards for the development and commercialization of molecular and gene-based drug products i.e.: *Guidance for Industry CMC for Human Gene Therapy INDs November 2004, Sterile Drug Products Produced by Aseptic Processing September 2004, Human Somatic Cell Therapy and Gene Therapy March 1998, PTC in the Characterization of Cell Lines Used to Produce Biologicals July 1993*. These industry guidelines, among others, provide essential oversight with regard to process methodologies, product formulations and quality control standards to ensure the safety, efficacy and quality of these drug products.

## **Table of Contents**

In January 2006, we entered into a Production Service Agreement with Molecular Medicine BioServices, Inc., pursuant to which Molecular Medicine will manufacture our lead product candidate, Generx, for late-stage clinical development. The agreement is due to expire upon completion of the project, which is anticipated to be completed in the third quarter of 2006. We may terminate the agreement at any time in our discretion by giving Molecular Medicine 60 days' notice of termination. Molecular Medicine may terminate the agreement at any time in its discretion by giving us 180 days' written notice. Either party may terminate the agreement upon a material breach by the other party, subject to certain cure periods.

The disposable portions of Innercool's products, the catheter and administrative set, are currently assembled at its facilities in San Diego. The console's cooling sub-assembly is currently purchased from a single vendor, although we believe there are several vendors that could supply this component. Innercool currently integrates this sub-assembly with additional software, printed circuit boards, electrical isolation, and a user interface in order to create the final product. We are currently considering improvements to the Innercool console which are designed to enhance functionality and/or manufacturability.

Innercool's manufacturing operations are required to comply with certain quality assurance regulations. Specifically, Innercool must adhere to the FDA quality system regulations, comply with ISO 13485 requirements and maintain our CE mark. We believe Innercool's operations meet such requirements.

## **Marketing and Sales**

Our product candidates must undergo testing and development in clinical trials and pre-clinical studies. Other than Innercool's Celsius Control System, we do not currently have any products approved for marketing nor any present capacity to market and sell products that could be commercially developed based on our technology. If we should obtain any such marketing approvals, we expect that we would elect to engage in marketing or sales through or in collaboration with a commercialization partner, although we are not currently involved with such a partner.

Innercool is currently selling its products into neurosurgical and neurocritical care markets. Innercool's sales force currently consists of three individuals. Representative accounts include medical centers at Stanford University, Cornell, Columbia, the University of Michigan, Seattle's Harborview and Swedish medical centers, San Francisco General Hospital, and the University of California medical centers at San Diego and San Francisco.

Innercool has received a CE mark allowing its products to be marketed in the European Community, and approval from the Therapeutic Goods Administration (TGA) that allows it to market its products in Australia. Innercool has used a distributorship arrangement to commence sales efforts in Australia and has opened accounts at some of the country's premier hospitals. Innercool has not commenced sales efforts in Europe and does not currently expect to do so other than through a distributorship arrangement.

## **Intellectual Property**

As part of our acquisition of Schering's portfolio of cardiovascular growth factor therapeutic assets, pursuant to a Technology Transfer Agreement entered into between Cardium and Schering, we acquired from Schering a portfolio of methods and compositions directed at the treatment of cardiovascular diseases. We also have exclusive licenses to methods for introducing DNA to the heart and for improving heart muscle function, as well as to various biologics. Our resulting portfolio of cardiovascular product candidates and associated intellectual property include methods and genes applicable to the treatment of heart diseases, the promotion of healing, and the treatment of peripheral vascular disease. In March 2006, we also acquired a portfolio of intellectual property related to devices and methods for endovascular temperature control therapy, in connection with our acquisition of the assets of Innercool Therapies. There can be no assurance that our intellectual property assets will be sufficient to protect our commercialization opportunities, nor that our planned commercialization activities will not infringe any intellectual property rights held or developed by third parties.

## **Table of Contents**

We have entered into certain collaborative and licensing arrangements in connection with the Schering portfolio acquisitions. We expect to continue evaluations of the safety, efficacy and possible commercialization of our therapeutic genes and methods of gene therapy. On the basis of such evaluations, we may alter our current research and development programs, clinical studies, partnering or other development or commercialization activities. Accordingly, we may elect to cancel, from time to time, one or more of the following arrangements with third parties, subject to any applicable accrued liabilities and, in certain cases, termination fees. Alternatively, the other parties to such arrangements may, in certain circumstances, be entitled to terminate the arrangements. Further, the amounts payable under certain of our arrangements may depend on the number of products or indications for which any particular technology licensed under such arrangement is used by us. Thus, any statement of potential fees payable by us under each agreement is subject to a high degree of potential variation from the amounts indicated herein.

Our business strategy includes the establishment of research collaborations to support and supplement our discovery, pre-clinical and clinical research and development phases of the product commercialization cycle, as well as the implementation of long-term strategic partnerships with major pharmaceutical and biotechnology companies and interventional cardiology and medical device companies, to support clinical trials and product commercialization activities, including product manufacturing, marketing and distribution.

### ***Schering Agreement***

We entered into an agreement with Schering covering the transfer or license of certain assets and technology relating to (i) methods of gene therapy for the treatment of cardiovascular disease (including methods for the delivery of genes to the heart or vasculature and the use of angiogenic and/or non-angiogenic genes for the potential treatment of diseases of the heart or vasculature); (ii) therapeutic genes that include fibroblast growth factors (including FGF-4); insulin-like growth factors (including IGF-I); and potentially other related biologics (including mutant eNOS); and (3) other technology and know-how, including manufacturing and formulation technology, as well as data relating to the clinical development of Generx and corresponding FDA regulatory matters. Under this agreement, we paid Schering a \$4 million up front fee in October 2005 and would be required to pay a \$10 million milestone payment upon the first commercial sale of each resulting product. We also may be obligated to pay the following royalties to Schering: (i) 5% on net sales of an FGF-4 based product such as Generx, or (ii) 4% on net sales of other products developed based on technology transferred to us by Schering. We are also obligated to reimburse Schering for patent expenses, including the expenses of any interference or other proceedings, accrued on or after April 1, 2005 in connection with the transferred technologies.

### ***University of California License Agreement***

In September 1995, Collateral Therapeutics entered into an agreement with the Regents of the University of California (Regents) pursuant to which the Regents granted to Collateral Therapeutics an exclusive license (with the right to sublicense) in the United States, and in foreign countries where the respective patent rights exist, to certain technology relating to angiogenic gene therapy, based on scientific discovery research conducted at a laboratory at the University of California. In June 1997, Collateral Therapeutics and the Regents entered into an exclusive license agreement (with the right to sublicense) in the United States, and in foreign countries where the respective patent rights exist, for certain technology relating to angiogenic gene therapy for congestive heart failure.

As part of the Schering transaction, we acquired Collateral Therapeutics' rights and corresponding obligations under the September 1995 agreement, which in connection with the Schering transaction was amended, among other things, to include the technology previously covered by the June 1997 agreement. The agreement as amended may be canceled by us at any time on 60 days' notice, following which we would continue to be responsible only for obligations and liabilities accrued before termination. Under the agreement, we are obligated to pay (1) an annual royalty fee of 2% based on net sales of products incorporating the technology licensed under the agreement, and (2) a minimum annual royalty fee (which may be offset against the



---

**Table of Contents**

net sales-based royalty fee) of \$150,000 for 2009, \$200,000 for 2010, \$250,000 for 2011, \$300,000 for 2012, \$400,000 for 2013 and \$500,000 for 2014 and thereafter. We also are obligated to reimburse the Regents for ongoing patent expenses incurred in connection with the licensed technologies. We are obligated to make milestone payments to the Regents of \$100,000 payable on the earlier to occur of the beginning of new Phase II clinical trials in the United States or June 30, 2006, and \$200,000, payable on the earlier to occur of the beginning of Phase II/III clinical trials in the United States or December 31, 2008.

The above agreement provides us with exclusive rights (subject to any license rights of the U.S. government) to develop and commercialize technology covered by patent applications that have been filed in the United States and in foreign countries. Under the terms of the agreement, we are required to diligently proceed with the development and commercialization of the products covered by the licensed patents. To demonstrate our diligence, we are required to attain certain developmental milestones on or before deadlines set forth in the licenses. If and after we receive marketing approval of the products, we will be required to market the products in the United States within six months thereafter. If there is a material breach of any of these agreements, which material breach remains uncured for 60 days, the breached agreement could be terminated by the Regents.

***New York University Research and License Agreement***

In March 1997, Collateral Therapeutics entered into an agreement with New York University (NYU) pursuant to which NYU granted to Collateral Therapeutics an exclusive worldwide license (with the right to sublicense) to certain technology covering development, manufacture, use and sale of gene therapy products based on FGF-4 for the treatment of coronary artery disease, peripheral vascular disease and congestive heart failure. This agreement was also assumed by us in connection with the Schering transaction and amended in certain respects pursuant to an agreement with NYU. Upon assumption, this agreement as amended provides us with exclusive rights in such fields to develop and commercialize technology covered by the issued patent and patent applications that have been filed in the United States and in foreign countries. Pursuant to the agreement, we are obligated to pay NYU license fees through the completion of the first full year of sales of licensed product equal to \$50,000 per year. We also are obligated to reimburse NYU for ongoing patent expenses incurred in connection with the licensed technologies. Should licensed products under the agreement reach the stage of filing of a product license application (PLA) and PLA approval or foreign equivalent thereof, we could be obligated to pay up to an aggregate amount of approximately \$1.8 million for each product in milestone payments. In addition, beginning in the year in which we complete one full year of sales of licensed products and continuing thereafter until the agreement terminates or expires, we could also be obligated to pay annual royalty fees equal to the greater of \$500,000 or 3% on net sales of products incorporating the technology licensed under the agreement. Under the license agreement, we are required to pursue development and commercialization of the licensed products. If there is a material breach of this agreement that remains uncured for 60 days (or 30 days in the case of unpaid amounts due), the breached agreement could be terminated by NYU.

***Yale University License Agreement***

In September 2000, Schering entered into an agreement with Yale University pursuant to which Yale University granted to Schering an exclusive worldwide license (with the right to sublicense) to certain technology covering development, manufacture, use and sale of gene therapy products based on a phosphomimetic mutant of human endothelial nitric oxide synthase (eNOS) for the treatment of all cardiovascular diseases. As part of the Schering transaction, we assumed this agreement with Yale University and as such will be obligated to pay an annual license fee of \$15,000, and make certain milestone payments during the development of the licensed products as follows: (i) \$150,000 upon filing the first investigational new drug application for the first licensed product in any one of the United States, Japan or a country in the European Union; (ii) \$825,000 upon treating the first patient in the second clinical trial in any one of the United States, Japan or a country in the European Union; (iii) \$900,000 upon filing first Biologics License Application (BLA) or new drug application in the United States; (iv) \$1.5 million upon the first commercial sale of a licensed product; and (v) \$3 million upon first \$10 million in net sales. If we achieve sales of licensed products, we would

## **Table of Contents**

be required to pay a minimum royalty of \$50,000 per year that is credited to an annual sales royalty equal to 4% of the first \$250 million of net sales, 5% of the next \$250 million of net sales and 6% of net sales in excess of \$500 million. Under the terms of this agreement, we are obligated to reimburse Yale University for ongoing patent expenses incurred in connection with the licensed technologies. If there is a material breach of this agreement that remains uncured for 60 days, the breached agreement could be terminated by Yale.

### ***SurModics License Agreement***

In connection with the Innercool Therapies acquisition, a Master License Agreement with SurModics, Inc., dated December 1, 1999, was assigned to and assumed by Innercool Therapies, Inc. (SurModics License). Pursuant to the terms of the SurModics License, SurModics grants to Innercool a worldwide license with respect to medical products that are surface-treated with photo-reactive polyvinylpyrrolidone, photo-reactive heparin, diphoto diquat (photo-reactive crosslinking compound) or any combination of such photo-reactive reagents, under SurModics trade secrets and other technical information relating to the surface-treatment of medical devices and which SurModics has the right to transmit to others, as well as certain patent applications and patents. In connection with the SurModics License, Innercool is obligated to pay SurModics a royalty equal to the greater of: (A) earned royalties calculated as a percentage of net sales of licensed products sold in each calendar year (the percentage used in each calculation during each calendar year is based on the cumulative net sales of licensed product in the calendar year as follows: 2.5% on the first \$15 million of net sales; 2.25% on the next \$15 million; and 2.00% on net sales over \$30 million); or (B) quarterly minimum royalties that increase on an annual basis. Quarterly minimum royalties for 2006 are \$20,000. In addition, Innercool grants to SurModics a noncancelable, nonexclusive, sublicensable, worldwide license to make, have made, use and sell products and processes covered by any Innercool latent reactive chemical patent, to the extent such manufacture, sale or use is covered by any claim of any patent that SurModics has the right to license or may have licensed to others, and SurModics agrees to pay to Innercool five percent (5%) of the royalties SurModics receives from its sublicensees based on sales of products that but for such sublicenses would infringe Innercool's patents. Each license granted under the SurModics License extends until expiration of the last to expire patent rights covering the applicable product or for 15 years following the first bona fide commercial sale of such product, whichever is longer. The SurModics License may be terminated by Innercool upon 90 days advance notice and by SurModics in the event of any material breach or default by Innercool upon 30 days advance notice.

### **Employees**

As of March 24, 2006, Cardium employed approximately 14 full-time employees. Innercool Therapies, Inc., our wholly-owned subsidiary, employed approximately 15 full-time employees, as well as one temporary and one part-time employee. We expect to hire approximately 26 additional employees during the next 12 months. Our employees are not represented by a collective bargaining agreement and we have not experienced any work stoppages as a result of labor disputes. We believe our relationship with our employees is good. We also rely on various consultants and advisors to provide services to us.

**Table of Contents****ITEM 2. DESCRIPTION OF PROPERTY**

The table below summarizes our facilities. We believe our facilities are adequate to meet our operating requirements for the foreseeable future.

<b>Location</b>	<b>Nature of Use</b>	<b>Square Feet</b>	<b>How Held</b>	<b>Monthly Base Rent</b>	<b>Lease Expiration Date</b>
3611 Valley Centre Drive  Suite 525  San Diego, CA USA	Corporate headquarters (Principal executive offices)	5,727	Leased	\$ 21,500 <sup>(1)</sup>	October 31, 2007 <sup>(2)</sup>
3931 Sorrento Valley Blvd.  San Diego, CA USA <sup>(3)</sup>	Office, Research and Development and Related Uses	24,000 <sup>(4)</sup>	Leased <sup>(5)</sup>	\$ 25,200 <sup>(6)</sup>	October 31, 2007

<sup>(1)</sup> Monthly base rent during the first year of the lease. Monthly base rent increases to approximately \$22,335 in the second year of the lease. In addition to base rent, we are also required to pay our proportionate share of operating and tax expenses for the office park in which our space is located.

<sup>(2)</sup> The lease contains two options, the first for an additional term of one year and the second for an additional term of two years. The second option is subject to a third party right of first refusal.

<sup>(3)</sup> This facility is used by Innercool Therapies, Inc., our wholly-owned subsidiary.

<sup>(4)</sup> Approximately 6,602 square feet are subleased to a third party.

<sup>(5)</sup> The lease was assigned to and assumed by Innercool Therapies in March 2006 in connection with the Innercool acquisition described under Item 1 above.

<sup>(6)</sup> In addition to base rent, we are also obligated to pay the landlord's operating expenses associated with the facility. We receive approximately \$7,262 in offsetting monthly rent from the third party sublessee plus the sublessee's pro rate share of the landlord's operating expenses.

We do not intend to invest directly in real estate, real estate mortgages or interests in real estate. We have an investment policy that governs the investment of any surplus funds we may have from time to time. Under this policy, we may invest in certain securities that meet the credit and maturity requirements set forth in the policy, including securities of federal agencies, corporate obligations, municipal notes and money market funds. An investment in such securities may result in an indirect investment in real estate, real estate mortgages or interests in real estate.

**ITEM 3. LEGAL PROCEEDINGS**

From time to time, we may become involved in various investigations, claims and legal proceedings that arise in the ordinary course of our business. These matters may relate to intellectual property, employment, tax, regulation, contract or other matters. The resolution of these matters as they arise will be subject to various uncertainties and, even if such claims are without merit, could result in the expenditure of significant financial and managerial resources.

As of March 28, 2006, neither Cardium nor its subsidiaries were a party to any material pending legal proceeding nor was any of their property the subject of any material pending legal proceeding other than patent proceedings and related matters. We anticipate, however, that we will be regularly engaged in various patent prosecution and related matters in connection with the technology we develop and/or license, including the technologies described in Item 1 above. For example, we, and previously Collateral Therapeutics, have assisted the University of California, as the licensor, in an interference proceeding involving the University of California's technology for cardiovascular gene therapy (filed by Hammond et al.) and a pending patent application filed by Jeffrey Leiden et al. (a U.S. counterpart of international application PCT/US93/11133, which published as WO94/11506). In March 2006, we reported that a panel of Administrative Patent Judges of the U.S. Board of Patent Appeals and Interferences (BPAI) issued a final judgment against the Leiden applicants, ordering

**Table of Contents**

that the interference count (representing the claims in dispute) be awarded to Hammond, and that Leiden et al. be held not entitled to any patent containing claims corresponding to those in the interference. However, the patent applicant, Arch Development Corporation, which had licensed the technology to Boston Scientific Corporation, has appealed the decision against them. In a related matter, Collateral Therapeutics, with our assistance, successfully opposed a European counterpart to the Leiden PCT application (EP-B-668913), which led to a decision to revoke the patent grant in Europe. Although the patentee, Arch Development Corporation, subsequently appealed the adverse decision, a ruling following appeal to the European Patent Office's Technical Board of Appeal has now been rendered and the European patent grant to Arch (which had been licensed to Boston Scientific) has now been revoked. If the interference, opposition or other adverse proceedings were ultimately to be decided adversely, we could be compelled to seek a license to the Leiden technology, which may not be available on terms that we find commercially reasonable. In addition, such proceedings, even if decided in our favor, involve a lengthy process, are subject to appeal, and typically result in substantial costs and diversion of resources. In connection with our acquisition of the licensed technologies from Schering AG, we were obligated to reimburse them for any patent expenses (including interference or other proceedings) that continued to be borne by them for activities from April 1, 2005 forward.

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

We did not submit any matters to our stockholders for a vote during the fourth quarter ended December 31, 2005.

**Table of Contents****PART II****ITEM 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS****Market Information**

Our common stock trades on both the Over-the-Counter Bulletin Board (OTCBB) and the Pink Sheets under the symbol CDTP. Below are the high and low closing prices of our common stock as reported by Nasdaq for each quarter of the years ended December 31, 2005 and 2004:

	2005		2004	
	High	Low	High	Low
First Quarter	\$ 0.15	\$ 0.15	\$ 0.55	\$ 0.25
Second Quarter	\$ 0.46	\$ 0.15	\$ 0.35	\$ 0.30
Third Quarter	\$ 1.51	\$ 0.46	\$ 0.30	\$ 0.25
Fourth Quarter	\$ 2.35	\$ 0.61	\$ 0.26	\$ 0.15

The information above reflects inter-dealer prices, without retail mark-up, mark down or commissions, may not represent actual transactions and should not be deemed to reflect an established public trading market for our common stock. The high and low closing prices shown are for shares of common stock of Aries Ventures before the reverse merger with Cardium in October 2005, with the exception of the high closing price for the fourth quarter of 2005, which occurred after the reverse merger. Until February 27, 2006, our common stock traded solely on the Pink Sheets.

 **Holders**

As of March 13, 2006, there were approximately 361 stockholders of record of our common stock.

 **Dividends**

During the last two years ended December 31, 2005 and 2004, no dividends were declared or paid on our common stock. We do not anticipate paying a dividend in the foreseeable future, as we are in our development stage and expect to sustain losses over the next several years. To the extent we do have earnings, we intend to retain any earnings to help provide funds for the development of our product candidates, the implementation of our business strategy and for our future growth.

In preparation for and in connection with the reverse merger between Aries Ventures and Cardium in October 2005, a one-time, non-dividend, cash distribution of approximately \$0.43 per share was made to the stockholders of record holding, immediately prior to the close of the reverse merger, approximately two million shares of common stock of Aries Ventures.

 **Recent Sales of Unregistered Securities**

Other than as previously reported on our Current Report on Form 8-K filed with the Securities and Exchange Commission on October 26, 2005, during the years ended December 31, 2005, 2004 and 2003, we did not sell any unregistered securities.

 **Repurchases**

During the fourth quarter of 2005, we did not repurchase any shares of our common stock, nor were any repurchases made on our behalf.

## **Table of Contents**

### **ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION**

*The following is a discussion of our intended plan of operation during the next 12 months. You should carefully review the risks described under this Item 6 and elsewhere in this report, which identify certain important factors that could cause our future financial condition and results of operations to vary.*

#### **Plan of Operation**

Building upon our core products and product candidates, our strategic goal is to develop a portfolio of medical products at various stages of development and secure additional financial resources to commercialize these products in a timely and effective manner. The key elements of our strategy are to:

initiate a late-stage clinical study (AGENT-5) for Generx;

seek to accelerate the development and sales of Innercool's Celsius Control System and, at the same time, broaden and expand our therapeutic hypothermia technology into other medical indications and applications;

leverage our financial resources and focused corporate infrastructure through the use of contract manufacturers to produce clinical supplies and a contract research organization to manage or assist planned clinical studies;

advance the pre-clinical development of Corgentin and potentially seek partnering opportunities for the Corgentin and Genvascor product candidates;

seek to broaden and expand our product base and financial resources through other corporate development transactions in an attempt to enhance stockholder value, which could include acquiring other companies or product opportunities and/or securing additional capital; and

seek to monetize the economic value of our product portfolio by establishing strategic collaborations at appropriate valuation inflection points.

We recognize that the practical realities of developing therapeutic products in the current regulatory environment require sizable financial investment. In view of this, we plan to pursue clinical development strategies intended to facilitate collaborations and partnerships for joint development of our products at appropriate valuation inflection points during their clinical development cycle. In the future, we plan to aggressively seek access to other therapeutics and/or medical device opportunities, as well as medical-related technologies, to further strengthen and broaden our portfolio, and will consider the opportunistic acquisition of other companies having financial and development resources that offer the potential to enhance our near and long-term stockholder value.

In October 2005, we completed a private placement of our common stock that resulted in net proceeds to the Company of more than \$25,000,000. As a result, we believe that we have sufficient funds available to satisfy our current cash requirements over the next 12 months.

More detailed information about our products, product candidates and our intended efforts to develop our products is included under Item 1 of this report.

#### **Off-Balance Sheet Arrangements**

As of December 31, 2005, we did not have any off-balance sheet debt nor did we have any transactions, arrangements, obligations (including contingent obligations) or other relationships with any unconsolidated entities or other persons that may have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant

components of revenue or expenses.

---

## **Table of Contents**

### **Critical Accounting Policies and Estimates**

Our financial statements included under Item 7 in this report have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of financial statements in accordance with GAAP requires that we make estimates and assumptions that affect the amounts reported in our financial statements and their accompanying notes. We have identified certain policies that we believe are important to the portrayal of our financial condition and results of operations. These policies require the application of significant judgment by our management. We base our estimates on our historical experience, industry standards, and various other assumptions that we believe are reasonable under the circumstances. Actual results could differ from these estimates under different assumptions or conditions. An adverse effect on our financial condition, changes in financial condition, and results of operations could occur if circumstances change that alter the various assumptions or conditions used in such estimates or assumptions. Our significant accounting policies are described in the notes to our financial statements.

### **Recent Accounting Pronouncements**

In December 2004, the Financial Accounting Standards Board ( FASB ) issued Statement of Financial Accounting Standards No. 123 (revised 2004), Share Based Payment (SFAS 123R), a revision to SFAS No. 123, Accounting for Stock-Based Compensation. SFAS 123R supersedes Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and amends SFAS No. 95, Statement of Cash Flows. SFAS 123R requires that we measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards. The cost will be recognized as compensation expense over the vesting period of the awards. We are required to adopt SFAS 123R effective for annual periods beginning after December 15, 2005. Under this method, we will begin recognizing compensation cost for equity-based compensation for all new or modified grants after the date of adoption. In addition, we will recognize the unvested portion of the grant date fair value of awards issued before adoption based on the fair values previously calculated for disclosure purposes over the remaining vesting period of the outstanding options and warrants. The adoption of SFAS 123R will have an impact on our financial statements whereby we will record a charge to earnings for the fair value of stock options over the vesting period.

### **Risks**

*You should carefully consider the risks described below, as well as the other information in this report, when evaluating our business and future prospects. If any of the following risks actually occur, our business, financial condition and results of operations could be seriously harmed. In that event, the market price of our common stock could decline and you could lose all or a portion of the value of your investment in our common stock.*

***We are a development stage company formed in December 2003. We have incurred losses since inception and expect to incur significant net losses in the foreseeable future and may never become profitable.***

Due to the development stage of our business, our development and start-up costs, including significant amounts we expect to spend on research and development activities and clinical trials for Generx and other product candidates, and our lack of substantial revenues during our development stage, you should expect that we will sustain operating losses, which may be substantial, in the early years of operation. A large portion of our expenses are fixed, including expenses related to facilities, equipment and personnel. As a result, we expect our net losses from operations to continue for at least the next five years. Our ability to generate revenues and become profitable will depend on our ability, alone or with potential collaborators, to timely, efficiently and successfully complete the development of our product candidates, successfully complete pre-clinical and clinical tests, obtain necessary regulatory approvals, and manufacture and market our product candidates. There can be no assurance that any such events will occur or that we will ever become profitable. Even if we do achieve profitability, we cannot predict the level of such profitability. If we sustain losses over an extended period of time, we may be unable to continue our business.



## **Table of Contents**

***Our business prospects are difficult to evaluate because we are a new company.***

Because we have a short operating history, it may be difficult for you to assess our growth, partnering and earnings potential. It is likely we will face many of the difficulties that companies in the early stages of their development often face. These include, among others: limited financial resources; developing and marketing a new product for which a market is not yet established and may never become established; delays in reaching our goals; challenges related to the development, approval and acceptance of a new technology or product; lack of revenues and cash flow; high start-up and development costs; competition from larger, more established companies; and difficulty recruiting qualified employees for management and other positions.

We will likely face these and other difficulties in the future, some of which may be beyond our control. If we are unable to successfully address these difficulties as they arise, our future growth and earnings will be negatively affected. We cannot be certain that our business strategy will be successful or that we will successfully address any problems that may arise.

***We will need substantial additional capital to develop our products and for our future operations. If we are unable to obtain the funds necessary to do so, we may need to delay, scale back or eliminate our product development or may be unable to continue our business.***

To conduct the costly and time-consuming research, pre-clinical and clinical testing necessary to obtain regulatory approvals and bring our products to market will require a commitment of substantial funds in excess of our current capital. Our future capital requirements will depend on many factors, including, among others: the progress of our research and development programs, including our current programs as well as any new programs we elect to undertake; the progress, scope and results of our pre-clinical and clinical testing; the time and cost involved in obtaining regulatory approvals; the cost of manufacturing our products and product candidates; the cost of prosecuting, defending and enforcing patent claims and other intellectual property rights; competing technological and market developments; and our ability to establish and maintain collaborative and other arrangements with third parties to assist in bringing our products to market and the cost of such arrangements.

We will need to raise substantial additional capital to fund our future operations. We cannot be certain that additional financing will be available on acceptable terms, or at all. In recent years, it has been difficult for companies to raise capital due to a variety of factors, which may or may not continue. To the extent we raise additional capital through the sale of equity securities or we issue securities in connection with an acquisition or other transaction, the ownership position of existing stockholders could be substantially diluted. If additional funds are raised through the issuance of preferred stock or debt securities, these securities are likely to have rights, preferences and privileges senior to our common stock. Fluctuating interest rates could also increase the costs of any debt financing we may obtain.

Our failure to successfully address ongoing liquidity requirements would have a material adverse effect on our business. If we are unable to obtain additional capital on acceptable terms when needed, we may need to take actions that harm our business and our ability to achieve cash flow in the future, including possibly surrendering our rights to some technologies or product opportunities, delaying our clinical trials or curtailing or ceasing operations.

***In March 2006, we acquired the assets and business of Innercool Therapies, Inc. and may, in the future, pursue acquisitions of other companies that, if not successful, could adversely affect our business, financial condition and results of operations.***

On March 8, 2006, we completed our acquisition of the assets and business of Innercool Therapies, Inc., a medical technology company focused on the emerging field of therapeutic hypothermia. Innercool's business is subject to all of the operational risks that normally arise for a medical technology company, including those related to regulatory approvals and clinical studies, acceptance of technology, competing technology, intellectual property rights, profitability, suppliers and third party collaborators, adverse publicity, litigation, and personnel.

## Table of Contents

In the future, we may pursue additional acquisitions of other companies as part of our strategy focused on the acceleration of our growth and development as a means to building long-term stockholder value. Acquisitions, including the Innercool acquisition, involve numerous risks, including:

our limited experience in evaluating and completing acquisitions;

the potential need to issue convertible debt or equity securities to complete an acquisition, which would dilute our stockholders and could adversely affect the market price of our common stock;

potential difficulties related to integrating the technology, products, personnel and operations of the acquired company;

requirements of significant capital infusions in circumstances under which the acquired business, its products and/or technologies may not generate sufficient revenue to offset acquisition costs or ongoing expenses;

failure to operate as a combined organization utilizing common information and communication systems, operating procedures, financial controls and human resources practices;

disruptions to our ongoing business, diversion of resources, increases in our expenses and distraction of management's attention from the normal daily operations of our business;

entering markets in which we have no or limited prior direct experience and where competitors in such markets have stronger market positions;

the potential to negatively impact our results of operations because an acquisition may require us to incur large one-time charges to earnings, amortize or write down amounts related to goodwill and other intangible assets, or incur or assume substantial debt or liabilities, or cause adverse tax consequences, substantial depreciation or deferred compensation charges;

an uncertain sales and earnings stream from the acquired company;

potential loss of key employees of the acquired company; and

disruptions to our relationships with existing collaborators who could be competitive with the acquired business.

There can be no assurance that our acquisition of the assets and business of Innercool Therapies or other acquisitions that we may pursue will be successful. If we pursue an acquisition but are not successful in completing it, or if we complete an acquisition but are not successful in integrating the acquired company's employees, products or operations successfully, our business, financial position or results of operations could be adversely affected.

***If our right to use any intellectual property we license from third parties is terminated or adversely affected, our financial condition, operations or ability to develop and commercialize our product candidates may be harmed.***

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

We substantially rely on licenses to use certain technologies that are material to our operations. We do not own the patents, patent applications and other intellectual property rights that underlie the licenses we have acquired or may acquire in the future. We rely on our licensors to properly prosecute and enforce the patents, file patent applications and prevent infringement of those patents and patent applications. The licenses and other intellectual property rights we acquire may or may not provide us with exclusive rights. To the extent we do not have exclusive rights, others may license the same technology and may develop the technology more successfully or may develop products similar to ours and that compete with our products. Even if we are provided with exclusive rights, the scope of our rights under our licenses may be subject to dispute by our licensors or third parties. Our licenses also contain milestones that we must meet and/or minimum royalty or other payments that we must make to maintain the licenses. There is no assurance that we will be able to meet such milestones and/or make such payments. Our licenses may be terminated if we fail to meet applicable milestones or make applicable payments.

## **Table of Contents**

*We are an early stage company and, other than Innercool's Celsius Control System, have no other products available for sale or use. Our product candidates require additional research, development, testing and regulatory approvals before marketing. We may be unable to develop, obtain regulatory approval or market any of our product candidates or expand the market of our existing product and technology. If our product candidates are delayed or fail, our financial condition will be negatively affected, and we may have to curtail or cease our operations.*

We are in the early stage of product development and, other than Innercool's Celsius Control System acquired in March 2006, currently do not sell any other products and may not have any other products commercially available for several years, if at all. Our product candidates, including the expansion of our therapeutic hypothermia technology into other medical indications and applications, require additional research and development, clinical testing and regulatory clearances before we can market them. There are many reasons that our products and product candidates may fail or not advance beyond clinical testing, including the possibility that:

our products and product candidates may be ineffective, unsafe or associated with unacceptable side effects;

our product candidates may fail to receive necessary regulatory approvals or otherwise fail to meet applicable regulatory standards;

our product candidates may be too expensive to develop, manufacture or market;

physicians, patients, third-party payers or the medical community in general may not accept or use our proposed products;

our potential collaborators may withdraw support for or otherwise impair the development and commercialization of our products or product candidates;

other parties may hold or acquire proprietary rights that could prevent us or our potential collaborators from developing or marketing our products or product candidates; or

others may develop equivalent, superior or less expensive products.

In addition, our product candidates are subject to the risks of failure inherent in the development of gene therapy and other products based on innovative technologies. As a result, we are not able to predict whether our research, development and testing activities will result in any commercially viable products or applications. If our product candidates are delayed or we fail to successfully develop and commercialize our product candidates, or if we are unable to expand the market of our existing product or its related technology, our financial condition may be negatively affected, and we may have to curtail or cease our operations.

*We may experience delays in our clinical trials that could adversely affect our financial results and our commercial prospects.*

To obtain regulatory approvals for new products or expand indications for existing ones, we must, among other requirements, complete clinical trials showing that our product candidates are safe and effective for a particular indication. We plan to submit a protocol to the FDA in 2006 and plan to conduct verbal and written communications with the FDA to continue to evaluate our Generx product candidate. We plan on initiating our clinical trials in 2006 but there is no assurance we will be able to do so as the timing of the commencement of the trial may be dependent on, among other things, FDA reviews and other factors outside of our control. Furthermore, there can be no assurance that our clinical trials will in fact demonstrate that our products are safe or effective.

Additionally, we may not be able to identify or recruit a significant number of acceptable patients or may experience delays in enrolling patients into clinical trials for our products. The FDA or we may suspend our clinical trials at any time if either believes that we are exposing the subjects participating in the trials to



## Table of Contents

unacceptable health risks. The FDA or institutional review boards and/or institutional biosafety committees at the medical institutions and healthcare facilities where we sponsor clinical trials may suspend any trial indefinitely if they find deficiencies in the conduct of the trials.

Product development costs to us and our potential collaborators will increase if we have delays in testing or approvals or if we need to perform more or larger clinical trials than planned. We expect to continue to rely on third party clinical investigators at medical institutions and healthcare facilities to conduct our clinical trials, and, as a result, we may face additional delaying factors outside of our control. Significant delays may adversely affect our financial results and the commercial prospects for our product candidates and delay our ability to become profitable.

***If we cannot successfully complete the clinical trial process for our product candidates, we will not be able to market them. Even successful clinical trials may not result in a marketable product and may not be entirely indicative of a product's safety or efficacy.***

Our Celsius Control System acquired from Innercool Therapies has received FDA 510(k) clearance for certain specified indications but we may elect to pursue other indications, which would generally require that we or collaborators conduct additional clinical studies and/or testing. Our Generx product candidate is currently in the clinical stage. Other product candidates are in the pre-clinical stage and there can be no assurance they will ever advance to clinical trials. For product candidates that advance to clinical testing, we cannot be certain that we or a collaborator will successfully complete the clinical trials necessary to receive regulatory product approvals. This process is lengthy and expensive. To obtain regulatory approvals, we or a collaborative partner must demonstrate through pre-clinical studies and clinical trials that our product candidates are safe and effective for use in at least one medical indication.

Many factors, known and unknown, can adversely affect clinical trials and the ability to evaluate a product's efficacy. For example, clinical trials are often conducted with patients who have the most advanced stages of disease. During the course of treatment, these patients can die or suffer other adverse events for reasons that may or may not be related to the proposed product being tested. For instance, as reported in December 1999, the death of a patient enrolled in the Phase 1/2 trial for Generx, which occurred approximately five months after the one-time product administration, was determined to have been unlikely to be causally related to the therapy. Our clinical trials may also be adversely impacted by patient deaths or problems that occur in other trials. However, even if unrelated to our product, such events can nevertheless adversely impact our clinical trials. As a result, our ability to ultimately develop and market the products and obtain revenues would suffer.

Deaths and other adverse events that occur in the conduct of clinical trials may result in an increase in governmental regulation or litigation, and could result in delays or halts being imposed upon clinical trials including our own. In addition, patients involved in clinical trials such as ours often have unknown as well as known health risks and pre-existing conditions. An adverse event may therefore appear to have been caused or exacerbated by the administration of study product, even if it was not actually related. Such consequences can also increase the risk that any potential adverse event in our trial could give rise to claims for damages against us, or could cause further delays or halt our clinical trial, any of which results would negatively affect us. In addition, fears regarding the potential consequences of gene therapy trials or the conduct of such trials could dissuade investigators or patients from participating in our trials, which could substantially delay or prevent our product development efforts.

Even promising results in pre-clinical studies and initial clinical trials do not ensure successful results in later clinical trials, which test broader human use of our products. Many companies in our industry have suffered significant setbacks in advanced clinical trials, despite promising results in earlier trials. Even successful clinical trials may not result in a marketable product or be indicative of the efficacy or safety of a product. Many factors or variables could affect the results of clinical trials and cause them to appear more promising than they may otherwise be. Product candidates that successfully complete clinical trials could ultimately be found to be unsafe or ineffective.

## **Table of Contents**

In addition, our ability to complete clinical trials depends on many factors, including obtaining adequate clinical supplies and having a sufficient rate of patient recruitment. For example, patient recruitment is a function of many factors, including: the size of the patient population; the proximity of patients to clinical sites; the eligibility criteria for the trial; the perceptions of investigators and patients regarding safety; and the availability of other treatment options. Even if patients are successfully recruited, we cannot be sure they will complete the treatment process. Delays in patient enrollment or treatment in clinical trials may result in increased costs, program delays or both.

With respect to markets in other countries, we or a partner will also be subject to regulatory requirements governing clinical trials in those countries. Even if we complete clinical trials, we may not be able to submit a marketing application. If we submit an application, the regulatory authorities may not review or approve it in a timely manner, if at all.

### ***Our technologies and product candidates may have unacceptable side effects that could delay or prevent product approval.***

Possible side effects of therapeutic technologies may be serious and life-threatening. The occurrence of any unacceptable side effects during or after pre-clinical and clinical testing of our product candidates could delay or prevent approval of our products and our revenues would suffer. For example, possible serious side effects of viral vector-based gene transfer include viral infections resulting from contamination with replication-competent viruses and inflammation or other injury to the heart or other parts of the body. In addition, the development or worsening of cancer in a patient may be a perceived or actual side effect of gene therapy technologies such as our own. Furthermore, there is a possibility of side effects or decreased effectiveness associated with an immune response toward any viral vector or gene used in gene therapy. The possibility of such response may increase if there is a need to deliver the viral vector more than once.

***Because we cannot predict whether or when we will obtain regulatory approval to commercialize our product candidates, we cannot predict the timing of any future revenue from these product candidates. To our knowledge, the FDA has not yet approved any gene therapy products.***

Other than our Innercool Celsius Control System, we cannot commercialize any of our product candidates to generate revenue until the appropriate regulatory authorities have reviewed and approved the applications for our product candidates. We cannot assure you that the regulatory agencies will complete their review processes in a timely manner or that we will obtain regulatory approval for any product candidate we or our potential collaborators develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Regulatory approval processes outside the United States include all or many of the risks associated with the FDA approval process and potentially others as well. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review.

### ***Our technologies and product candidates are unproven and they may fail to gain market acceptance.***

Our future depends on the success of our technologies and product candidates. Gene-based therapy and endovascular temperature control therapy are new and rapidly evolving medical approaches that have not been shown to be effective on a widespread basis. Biotechnology and pharmaceutical companies have successfully developed and commercialized only a limited number of gene-based products to date. In addition, no gene therapy product has received regulatory approval in the United States. Our product candidates, and the technology underlying them, are new and unproven and there is no guarantee that health care providers or patients will be interested in our products. Our success will depend in part on our ability to demonstrate the clinical benefits, reliability, safety and cost effectiveness of our product candidates and technology, as well as on our ability to continue to develop our product candidates to respond to competitive and technological changes. If

## **Table of Contents**

the market does not accept our products or product candidates, when and if we are able to commercialize them, we may never become profitable. It is difficult to predict the future growth of our business, if any, and the size of the market for our product candidates because the market and technology are continually evolving. There can be no assurance that our technologies and product candidates will prove superior to technologies and products that may currently be available or may become available in the future or that our technologies or research and development activities will result in any commercially profitable products.

***We may not successfully establish and maintain collaborative and licensing arrangements, which could adversely affect our ability to develop and commercialize our product candidates.***

Our strategy for the development, testing, manufacturing and commercialization of our product candidates generally relies on establishing and maintaining collaborations with corporate partners, licensors and other third parties. For example, we have licenses from New York University and the University of California relating to the use and delivery of our Generx product candidates for the treatment of vascular disease, as well as a relationship with Schering AG Group (Germany) regarding the transfer of information about certain manufacturing and regulatory matters concerning our product candidates. We may not be able to maintain or expand these licenses and collaborations or establish additional licensing and collaboration arrangements necessary to develop and commercialize our product candidates. Even if we are able to maintain or establish licensing or collaboration arrangements, these arrangements may not be on favorable terms and may contain provisions that will restrict our ability to develop, test and market our product candidates. Any failure to maintain or establish licensing or collaboration arrangements on favorable terms could adversely affect our business prospects, financial condition or ability to develop and commercialize our product candidates.

We expect to rely at least in part on third party collaborators to perform a number of activities relating to the development and commercialization of our product candidates, including the manufacture of product materials, the design and conduct of clinical trials, and potentially the obtaining of regulatory approvals and the marketing and distribution of any successfully developed products. Our collaborative partners also may have or acquire rights to control aspects of our product development and clinical programs. As a result, we may not be able to conduct these programs in the manner or on the time schedule we currently contemplate. In addition, if any of these collaborative partners withdraw support for our programs or product candidates or otherwise impair their development, our business could be negatively affected. To the extent we undertake any of these activities internally, our expenses may increase.

In addition, our success depends on the performance of our collaborators of their responsibilities under their arrangements with us. Our existing or potential collaborators may not perform their obligations in a timely fashion or in a manner satisfactory to us.

***We will rely on third parties to manufacture our product candidates. There can be no guarantee that we can obtain sufficient and acceptable quantities of our product candidates on acceptable terms, which may delay or impair our ability to develop, test and market such products.***

Our business strategy relies on third parties to manufacture and produce our products and product candidates and the catheters used to deliver the products in accordance with good manufacturing practices established by the FDA. For example, we recently entered into a Production Service Agreement with Molecular Medicine Bioservices, Inc. pursuant to which Molecular Medicine will manufacture our lead product candidate, Generx, for late-stage clinical development. These third party manufacturers are subject to extensive government regulation and must receive FDA approval before they can produce clinical material or commercial product.

Our products and product candidates may be in competition with other products for access to these facilities and may be subject to delays in manufacture if third parties give other products greater priority than our products. These third parties also may not deliver sufficient quantities of our products, manufacture our products in accordance with specifications, or comply with applicable government regulations. Successful large-scale



## **Table of Contents**

manufacturing of gene-based therapy products has been accomplished by very few companies, and it is anticipated that significant process development changes will be necessary for the commercial process.

Additionally, if the manufactured products fail to perform as specified, our business and reputation could be severely impacted. Our product materials will be produced by a third party collaborator, and we have entered into a manufacturing agreement for the production of additional product materials for anticipated clinical trials and initial commercial use. If any manufacturing agreement is terminated or any third party collaborator experiences a significant problem that could result in a delay or interruption in the supply of product materials to us, there are very few contract manufacturers who currently have the capability to produce our product candidates on acceptable terms, or on a timely and cost-effective basis. There can be no assurance that manufacturers on whom we depend will be able to successfully produce our products or product candidates on acceptable terms, or on a timely or cost-effective basis. There can also be no assurance that manufacturers will be able to manufacture our products in accordance with our product specifications. We must have sufficient and acceptable quantities of our product materials to conduct our clinical trials and to market our product candidates, if and when such products have been approved by the FDA for marketing. If we are unable to obtain sufficient and acceptable quantities of our product material, we may be required to delay the clinical testing and marketing of our products.

***If we do not comply with applicable regulatory requirements in the manufacture and distribution of our products and product candidates, we may incur penalties that may inhibit our ability to commercialize our products and adversely affect our revenue.***

Our failure or the failure of our potential collaborators or third party manufacturers to comply with applicable FDA or other regulatory requirements including manufacturing, quality control, labeling, safety surveillance, promoting and reporting may result in criminal prosecution, civil penalties, recall or seizure of our products, total or partial suspension of production or an injunction, as well as other regulatory action against our products, product candidates or us. Discovery of previously unknown problems with a product, supplier, manufacturer or facility may result in restrictions on the sale of our products, including a withdrawal of such products from the market. The occurrence of any of these events would negatively impact our business and results of operations.

***If we are unable to create and maintain sales, marketing and distribution capabilities or enter into agreements with third parties to perform those functions, we will not be able to commercialize our product candidates or market our products.***

We currently have limited sales, marketing and distribution capabilities in connection with our Innercool products and none with respect to our other product candidates, which are not yet approved for marketing. Therefore, to commercialize our other product candidates, if and when such products have been approved and are ready for marketing, we expect either to collaborate with third parties to perform these functions or develop them internally.

We have little experience in developing, training or managing a sales force and will incur substantial additional expenses if we are forced to market future products directly. Developing a marketing and sales force is also time consuming and could delay launch of new products or expansion of existing product sales. We expect that we will need to develop additional marketing and sales personnel, and/or work with outside providers, in order to achieve increased sales of our Innercool products. In addition, we will compete with many companies that currently have extensive and well-funded marketing and sales operations. Our marketing and sales efforts may be unable to compete successfully against these companies.

***If we are unable to attract and retain key personnel and advisors, it may adversely affect our ability to obtain financing, pursue collaborations or develop or market our products or product candidates.***

Our future success depends on our ability to attract, retain and motivate highly qualified management and scientific and regulatory personnel and advisors, as well as production, marketing and sales personnel in

## **Table of Contents**

connection with our Innercool products. To pursue our business strategy, we will need to hire or otherwise engage qualified scientific personnel and managers, including personnel with expertise in clinical trials, government regulation and manufacturing and other areas. Competition for qualified personnel is intense among companies, academic institutions and other organizations. If we are unable to attract and retain key personnel and advisors, it may negatively affect our ability to successfully develop, test, commercialize and market our products and product candidates.

***We will use hazardous and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.***

Our products and processes will involve the controlled storage, use and disposal of certain hazardous and biological materials and waste products. We and our suppliers and other collaborators are subject to federal, state and local regulations governing the use, manufacture, storage, handling and disposal of materials and waste products. Even if we and these suppliers and collaborators comply with the standards prescribed by law and regulation, the risk of accidental contamination or injury from hazardous materials cannot be completely eliminated. In the event of an accident, we could be held liable for any damages that result, and any liability could exceed the limits or fall outside the coverage of any insurance we may obtain and exceed our financial resources. We may not be able to maintain insurance on acceptable terms, or at all. We may incur significant costs to comply with current or future environmental laws and regulations.

***To the extent we enter markets outside the United States, our business will be subject to political, economic, legal and social risks in those markets, which could adversely affect our business.***

There are significant regulatory and legal barriers in markets outside the United States that we must overcome to the extent we enter or attempt to enter markets in countries other than the United States. We will be subject to the burden of complying with a wide variety of national and local laws, including multiple and possibly overlapping and conflicting laws. We also may experience difficulties adapting to new cultures, business customs and legal systems. Any sales and operations outside the United States, including those associated with our Innercool products, would be subject to political, economic and social uncertainties including, among others:

changes and limits in import and export controls;

increases in custom duties and tariffs;

changes in currency exchange rates;

economic and political instability;

changes in government regulations and laws;

absence in some jurisdictions of effective laws to protect our intellectual property rights; and

currency transfer and other restrictions and regulations that may limit our ability to sell certain products or repatriate profits to the United States.

Any changes related to these and other factors could adversely affect our business to the extent we enter markets outside the United States.

***Negative public opinion and increased regulatory scrutiny of gene therapy and genetic research may adversely affect our ability to conduct our business or obtain regulatory approvals for our product candidates.***

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

Ethical, social and legal concerns about gene therapy and genetic research could result in additional regulations restricting or prohibiting our products and processes we may use. More restrictive government regulations or negative public opinion may have a negative effect on our business or financial condition and may delay or impair the development and commercialization of our product candidates.

## **Table of Contents**

***We are subject to significant government regulation with respect to our products and product candidates. Compliance with government regulation can be a costly and time-consuming process, with no assurance of ultimate regulatory approval. If these approvals are not obtained, we will not be able to sell our product candidates. To our knowledge, the FDA has not yet approved any gene therapy products.***

We and our collaborators are subject to extensive and rigorous government regulation in the United States and abroad. The FDA, the National Institute of Health and comparable agencies in foreign countries impose many requirements on the introduction of new pharmaceutical products and/or medical devices through lengthy and detailed clinical testing procedures and other costly and time consuming compliance procedures. These requirements vary widely from country to country and make it difficult to estimate when our biologic product candidates will be commercially available, if at all. In addition, DNA-based therapies such as those being developed by us are relatively new and are only beginning to be tested in humans. Regulatory authorities may require us or our potential collaborators to demonstrate that our products are improved treatments relative to other therapies or may significantly modify the requirements governing gene therapies, which could result in regulatory delays or rejections. If we are delayed or fail to obtain required approvals for our product candidates, our operations and financial condition would be damaged. Neither we nor our potential commercialization partners may sell our products without applicable regulatory approvals. Numerous regulations in the United States and abroad also govern the manufacturing, safety, labeling, storage, record keeping, reporting and marketing of our products and product candidates. Compliance with these regulatory requirements is time consuming and expensive. If we fail to comply with regulatory requirements, either before approval or in marketing our products after approval, we could be subject to regulatory or judicial enforcement actions. These actions could result in withdrawal of existing approvals, product recalls, injunctions, civil penalties, criminal prosecution, and enhanced exposure to product liabilities.

We cannot assure you that our product candidates will prove safe and effective in clinical trials and will meet all of the applicable regulatory requirements needed to receive regulatory approval. We or a partner will need to conduct significant research, pre-clinical testing and clinical trials before we can file product approval applications with the FDA and similar regulatory authorities in other countries or seek expansion of existing indications such as those associated with our Innercool products. Preclinical testing and clinical trials are long, expensive and uncertain processes. We may spend several years completing our testing for any particular product candidate, and failure can occur at any stage.

Even if we achieve positive results in early clinical trials, these results do not necessarily predict final results. A number of companies in the pharmaceutical and medical device industries have suffered significant setbacks in advanced clinical trials, even after achieving positive results in earlier trials. Negative or inconclusive results or adverse medical events during a clinical trial could cause the FDA or us to terminate a clinical trial or require that we repeat a clinical trial.

***We face intense competition and must cope with rapid technological change, which may adversely affect our financial condition and/or our ability to successfully commercialize and/or market our products and product candidates.***

Our competitors and potential competitors include large pharmaceutical and medical device companies and more established biotechnology companies. These companies have significantly greater financial and other resources and greater expertise than us in research and development, manufacturing, pre-clinical and clinical testing, obtaining regulatory approvals and marketing. This may make it easier for them to respond more quickly than us to new or changing opportunities, technologies or market needs. Small companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical companies or through acquisition or development of intellectual property rights. Our larger competitors may be able to devote greater resources to research and development, marketing, distribution and other activities that could provide them with a competitive advantage. Many of these competitors operate large, well-funded research and development programs and have significant products approved or in development. Our potential competitors also include academic institutions, governmental agencies and other public and private research organizations that

## **Table of Contents**

conduct research, seek patent protection and establish collaborative arrangements for product and clinical development and marketing.

We are engaged in DNA-based therapy and endovascular temperature control therapy. Our industry is characterized by extensive research and development, rapid technological change, frequent innovations and new product introductions, and evolving industry standards. Existing products and therapies to treat vascular and cardiovascular disease, including drugs and surgical procedures, as well as competitive approaches to temperature control therapy, will compete directly or indirectly with the products that we are seeking to develop and market. In addition, our competitors may develop more effective or more affordable products, or achieve earlier patent protection or product commercialization and market penetration than us. As these competitors develop their technologies, they may develop proprietary positions that prevent us from successfully commercializing our future products. To be successful, we must be able to adapt to rapidly changing technologies by continually enhancing our products and introducing new products. If we are unable to adapt, products and technologies developed by our competitors may render our products and product candidates uneconomical or obsolete, and we may not be successful in marketing our products and product candidates against competitors. We may never be able to capture and maintain the market share necessary for growth and profitability and there is no guarantee we will be able to compete successfully against current or future competitors.

***Changes and reforms in the health care system or reimbursement policies may adversely affect the sale of our products and future products or our ability to obtain an adequate level of reimbursement or acceptable prices for our products or future products.***

Other than Innercool's Celsius Control System, we currently have no products approved for marketing. Our ability to earn sufficient returns on our products and future products, if and when such products are approved and ready for marketing, will depend in part on the extent to which reimbursement for our products and related treatments will be available from government health administration authorities, private health coverage insurers, managed care organizations and other third-party payers. If we fail to obtain appropriate reimbursement, it could prevent us from successfully commercializing and marketing our products and future products.

There have been and continue to be efforts by governmental and third-party payers to contain or reduce the costs of health care through various means, including limiting coverage and the level of reimbursement. We expect that there will continue to be a number of legislative proposals to implement government controls and other reforms to limit coverage and reimbursement. The announcement of these proposals or reforms could impair our ability to raise capital. The adoption of these proposals or reforms could impair our operations and financial condition.

Additionally, third-party payers, including Medicare, are increasingly challenging the price of medical products and services and are limiting the reimbursement levels offered to consumers for these medical products and services. If purchasers or users of our products or future products are not able to obtain adequate reimbursement from third-party payers for the cost of using the products, they may forego or reduce their use. Significant uncertainty exists as to the reimbursement status of newly approved health care products, including gene therapy and therapeutic hypothermia treatments, and whether adequate third-party coverage will be available.

***If our products and product candidates are not effectively protected by valid, issued patents or if we are not otherwise able to protect our proprietary information, it could harm our business.***

The success of our operations will depend in part on our ability and that of our licensors to: obtain patent protection for our gene therapy, therapeutic genes and/or gene-delivery methods, endovascular temperature control devices and procedures, and other methods or components on which we rely both in the United States and in other countries with substantial markets; defend patents once obtained; maintain trade secrets and operate without infringing upon the patents and proprietary rights of others; and obtain appropriate licenses upon

## **Table of Contents**

reasonable terms to patents or proprietary rights held by others that are necessary or useful to us in commercializing our technology, both in the United States and in other countries with substantial markets.

***If we are not able to maintain adequate patent protection for our products and product candidates, we may be unable to prevent our competitors from using our technology or technology that we license.***

The patent positions of the technologies being developed by us and our collaborators involve complex legal and factual uncertainties. As a result, we cannot be certain that we or our collaborators will be able to obtain adequate patent protection for our products or product candidates. There can be no assurance that (i) any patents will be issued from any pending or future patent applications of ours or our collaborators; (ii) the scope of any patent protection will be sufficient to provide us with competitive advantages; (iii) any patents obtained by us or our collaborators will be held valid if subsequently challenged; or (iv) others will not claim rights in or ownership of the patents and other proprietary rights we or our collaborators may hold. Unauthorized parties may try to copy aspects of our products and technologies or obtain and use information we consider proprietary. Policing the unauthorized use of our proprietary rights is difficult. We cannot guarantee that no harm or threat will be made to our or our collaborators' intellectual property. In addition, changes in, or different interpretations of, patent laws in the United States and other countries may also adversely affect the scope of our patent protection and our competitive situation.

Due to the significant time lag between the filing of patent applications and the publication of such patents, we cannot be certain that our licensors were the first to file the patent applications we license or, even if they were the first to file, also were the first to invent, particularly with regards to patent rights in the United States. In addition, a number of pharmaceutical and biotechnology companies and research and academic institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to our operations. Some of these technologies, applications or patents may conflict with our or our licensors' technologies or patent applications. A conflict could limit the scope of the patents, if any, that we or our licensors may be able to obtain or result in denial of our or our licensors' patent applications. If patents that cover our activities are issued to other companies, we may not be able to develop or obtain alternative technology.

Patents issued and patent applications filed internationally relating to gene therapy, temperature control therapy, and other of our technologies are numerous, and we cannot assure you that current and potential competitors or other third parties have not filed or received, or will not file or receive applications in the future for patents or obtain additional proprietary rights relating to products or processes used or proposed to be used by us.

Additionally, there is certain subject matter that is patentable in the United States but not generally patentable outside of the United States. Differences in what constitutes patentable subject matter in various countries may limit the protection we can obtain outside of the United States. For example, methods of treating humans are not patentable in many countries outside of the United States. These and other issues may prevent us from obtaining patent protection outside of the United States, which would have a material adverse effect on our business, financial condition and results of operations.

***We may be subject to costly claims, and, if we are unsuccessful in resolving conflicts regarding patent rights, we may be prevented from developing, commercializing or marketing our products and/ or product candidates.***

There has been, and will likely continue to be, substantial litigation regarding patent and other intellectual property rights in the biotechnology industry. As the biotechnology industry expands and more patents are issued, the risk increases that our processes, technology, products and product candidates may give rise to claims that they infringe on the patents of others. Others could bring legal actions against us claiming damages and seeking to stop clinical testing, manufacturing and marketing of the affected product or use of the affected process. Litigation may be necessary to enforce our or our licensors' proprietary rights or to determine the

## **Table of Contents**

enforceability, scope and validity of the proprietary rights of others. If we become involved in litigation, it could be costly and divert our efforts and resources. In addition, if any of our competitors file patent applications in the United States claiming technology also invented by us or our licensors, we may need to participate in interference proceedings held by the U.S. Patent and Trademark Office to determine priority of invention and the right to a patent for the technology. Like litigation, interference proceedings can be lengthy and often result in substantial costs and diversion of resources.

For example, we, and previously Collateral Therapeutics, have assisted the University of California, as the licensor, in an interference proceeding involving the University of California's technology for cardiovascular gene therapy (filed by Hammond et al.) and a pending patent application filed by Jeffrey Leiden et al. (a U.S. counterpart of international application PCT/US93/11133, which published as WO94/11506). In March 2006, we reported that a panel of Administrative Patent Judges of the U.S. Board of Patent Appeals and Interferences (BPAI) issued a final judgment against the Leiden applicants, ordering that the interference count (representing the claims in dispute) be awarded to Hammond, and that Leiden et al. be held not entitled to any patent containing claims corresponding to those in the interference. However, the patent applicant, Arch Development Corporation, which had licensed the technology to Boston Scientific Corporation, has appealed the decision against them. In a related matter, Collateral Therapeutics, with our assistance, successfully opposed a European counterpart to the Leiden PCT application (EP-B-668913), which led to a decision to revoke the patent grant in Europe. Although the patentee, Arch Development Corporation, subsequently appealed the adverse decision, a ruling following appeal to the European Patent Office's Technical Board of Appeal has now been rendered and the European patent grant to Arch (which had been licensed to Boston Scientific) has now been revoked. If the interference, opposition or other adverse proceedings were ultimately to be decided adversely, we could be compelled to seek a license to the Leiden technology, which may not be available on terms that we find commercially reasonable. In addition, such proceedings, even if decided in our favor, involve a lengthy process, are subject to appeal, and typically result in substantial costs and diversion of resources.

As more potentially competing patent applications are filed, and as more patents are actually issued, in the fields of gene therapy or therapeutic hypothermia or in other fields in which we may become involved and with respect to component methods or compositions that we may employ, the risk increases that we or our licensors may be subjected to litigation or other proceedings that claim damages or seek to stop our marketing, product development or commercialization efforts. Even if such patent applications or patents are ultimately proven to be invalid, unenforceable or non-infringed, such proceedings are generally expensive and time consuming and could consume a significant portion of our resources and substantially impair our marketing and product development efforts.

If there were an adverse outcome of any litigation or interference proceeding, we could have a potential liability for significant damages. In addition, we could be required to obtain a license to continue to make or market the affected product or use the affected process. Costs of a license may be substantial and could include ongoing royalties. We may not be able to obtain such a license on acceptable terms, or at all.

***We may not have adequate protection for our unpatented proprietary information, which could adversely affect our competitive position.***

We will substantially rely on trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position. However, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. To protect our trade secrets, we may enter into confidentiality agreements with employees, consultants and potential collaborators. However, these agreements may not provide meaningful protection of our trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information. Likewise, our trade secrets or know-how may become known through other means or be independently discovered by our competitors. Any of these events could prevent us from developing or commercializing our product candidates.

## **Table of Contents**

***We face the risk of product liability claims, which could adversely affect our business and financial condition.***

Our operations will expose us to product liability risks that are inherent in the testing, manufacturing and marketing of biotechnology and medical device products. Failure to obtain sufficient product liability insurance or otherwise protect against product liability claims could prevent or delay the commercialization or marketing of our products or product candidates or negatively affect our financial condition. Regardless of the merit or eventual outcome, product liability claims may result in withdrawal of product candidates from clinical trials, costs of litigation, damage to our reputation, substantial monetary awards to plaintiffs and decreased demand for products.

Product liability may result from harm to patients using our products, a complication that was either not communicated as a potential side-effect or was more extreme than communicated. We will require all patients enrolled in our clinical trials to sign consents, which explain the risks involved with participating in the trial. The consents, however, provide only a limited level of protection, and product liability insurance will be required. Additionally, we will indemnify the clinical centers and related parties in connection with losses they may incur through their involvement in the clinical trials. We may not be able to obtain or maintain product liability insurance on acceptable terms or with adequate coverage against potential liabilities.

***The price of our common stock is expected to be volatile and an investment in our common stock could decline in value.***

The market price of our common stock, and the market prices for securities of pharmaceutical, medical device and biotechnology companies in general, are expected to be highly volatile. The following factors, in addition to other risk factors described in this report, and the potentially low volume of trades in our common stock, may have a significant impact on the market price of our common stock, some of which are beyond our control:

actual or anticipated variations in operating results;

developments concerning any research and development, clinical trials, manufacturing, and marketing collaborations;

our announcement of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

announcements of technological innovations;

new products or services that we or our competitors offer;

the initiation, conduct and/or outcome of intellectual property and/or litigation matters;

changes in financial estimates by securities analysts;

conditions or trends in bio-pharmaceutical or other healthcare industries;

global unrest, terrorist activities, and economic and other external factors;

regulatory developments in the United States and other countries;



## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

changes in the economic performance and/or market valuations of other biotechnology and medical device companies;

additions or departures of key personnel; and

sales or other transactions involving our common stock.

The stock market in general has recently experienced relatively large price and volume fluctuations. In particular, market prices of securities of biotechnology and medical device companies have experienced fluctuations that often have been unrelated or disproportionate to the operating results of these companies. Continued market fluctuations could result in extreme volatility in the price of the common stock, which could cause a decline in the value of the common stock. Prospective investors should also be aware that price volatility may be worse if the trading volume of the common stock is low.

**Table of Contents**

**ITEM 7. FINANCIAL STATEMENTS**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders

Cardium Therapeutics, Inc.

We have audited the accompanying balance sheet of Cardium Therapeutics, Inc. ( "Cardium" ) (a development stage company) as of December 31, 2005, and the related statements of operations, stockholders' equity, and cash flows for the each of the years ended December 31, 2005 and 2004 and for the period from December 22, 2003 (date of inception) through December 31, 2005. These financial statements are the responsibility of Cardium's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Cardium is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits include consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Cardium's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cardium Therapeutics, Inc. (a development stage company) as of December 31, 2005, and the results of its operations and its cash flows for each of the years ended December 31, 2005 and 2004 and for the period from December 22, 2003 (date of inception) through December 31, 2005, in conformity with accounting principles generally accepted in the United States of America.

/s/ MARCUM & KLIEGMAN LLP

New York, New York

March 10, 2006

**Table of Contents****CARDIUM THERAPEUTICS, INC.****(a development stage company)****BALANCE SHEET****December 31, 2005**

<b>Assets</b>	
Current assets:	
Cash and cash equivalents	\$ 21,787,869
Prepaid expenses	170,082
<b>Total current assets</b>	<b>21,957,951</b>
Property and equipment, net	372,197
Deposits	21,476
<b>Total assets</b>	<b>\$ 22,351,624</b>
<b>Liabilities and Stockholders Equity</b>	
Current liabilities:	
Accounts payable	\$ 162,869
Accrued liabilities	450,639
<b>Total liabilities</b>	<b>613,508</b>
Stockholders equity:	
Common stock, \$0.0001 par value; 100,000,000 shares authorized; 29,249,801 shares issued and outstanding	2,924
Additional paid-in capital	27,180,847
Deficit accumulated during development stage	(5,445,655)
<b>Total stockholders equity</b>	<b>21,738,116</b>
<b>Total liabilities and stockholders equity</b>	<b>\$ 22,351,624</b>

See accompanying notes, which are an integral part of these financial statements.

**Table of Contents****CARDIUM THERAPEUTICS, INC.****(a development stage company)****STATEMENTS OF OPERATIONS**

	<b>Year Ended</b>		<b>Period from</b>
	<b>December 31,</b>		<b>December 22,</b>
			<b>2003</b>
			<b>(Inception) to</b>
	<b>2005</b>	<b>2004</b>	<b>December 31,</b>
			<b>2005</b>
<b>Operating Expenses</b>			
Purchased technology	\$ (4,000,000)	\$	\$ (4,000,000)
General and administrative	(1,588,288)	(3,961)	(1,592,249)
Total operating expenses	(5,588,288)	(3,961)	(5,592,249)
Interest income	146,594		146,594
Net loss	\$ (5,441,694)	\$ (3,961)	\$ (5,445,655)
<b>Loss Per Common Share</b>			
Net loss per common share basic and diluted	\$ (0.54)	\$ (0.00)	
Weighted average shares outstanding basic and diluted	9,992,426	1,700,000	

See accompanying notes, which are an integral part of these financial statements.

**Table of Contents****CARDIUM THERAPEUTICS, INC.**

(a development stage company)

**STATEMENT OF STOCKHOLDERS EQUITY**

	Common Stock*		Additional Paid-In Capital	Stock Subscription Receivable	Deficit Accumulated During Development Stage	Total Stockholders Equity
	Shares	Amount				
Balance, December 22, 2003 (inception)		\$	\$	\$	\$	\$
Sale of common stock (December 31, 2003; \$0.01 per share)	1,700,000	170	16,830	(17,000)		
Balance, December 31, 2003	1,700,000	170	16,830	(17,000)		
Proceeds from subscription receivable				17,000		17,000
Net loss					(3,961)	(3,961)
Balance, December 31, 2004	1,700,000	170	16,830		(3,961)	13,039
Issuance of common stock for services and reimbursement of expenses (April 1, 2005, \$0.01 per share)	3,800,000	380	37,620			38,000
Issuance of common stock for services and reimbursement of expenses (May 20, 2005, \$0.01 per share)	350,000	35	3,465			3,500
Issuance of common stock for cash (July 1, 2005, \$0.01 per share)	2,000,000	200	19,800			20,000
Issuance of common stock to stockholders of Aries Ventures Inc. (October 20, 2005, \$0.73 per share)	2,032,226	203	1,499,797			1,500,000
Issuance of common stock for Officer loan (October 20, 2005, \$1.50 per share)	41,924	4	62,878			62,882
Issuance of common stock for cash (October 20, 2005, \$1.50 per share (net of fees of \$0.18 per share))	19,325,651	1,932	25,540,457			25,542,389
Net loss					(5,441,694)	(5,441,694)
Balance, December 31, 2005	29,249,801	\$ 2,924	\$ 27,180,847	\$	\$ (5,445,655)	\$ 21,738,116

\* The par value of common stock and the additional paid-in capital have been adjusted to reflect the change in par value from \$0.001 to \$0.0001 on May 20, 2005.

See accompanying notes, which are an integral part of these financial statements.

**Table of Contents****CARDIUM THERAPEUTICS, INC.****(a development stage company)****STATEMENTS OF CASH FLOWS**

	Year Ended December 31,		Period from December 22, 2003  (Inception) To December 31, 2005
	2005	2004	
<b>Cash Flows From Operating Activities</b>			
Net loss	\$ (5,441,694)	\$ (3,961)	\$ (5,445,655)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	11,646		11,646
Common stock issued for services and reimbursement of expenses	41,500		41,500
Changes in operating assets and liabilities:			
Prepaid expenses	(170,082)		(170,082)
Deposits	(21,476)		(21,476)
Accounts payable	162,869		162,869
Accrued liabilities	450,639		450,639
<b>Net cash used in operating activities</b>	<b>(4,966,598)</b>	<b>(3,961)</b>	<b>(4,970,559)</b>
<b>Cash Flows From Investing Activities</b>			
Purchase of property and equipment	(383,843)		(383,843)
<b>Cash Flows From Financing Activities</b>			
Proceeds from officer loan	62,882		62,882
Cash acquired in merger with Aries Ventures Inc.	1,500,000		1,500,000
Proceeds from the sale of common stock	25,562,389	17,000	25,579,389
<b>Net cash provided by financing activities</b>	<b>27,125,271</b>	<b>17,000</b>	<b>27,142,271</b>
<b>Net increase in cash</b>	<b>21,774,830</b>	<b>13,039</b>	<b>21,787,869</b>
Cash at beginning of year	13,039		
<b>Cash and cash equivalents at end of year</b>	<b>\$ 21,787,869</b>	<b>\$ 13,039</b>	<b>\$ 21,787,869</b>
<b>Non-Cash Activity</b>			
Subscription receivable for common shares	\$	\$	\$ 17,000
Common stock issued for services	\$ 62,882	\$	\$

See accompanying notes, which are an integral part of these financial statements.

**Table of Contents**

**CARDIUM THERAPEUTICS, INC.**

**(a development stage company)**

**NOTES TO FINANCIAL STATEMENTS**

**Note 1. Organization**

Cardium Therapeutics, Inc. ( Cardium ) was organized in Delaware in December 2003. We are a medical technology company primarily focused on the development, manufacture and sale of innovative products for cardiovascular and related indications, which are leading healthcare priorities for adults in the United States, Europe and elsewhere. In October 2005, we acquired a portfolio of biologic growth factors and related delivery techniques from the Schering AG Group, Germany, which we plan to develop as cardiovascular-directed growth factor therapeutics for various interventional cardiology applications, including potential treatments for ischemic heart disease. In March 2006, we acquired the technologies and products of Innercool Therapies, Inc., a medical technology company in the emerging field of therapeutic hypothermia, whose systems and products are designed to rapidly and controllably cool the body in order to reduce cell death and damage following acute ischemic events such as cardiac arrest and stroke, and to potentially lessen or prevent associated injuries such as adverse neurologic outcomes. Innercool Therapies is operated as a wholly-owned subsidiary of Cardium.

We are a development stage company in the initial stage of our operations. We have yet to generate positive cash flows from operations, and until commercially viable products are developed and regulatory approvals obtained, we are totally dependent on debt and equity funding to finance our operations. Before October 2005, cash requirements were funded by loans from executive officers. In October 2005, we closed a private placement of 19,325,651 shares of our common stock at a purchase price of \$1.50 per share and received net proceeds of \$25,542,389. In connection with the offering, we completed a reverse merger, whereby Cardium merged with Aries Ventures Inc. ( Aries ), a publicly traded company (see Note 9 ). As a result of these transactions, the stockholders of Cardium became the controlling stockholders of Aries. Accordingly, the acquisition of Cardium by Aries was a reverse merger. The historical financial results before the reverse merger on October 20, 2005, are those of Cardium. Aries results of operations are included in Cardium s financial results beginning October 20, 2005.

In January 2006, Aries was merged with and into Cardium, with Cardium as the surviving entity and the successor issuer to Aries. As a result, we are now in our present form a publicly-traded, Delaware corporation named Cardium Therapeutics, Inc.

**Note 2. Summary of Significant Accounting Policies**

**Basis of Presentation**

Our principal activities are expected to focus on the commercialization of our licensed technologies. The accompanying financial statements have been prepared in accordance with Statement of Financial Accounting Standards ( SFAS ) No. 7, Development Stage Enterprises.

**Fair Value of Financial Instruments**

The carrying amounts of cash and cash equivalents, accounts payable, and accrued liabilities approximate fair value due to the short-term maturities of such investments.

**Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial

## **Table of Contents**

statements, and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

### **Cash and Cash Equivalents**

Cash and cash equivalents, substantially all of which are invested in short-term commercial paper, includes all highly-liquid investments with an original maturity of three months or less at the date of purchase. We attempt to reduce our credit risk by investing our cash and cash equivalents with major banks and financial institutions located primarily in the United States. At times, cash balances held at financial institutions may exceed federally-insured limits.

### **Property and Equipment**

Property and equipment are stated at cost, net of accumulated depreciation. Property and equipment are depreciated on a straight-line basis over the estimated useful lives of the assets (three years for computer equipment and five years for furniture and fixtures).

### **Research and Development**

In accordance with SFAS No. 2, Research and Development Expenses, research and development costs are expensed as incurred. Research and development expenses are expected to consist of purchased technology, purchased research and development rights and outside services for research and development activities associated with product development. In accordance with SFAS No. 2, the cost to purchase such technology and research and development rights are required to be charged to expense if there is currently no alternative future use for this technology and, therefore, no separate economic value.

### **Income Taxes**

We account for income taxes under SFAS No. 109, Accounting for Income Taxes. SFAS No. 109 requires the recognition of deferred tax assets and liabilities for both the expected impact of differences between the financial statements and tax basis of assets and liabilities, and for the expected future tax benefit to be derived primarily from tax loss carryforwards. We have established a valuation allowance related to the benefits of net operating losses for which utilization in future periods is uncertain. We believe it is more likely than not that we will not realize the benefits of these deductible differences in the near future and, therefore, a valuation allowance has been recorded to offset future tax benefits.

We have federal net operating losses available to offset future taxable income, which, if not used, will expire in 2024. No provision for income taxes has been recorded in the financial statements as a result of such operating losses. Any benefit for income taxes as a result of the use of net operating losses will likely be limited as a result of cumulative changes in stock ownership.

### **Loss Per Common Share**

We compute earnings per share in accordance with SFAS No. 128, Earnings Per Share. SFAS No. 128 requires dual presentation of basic and diluted earnings per share.

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding, plus the issuance of common shares, if dilutive, resulting from the exercise of outstanding stock options and warrants. These potentially dilutive securities were not included in the calculation of loss per share for the years ended December 31, 2005 and 2004, because we incurred a loss during such periods and thus their inclusion would have been anti-dilutive. Accordingly, basic and



**Table of Contents**

diluted loss per common share are the same for all periods presented. The common stock issued and outstanding with respect to the stockholders of Aries Ventures have been included since October 20, 2005, the effective date of the reverse merger.

Potentially dilutive securities consisted of outstanding stock options and warrants to acquire 4,951,818 shares as of December 31, 2005, and 0 shares as of December 31, 2004.

**Stock-Based Compensation**

We adopted the disclosure requirements of SFAS No. 123, Accounting for Stock-Based Compensation, for stock options and similar equity instruments (collectively, Options) issued to employees, and continue to apply the intrinsic value based method of accounting for options issued to employees prescribed by Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issues to Employees, rather than the fair value based method of accounting prescribed by SFAS No. 123. We account for equity instruments issued to non-employees for goods or services in accordance with the provisions of SFAS No. 123 and the Emerging Issues Task Force (EITF) Issue No. 96-18, which require that such transactions be accounted for based on the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measured.

In December 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 148, Accounting for Stock-Based Compensation Transition and Disclosure. SFAS No. 148 amends SFAS No. 123, to provide an alternative method of transition to SFAS No. 123's fair value method of accounting for stock based employee compensation. SFAS No. 148 also amends the disclosure provisions of SFAS No. 123 and APB Opinion No. 28, Interim Financial Reporting, to require disclosure in the summary of significant accounting policies of the effects of an entity's accounting policy with respect to stock-based employee compensation on reported net income and earnings per share in annual and interim financial statements. We follow the disclosure only provisions of SFAS No. 123 that require disclosure of pro forma effects on net income (loss) as if the fair value method of accounting prescribed by SFAS No. 123 had been adopted, as well as certain other information.

The Black-Scholes option valuation model was used to estimate the fair value of the options granted during the years ended December 31, 2005 and 2004. The model includes subjective input assumptions that can materially affect the fair value estimates. The model was developed for use in estimating the fair market value of options that have no vesting restrictions and are fully transferable. The expected volatility is estimated based on the most recent historical period of time equal to the weighted average life of the options granted.

The table below shows what our net loss and net loss per common share would have been had compensation cost for stock options granted been determined under SFAS No. 123:

	2005	2004
Net loss, as reported	\$ (5,441,694)	\$ (3,961)
Add: compensation expense included in net loss		
Less: compensation expense pursuant to SFAS No. 123	(29,083)	
Pro forma net loss	\$ (5,470,777)	\$ (3,961)
Pro forma net loss per common share (basic and diluted)	\$ (0.55)	\$ (0.00)

The fair value of the stock options granted for 2005 were estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions: risk-free interest rate 4.5%; dividend yield of 0%; stock price volatility of 60%; and expected life of 4.5 years.

**Table of Contents****Recent Accounting Pronouncements**

In December 2004, the FASB issued Statement of Financial Accounting Standards No. 123 (revised 2004), Share Based Payment (SFAS 123R), a revision to SFAS No. 123, Accounting for Stock-Based Compensation. SFAS 123R supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and amends SFAS No. 95, Statement of Cash Flows. SFAS 123R requires that we measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards. The cost will be recognized as compensation expense over the vesting period of the awards. We are required to adopt SFAS 123R effective for annual periods beginning after December 15, 2005. Under this method, we will begin recognizing compensation cost for equity-based compensation for all new or modified grants after the date of adoption. In addition, we will recognize the unvested portion of the grant date fair value of awards issued before adoption based on the fair values previously calculated for disclosure purposes over the remaining vesting period of the outstanding options and warrants. The adoption of SFAS 123R will have an impact on the financial statements whereby we will record a charge to earnings for the fair value of stock options over the vesting period.

**Note 3. Property and Equipment**

Property and equipment consisted of the following as of December 31, 2005:

Computer and telecommunication equipment	\$ 162,946
Office furniture and fixtures	220,897
	\$ 383,843
Less: accumulated depreciation and amortization	(11,646)
<b>Total</b>	<b>\$ 372,197</b>

Depreciation of property and equipment totaled \$11,646 for the year ended December 31, 2005 and \$0 for the year ended December 31, 2004.

**Note 4. Accrued Liabilities**

Accrued liabilities consisted of the following at December 31, 2005:

Accrued legal fees	\$ 340,000
Accrued consulting and payroll	110,639
<b>Total</b>	<b>\$ 450,639</b>

**Note 5. Purchase of Technology from Schering AG Group (Germany)**

In October 2005, we completed a transaction with Schering AG Group (Germany) and related licensors, including the University of California, New York University and Yale University, for the transfer or license of certain assets and technology relating to (i) methods of gene therapy for the treatment of cardiovascular disease (including methods for the delivery of genes to the heart or vasculature and the use of angiogenic and/or non-angiogenic genes for the potential treatment of diseases of the heart or vasculature); (ii) therapeutic genes that include fibroblast growth factors (including FGF-4); insulin-like growth factors (including IGF-I); and potentially other related biologics (including mutant eNOS); and (3) other technology and know-how, including manufacturing and formulation technology, as well as data relating to the clinical development of Generx and corresponding FDA regulatory matters. Under the terms of the transaction, we paid Schering a \$4 million fee, and will pay a \$10 million milestone payment upon the first commercial sale of each resulting product. We also are obligated to pay the following royalties to Schering: (i) 5% on net sales of an FGF-4 based product such as Generx, or (ii) 4% on net sales of other products developed based on technology transferred to Cardium by Schering. In addition, we were obligated to reimburse Schering for certain patent expenses in connection with the



**Table of Contents**

transferred technologies. These expenses are estimated to be approximately \$340,000 at December 31, 2005, and have been recorded in our accrued liabilities.

**Note 6. Commitments and Contingencies****Operating Leases**

Effective November 1, 2005, we entered into a two year lease for our principal executive offices. The lease contains two options, the first for an additional term of one year and the second for an additional term of two years. The second option is subject to a third party right of first refusal. During the first year of the lease, the monthly installment of base rent is approximately \$21,500, which amount will increase to approximately \$22,335 in the second year of the lease. In addition to base rent, we also are required to pay our proportionate share of operating and tax expenses for the office park in which our space is located.

Future annual minimum rental payments under the lease are as follows:

Year Ending December 31,	
2006	\$ 259,000
2007	223,000
<b>Total</b>	<b>\$ 482,000</b>

Rent expense was \$42,953 for the year ended December 31, 2005, and \$0 for the year ended December 31, 2004.

**Employment Agreements**

Effective October 20, 2005, in connection with the transaction described in Note 9 below, the two co-founders of Cardium entered into two-year employment agreements with the Company. Their combined base annual compensation under the agreements is \$675,000. They are each entitled to a severance benefit if they are terminated without cause in an amount equal to the greater of one year's annual salary or the salary payable on the remaining term of the employment agreement at the time of termination.

Since November 2005, a stockholder has been providing consulting services to the Company pursuant to a Consulting Services Agreement. Under the agreement, the stockholder is paid consulting fees of \$8,333 per month. The agreement may be terminated by either party at any time.

**Note 7. Income Taxes**

As of December 31, 2005, we had federal net operating loss carryforwards of approximately \$76,900,000 expiring in various years through 2024, portions of which may be used to offset future taxable income, if any. We have a deferred tax asset arising from such operating losses for which a full valuation allowance has been established due to the uncertainty as to their realizability in future periods.

We acquired \$71,500,000 of this federal net operating loss carryforward through the reverse merger with Aries Ventures Inc. Due to the restrictions imposed by the Internal Revenue Code of 1986, as amended, regarding substantial changes in ownership of companies with loss carryforwards, the utilization of our federal net operating loss carryforwards will likely be substantially limited as a result of cumulative changes in stock ownership.

**Table of Contents**

Our net deferred tax assets (using a federal corporate income rate of approximately 34%) consisted of the following:

	December 31,	
	2005	2004
Deferred tax assets:		
Operating loss carryforwards	\$ 28,828,000	\$
Less: Valuation allowance	(28,828,000)	
Net deferred tax assets	\$	\$

As a result of our significant operating loss carryforwards and the corresponding valuation allowance, no income tax benefit has been recorded at December 31, 2005 and 2004. The provision for income taxes using the statutory federal tax rate as compared to our effective tax rate is summarized as follows:

	December 31,	
	2005	2004
Tax benefit at statutory rate	(34.0)%	(34.0)%
State income taxes	(8.8)%	(8.8)%
Adjustments to change in valuation allowance	42.8	42.8

**Note 8. Stockholders Equity****Common Stock**

Cardium was incorporated in Delaware on December 22, 2003. On December 31, 2003, we sold 1,700,000 shares of our common stock to our founders and executives for \$17,000. On April 1, 2005, we issued an additional 3,800,000 shares of our common stock (of which 3,650,000 shares were issued to our co-founders and the remainder was issued to another employee of Cardium), in exchange for services and reimbursement of expenses valued at \$38,000.

On May 19, 2005, our Board of Directors and stockholders approved an increase in our authorized shares of common stock from 5,500,000 shares to 100,000,000 shares and a change in the par value of our shares of common stock from \$0.001 to \$0.0001.

On May 20, 2005, we issued 350,000 shares of our common stock to our co-founders in exchange for services and reimbursement of expenses valued at \$3,500. On July 1, 2005, we sold 2,000,000 shares of our common stock for \$20,000 to one of our founders.

On October 20, 2005, we completed a reverse merger with Aries Ventures Inc., a publicly-traded shell company, whereby a newly formed and wholly-owned subsidiary of Aries Ventures was merged with and into Cardium. At the time of the reverse merger, Cardium had 7,850,000 shares of its common stock outstanding and Aries Ventures had 2,032,226 shares of its common stock outstanding. In connection with the reverse merger, a three year warrant to purchase 400,000 shares of our common stock at an exercise price of \$1.75 per share was issued to an Aries stockholder who held of record or beneficially more than 45% of the outstanding common stock of Aries before the reverse merger, as consideration for such stockholder's agreement not to sell any of such stockholder's shares for a specified period of time.

Concurrently with the reverse merger, we closed a private placement of 19,325,651 shares of common stock at a purchase price of \$1.50 per share and received net proceeds of \$25,542,389. Investors who invested at least \$1,000,000 in shares of common stock received a three-year warrant to buy 10% of the number of shares of

**Table of Contents**

common stock purchased in the private placement, at an exercise price of \$1.75 per share. Warrants to purchase 424,263 shares of common stock, in the aggregate, were issued to such investors.

In October 2005, one of our executive officers was issued 41,924 shares of our common stock as repayment for advances totaling \$62,882 that had been made to fund our early start-up costs.

**2005 Equity Incentive Plan**

We have an equity incentive plan established in 2005 under which 5,665,856 shares of our common have been reserved for issuance to employees, non-employee directors and consultants of the Company. In November 2005, options to purchase 2,095,000 shares of our common stock, in the aggregate, were granted under the plan. The options vest over three years, have an exercise price of \$1.95 per share, and a term of ten years.

The following table summarizes the option activity under our 2005 Equity Incentive Plan.

	Number of Options	Exercise Price	Remaining Contractual Life (in years)
Balance outstanding, December 31, 2004		\$	
Options issued	2,095,000	1.95	10
Options exercised			
Options expired			
Balance outstanding, December 31, 2005	2,095,000	\$ 1.95	10
Options exercisable at December 31, 2005		\$	10

**Warrants**

The following table summarizes the warrant activity for the years ended December 31, 2005 and 2004.

	Number of Warrants	Exercise Price	Remaining Contractual Life (in years)
Balance outstanding, December 31, 2003		\$	
Warrants issued			
Warrants exercised			
Warrants expired			
Warrants cancelled			
Balance outstanding, December 31, 2004			
Warrants issued	2,856,818	\$ 1.50-1.75	3-5
Warrants exercised			
Warrants expired			
Warrants cancelled			
Balance outstanding, December 31, 2005	2,856,818	\$ 1.50-1.75	3-5

Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

Warrants exercisable at December 31, 2005	2,856,818	\$ 1.50-1.75	3-5
---	-----------	--------------	-----

**Note 9. Reverse Merger Transaction**

On October 20, 2005, we completed a reverse merger with Aries Ventures Inc., a publicly-traded shell company, whereby a newly formed and wholly-owned subsidiary of Aries Ventures was merger with and into

---

**Table of Contents**

Cardium. For financial reporting purposes, Cardium was the acquirer in the merger and the merger was accounted for as a reverse merger. At the time of the reverse merger, Cardium had 7,850,000 shares of its common stock outstanding and Aries Ventures had 2,032,226 shares of its common stock outstanding.

Concurrently with the reverse merger, we closed a private placement of 19,325,651 shares of common stock at a purchase price of \$1.50 per share and received net proceeds of \$25,542,389. Investors who invested at least \$1,000,000 in shares of common stock received a three-year warrant to buy 10% of the number of shares of common stock purchased in the private placement, at an exercise price of \$1.75 per share. Warrants to purchase 424,263 shares of common stock, in the aggregate, were issued to such investors.

In connection with the private placement, we incurred selling commissions, marketing allowances and management fees payable to the placement agent totaling approximately \$3,049,000, and legal, accounting and other fees and expenses totaling approximately \$397,000. In addition, five-year warrants to purchase 2,032,555 shares of our common stock were issued to the placement agent at an exercise price of \$1.50 per share.

**Note 10. Subsequent Events**

In January 2006, our stockholders approved an increase in our authorized capital stock from 100,000,000 shares of common stock to 240,000,000 shares (200,000,000 shares of common stock and 40,000,000 shares of preferred stock).

Upon joining our Board of Directors in January 2006, each non-employee director received an option under our 2005 Equity Incentive Plan to buy 100,000 shares of our common stock, vesting over a four year period, with an exercise price equal to \$2.75 per share, and a ten year term. In addition, an executive vice president hired in January 2006 received options under our 2005 Equity Incentive Plan to buy 500,000 shares of our common stock, vesting over four years, with a ten year term and an exercise price of \$2.75 per share.

On March 8, 2006, Cardium, through its newly-formed, wholly-owned subsidiary, Innercool Therapies, Inc., a Delaware corporation, acquired substantially all of the assets and the business of Innercool Therapies, Inc., an unaffiliated California corporation, then in the development stage, engaged in the business of researching, developing, manufacturing, marketing, selling and distributing products and services related to endovascular temperature control therapy. As partial consideration therefore, Cardium issued to the seller 2,500,000 shares of Cardium's common stock. In addition, as part of the acquisition, Cardium agreed to (i) deliver to the seller \$5,000,000 in cash or shares of Cardium's common stock, at Cardium's election, if net sales revenue from certain of Innercool's products acquired in the acquisition equals or exceeds \$20,000,000 in any one calendar year beginning with 2006 and ending December 31, 2011; (ii) assume certain liabilities of Innercool Therapies in the aggregate amount of approximately \$580,000; and (iii) pay certain transaction costs associated with the acquisition and amounts that may be payable to former employees of the seller for accrued and unpaid vacation estimated, in the aggregate, to be approximately \$170,000, as well as certain audit fees and expenses. The last reported sale price for Cardium's common stock before the close of the Innercool transaction was \$2.35 per share.

As part of the acquisition, Cardium, through its wholly-owned Innercool subsidiary, acquired all of the rights and assumed all of the obligations of the seller under the terms of a lease for approximately 24,000 square feet in San Diego, California, and a sublease of approximately 6,602 square feet of such facilities to an unaffiliated third party. The base monthly rent under the lease is \$25,200, plus the payment of the landlord's operating expenses. The monthly base rent payable to Innercool under the terms of the sublease is approximately \$7,262, plus sublessee's pro rata share of landlord's operating expenses. The lease and the sublease both expire October 31, 2007.

Also assigned to and assumed by Cardium's Innercool subsidiary in connection with the above described acquisition was a Master License Agreement with SurModics, Inc. Pursuant to the terms of the license, SurModics grants to Innercool a worldwide license with respect to medical products that are surface-treated with



**Table of Contents**

photo-reactive polyvinylpyrrolidone, photo-reactive heparin, diphoto diquat (photo-reactive crosslinking compound) or any combination of such photo-reactive reagents, under SurModics' trade secrets and other technical information relating to the surface-treatment of medical devices and which SurModics has the right to transmit to others, as well as certain patent applications and patents. In connection with the license, Innercool is obligated to pay SurModics a royalty equal to the greater of: (A) earned royalties calculated as a percentage of net sales of licensed products sold in each calendar year (the percentage used in each calculation during each calendar year is based on the cumulative net sales of licensed product in the calendar year as follows: 2.5% on the first \$15 million of net sales; 2.25% on the next \$15 million; and 2.00% on net sales over \$30 million); or (B) quarterly minimum royalties that increase on an annual basis. Quarterly minimum royalties for 2006 are \$20,000. In addition, Innercool grants to SurModics a noncancelable, nonexclusive, sublicensable, worldwide license to make, have made, use and sell products and processes covered by any Innercool latent reactive chemical patent, to the extent such manufacture, sale or use is covered by any claim of any patent that SurModics has the right to license or may have licensed to others, and SurModics agrees to pay to Innercool five percent (5%) of the royalties SurModics receives from its sublicensees based on sales of products that but for such sublicenses would infringe Innercool's patents.

Effective March 8, 2006, in connection with the above described acquisition, Cardium's Innercool subsidiary entered into a three year employment agreement with a former executive officer of the seller for an annual base salary of initially \$266,000, and bonus compensation of up to 40% of base salary. If he is terminated without cause or if he terminates his employment for good reason, he is entitled to a severance benefit in an amount equal to one year's base salary and a pro rata share of any bonus that he would have otherwise been eligible to receive during such one year.

In March 2006, in connection with our acquisition of the business of Innercool Therapies, Inc., we issued warrants to purchase up to 700,000 shares of our common stock, in the aggregate, to approximately fifteen individuals who were previously employees of Innercool Therapies and who were retained as employees or consultants of Cardium or its subsidiaries, at an exercise price of \$2.35, with a ten year term, and vesting over a three year period.

Also in connection with our acquisition of the business of Innercool Therapies, Inc., we expect to file a post-effective amendment to our resale registration statement on Form SB-2, as previously amended on February 10, 2006, to reflect the acquisition transaction, as well as the assets acquired from Innercool. The selling stockholders named in the resale registration statement may not resell any shares pursuant to the registration statement until the post-effective amendment is declared effective by the Securities and Exchange Commission.

**Table of Contents**

**ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 8A. CONTROLS AND PROCEDURES**

We maintain certain disclosure controls and procedures. They are designed to help ensure that material information is: (1) gathered and communicated to our management, including our principal executive and financial officers, on a timely basis; and (2) recorded, processed, summarized, reported and filed with the Securities and Exchange Commission as required under the Securities Exchange Act of 1934, as amended.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2005. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective for their intended purpose described above. There were no changes to our internal controls during the fourth quarter ended December 31, 2005 that have materially affected, or that are reasonably likely to materially affect, our internal controls.

**ITEM 8B. OTHER INFORMATION**

None.

**Table of Contents****PART III****ITEM 9. DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS; COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT****Our Directors and Executive Officers**

Our Board of Directors is responsible for the overall management of the Company and elects the executive officers of the Company who are responsible for administering our day-to-day operations. The Board of Directors is divided into three classes, designated Class I, Class II and Class III. Members of each class are elected to serve for a three-year term. The three-year terms of the members of each class are staggered, so that each year the members of a different class are due to be elected at our annual meeting of stockholders. The Class I directors are serving a term that will expire at our next annual meeting of stockholders to be held on June 6, 2007. The Class II directors are serving a term that will expire at the next annual meeting thereafter, and the Class III directors are serving a term that will expire at the next annual meeting thereafter.

The name, age, position and business experience of each of our directors and executive officers, and other significant employees of Cardium and its subsidiaries, are shown below.

***Christopher J. Reinhard*** (Age 52)

*Chairman of the Board (Class III Director), Chief Executive Officer, President and Treasurer*

Mr. Reinhard is a co-founder of Cardium and has served as a director and the Chief Executive Officer, President and Treasurer of Cardium since its inception in December 2003. Mr. Reinhard has also served as a director and the Chief Executive Officer, President and Treasurer of Aries Ventures, Inc., our wholly-owned subsidiary, since its inception in January 2006, and as a director and the Chief Executive Officer and Treasurer of Innercool Therapies, Inc., a wholly-owned subsidiary, since March 2006. Previously, he served as a director and the Chief Executive Officer, President and Treasurer of Aries Ventures Inc. from October 20, 2005 through its merger with Cardium in January 2006. He also served as Chief Financial Officer of Aries Ventures Inc. from October 20, 2005 to November 16, 2005. For the past nine years, Mr. Reinhard has focused on the commercial development of cardiovascular growth factor therapeutics. Before founding Cardium, he was a co-founder of Collateral Therapeutics, Inc., a former Nasdaq listed public company, and served as a director (from 1995) and President (from 1999) of Collateral Therapeutics until the completion of its acquisition by Schering AG Group (Germany) in 2002. He continued as Chief Executive of Collateral Therapeutics through December 2004. Mr. Reinhard played a major role in effecting Collateral Therapeutics' initial public offering led by Bear Stearns & Co. in 1998, and the sale of Collateral Therapeutics to Schering. Mr. Reinhard has also been Executive Chairman (since 2004) of Artes Medical, Inc., a privately-held specialty pharmaceutical and medical device company. Previously, Mr. Reinhard was Vice President and Managing Director of the Henley Group, a publicly-traded diversified industrial and manufacturing group, and Vice President of various public and private companies created by the Henley Group through spin-out transactions, including Fisher Scientific Group, a leading international distributor of laboratory equipment and test apparatus for the scientific community, Instrumentation Laboratory and IMED Corporation, a medical device company. Mr. Reinhard received a B.S. in Finance and an M.B.A. from Babson College.

***Tyler M. Dylan, Ph.D., J.D.*** (Age 44)

*Director (Class II), Chief Business Officer, General Counsel, Executive Vice President and Secretary*

Dr. Dylan is a co-founder of Cardium and has served as a director and the General Counsel, Executive Vice President and Secretary of Cardium since its inception in December 2003, and as the Chief Business Officer of Cardium since May 2005. Dr. Dylan has also served as a director and the Chief Business Officer, General Counsel, Executive Vice President and Secretary of Aries Ventures, Inc., our wholly-owned subsidiary, since its inception in January 2006, and of Innercool Therapies, Inc., also a wholly-owned subsidiary, since March 2006. Previously, he served as the Chief Business Officer, General Counsel, Executive Vice President and Secretary of

**Table of Contents**

Aries Ventures Inc. from October 20, 2005 through its merger with Cardium in January 2006. Dr. Dylan has focused on the development of cardiovascular growth factor therapeutics for the last seven years. He served as General Counsel (from 1998) and Vice President (from 1999) of Collateral Therapeutics until the completion of its acquisition by Schering in 2002. He continued as an executive officer of Collateral Therapeutics until October 2003. Dr. Dylan played a major role in developing Collateral Therapeutics' intellectual property portfolio, in furthering its business development efforts and in advancing the company toward and through its acquisition by Schering. In addition to his work with Collateral Therapeutics, Dr. Dylan has advised both privately-held and publicly-traded companies that are developing, partnering or commercializing technology-based products. Before joining Collateral Therapeutics, Dr. Dylan was a partner of the international law firm of Morrison & Foerster LLP. In his law firm practice, Dr. Dylan focused on the development, acquisition and enforcement of intellectual property rights, as well as related business and transactional issues. He also has worked with both researchers and business management in the biotech and pharmaceutical industries. Dr. Dylan received a B.Sc. in Molecular Biology from McGill University, Montreal, Canada, a Ph.D. in Biology from the University of California, San Diego, where he performed research at the Center for Molecular Genetics, and a J.D. from the University of California, Berkeley.

***Dennis M. Mulroy*** (Age 51)

*Chief Financial Officer*

Mr. Mulroy has been the Chief Financial Officer of Cardium since November 2005, and has served as a director and the Chief Financial Officer of Aries Ventures, Inc., our wholly-owned subsidiary, since its inception in January 2006, and of Innercool Therapies, Inc., also a wholly-owned subsidiary, since March 2006. He was also the Chief Financial Officer of Aries Ventures Inc. from November 2005 through its merger with Cardium in January 2006. Before joining Cardium, Mr. Mulroy was Chief Financial Officer of Molecular Imaging Corporation, a publicly-traded diagnostic services company (January 2004-November 2005), SeraCare Life Sciences, Inc., a publicly-traded company (November 2001-June 2003), Bioceutix Inc. (January 2001-November 2001) and Bidland Systems, Inc. (July 2000-December 2000). Mr. Mulroy also was employed with Ernst & Young in San Diego, California and is a Certified Public Accountant in the State of California. He received his degree in Business Administration with an emphasis in Accounting from the University of San Diego.

***Randall Moreadith, M.D., Ph.D.*** (Age 52)

*Executive Vice President and Chief Medical Officer*

Dr. Moreadith has been an Executive Vice President and the Chief Medical Officer of Cardium since January 2006. Before joining Cardium, Dr. Moreadith served as Chief Medical Officer of Renovis, Inc., a publicly-traded pharmaceutical company, from August 2004 to December 2005. He was a co-founder of ThromboGenics Ltd., a company focused on biotherapeutics for the treatment of vascular diseases, including acute ischemic stroke, and served as the company's President and Chief Operating Officer from December 1998 to December 2003. From April 1996 to February 1997, Dr. Moreadith served as Principal Medical Officer of Quintiles, Inc., and was also a co-founder of the Cardiovascular Therapeutics Group. He received a B.S. in Biology and Chemistry from North Carolina State University, an M.D. from Duke University and a Ph.D. in Biochemistry from Johns Hopkins University, and was a Howard Hughes Medical Institute Postdoctoral Fellow in Genetics at Harvard Medical School. His faculty appointments include the University of Texas Southwestern Medical Center where he was an Established Investigator of the American Heart Association.

***Edward William Gabrielson, M.D.*** (Age 53)

*Director (Class I)*

Dr. Gabrielson has served as a director of Cardium since January 2006. He has more than 25 years of experience as a physician and faculty member at Johns Hopkins University. Currently, Dr. Gabrielson is a Professor of Pathology and Oncology at Johns Hopkins University School of Medicine, and Professor of Environmental Health Sciences at the Johns Hopkins University Bloomberg School of Public Health. He is also

---

**Table of Contents**

an attending physician at the Johns Hopkins Hospital and Bayview Medical Center. Dr. Gabrielson received his Bachelor of Science in Biology and Chemistry from the University of Illinois and an M.D. from Northwestern University Medical School.

***Murray Hunter Hutchison*** (Age 67)

*Director (Class III)*

Mr. Hutchison has served as a director of Cardium since January 2006. He served 24 years as Chief Executive Officer and Chairman of International Technology Corp., a large publicly-traded diversified environmental engineering firm, until his retirement in 1996. Since his retirement, Mr. Hutchison has been self-employed with his business activities involving primarily the management of an investment portfolio. Mr. Hutchison currently serves as a director of Jack in the Box, Inc., a publicly-traded fast food restaurant chain, and as a director of Cadiz, Inc., a publicly-traded company focused on land acquisition and water development activities, and has served on the audit committee of several publicly-traded companies. Mr. Hutchison holds a B.S. in Economics and Foreign Trade.

***Gerald J. Lewis*** (Age 72)

*Director (Class II)*

Justice Lewis has served as a director of Cardium since January 2006. He served on a number of courts in the California judicial system, and retired from the Court of Appeal in 1987. He has served as an arbitrator or mediator on a large number of cases and was Of Counsel to Latham & Watkins from 1987 to 1997. He has been a director of several publicly-traded companies, including Henley Manufacturing, Wheelabrator Technologies, Fisher Scientific International, California Coastal Properties and General Chemical Group, and was Chairman of the audit committee of several of these companies. Since 2000, Justice Lewis has been a director of Invesco Mutual Funds, which became the AIM Mutual Funds in 2003.

***Lon Edward Otremba*** (Age 49)

*Director (Class I)*

Mr. Otremba has served as a director of Cardium since January 2006. He is the Principal Managing Partner of Lon E. Otremba, Strategic and Operational Management Advisory, a management advisory firm. Previously, Mr. Otremba was Chief Executive Officer (September 2003-August 2005) and a director (September 2003-July 2005) of Muzak, LLC; Executive Vice President (2001-2003) of Time Warner; and President and a director (1997-2000) of Mail.com (now Easy Link Services Corp.). He currently sits on the board of a non-profit, independent school in Roslyn, New York.

***Ronald I. Simon, Ph.D.*** (Age 67)

*Director (Class III)*

Dr. Simon has served as a director of Cardium since January 2006 and is currently a financial consultant to various businesses. Since 2003, Dr. Simon has been a Director of WFS Financial Inc., a publicly-traded financial services company. Formerly, he was a director of Collateral Therapeutics from 1998 until its acquisition by Schering in 2002. From 1995 through 2002, Dr. Simon was a director of SoftNet Systems, Inc., and since 2002, has been a director of its successor company, American Independence Corp., a holding company engaged principally in the health insurance and reinsurance business. He was a director of BDI Investment Corporation, a closely held regulated investment company, from February 2003 until its liquidation in early 2005 and served as Chief Financial Officer for Wingcast, LLC, a developer of automotive telematics from 2001 to 2002. During 2001, Dr. Simon served as Acting Chairman, Chief Executive Officer and Chief Financial Officer for SoftNet Systems, Inc. He also served as Executive Vice President and Chief Financial Officer of Western Water Company from 1997 to 2000, and a director of Western Water Company from 1999 through 2001. Dr. Simon was Managing Director Chief Financial Officer of The Henley Group from 1986 to 1990. Dr. Simon earned a

**Table of Contents**

B.A. from Harvard University, an M.A. from Columbia University, and a Ph.D. from Columbia University Graduate School of Business.

**Michael Magers** (Age 57)

*President and Chief Operating Officer of Innercool*

Mr. Magers has been the President and Chief Operating Officer of Innercool since March 2006. Previously, he served as the President and Chief Operating Officer of Post Cooling Corporation (previously Innercool Therapies, Inc.) from 1998 through the completion of Cardium's acquisition of its business in March 2006. He has more than 30 years' experience in the research, development, manufacturing and marketing of innovative medical devices. Mr. Magers was Vice President, Research & Development of Mallinckrodt (Tyco) (1994-1998), Director of Technology of Ohmeda Medical Devices Division (1990-1994), and Vice President, Technology of Baxter Edwards Critical Care Division (1976-1990). Mr. Magers has an M.S. in Engineering and an M.B.A. in Finance and Marketing from the University of California, Irvine.

**Board Committees**

The Board of Directors has an Audit Committee, a Compensation Committee and a Nominating Committee. Membership on each committee is limited to independent directors as defined under the listing standards of the Nasdaq Stock Market. In addition, members of the Audit Committee also meet the independence standards for audit committee members adopted by the SEC. The members of our Board committees are as follows:

<b>Audit Committee</b>	<b>Compensation Committee</b>	<b>Nominating Committee</b>
Ronald I. Simon (Chairman)*	Gerald J. Lewis (Chairman)	Murray H. Hutchison (Chairman)
Murray H. Hutchison*	Murray H. Hutchison	Edward W. Gabrielson
Gerald J. Lewis	Ronald I. Simon	Lon E. Otremba

\* The Board of Directors has determined that Mr. Hutchison and Dr. Simon are each an audit committee financial expert as defined by applicable rules adopted by the SEC.

*Audit Committee.* The general function of the Audit Committee is to oversee the accounting and financial reporting processes of the Company and the audits of our financial statements. The Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities relating to the accounting, reporting and financial practices of the Company, including the integrity of our financial statements and disclosures; the surveillance of administration and financial controls and our compliance with legal and regulatory requirements; the qualification, independence and performance of our independent auditing firm; and the performance of our internal audit function and control procedures. The Audit Committee is responsible for reviewing and recommending matters to the Board of Directors, but has no authority to make final decisions except as set forth in its charter. The Audit Committee has the sole authority to appoint, determine funding for, and oversee our independent auditing firm.

*Compensation Committee.* The members of our Compensation Committee are Justice Lewis (Chairman), and Messrs. Hutchison and Simon. Among other things, the Compensation Committee administers our 2005 Equity Incentive Plan in connection with grants of awards to employees or consultants other than officers and directors, and recommends to the Board the amount of compensation to be paid or awarded to our directors, officers and certain other personnel including salary, bonuses, stock option grants, other cash or stock awards under our incentive compensation plans as in effect from time to time, retirement and other compensation.

*Nominating Committee.* The members of our Nominating Committee are Mr. Hutchison (Chairman), Dr. Gabrielson and Mr. Otremba. The purpose of the Nominating Committee is to assist the Board of Directors in identifying qualified individuals to become members of the Board and in determining the composition of the Board and its various committees. The Nominating Committee periodically reviews the qualifications and independence of directors, selects candidates as nominees for election as directors, recommends directors to

## **Table of Contents**

serve on the various committees of the Board, reviews director compensation and benefits, and oversees the self-assessment process of each of the committees of the Board of Directors.

The Nominating Committee considers director nominee recommendations from a variety of sources, including nominees recommended by stockholders. Persons recommended by stockholders will be evaluated on the same basis as persons suggested by others. Stockholder recommendations may be made in accordance with our Stockholder Communications Policy described below.

### **Stockholder Communications with Directors**

The Board of Directors has adopted a Stockholder Communications Policy to provide a process by which our stockholders may communicate with the Board. Under the policy, stockholders may communicate with the Board of Directors as a whole, with the independent directors, with a committee of the Board, or with a particular director. Stockholders wishing to communicate directly with our Board of Directors may do so by mail addressed to the Company at 3611 Valley Centre Drive, Suite 525, San Diego, California, 92130, Attn: Corporate Secretary. The envelope must contain a clear notation indicating that the enclosed letter is a Stockholder-Board Communication or Stockholder-Director Communication. All such letters must identify the author as a stockholder of the Company and clearly state whether the intended recipients are all members of the Board of Directors, all independent directors, all members of a committee of the Board, or certain specified individual directors. The Corporate Secretary will review the communications received from stockholders at the above designated address on a regular basis and if they are relevant to the Company's operations and policies, will copy and forward the communications to the appropriate director or directors as expeditiously as reasonably practicable. By way of example, communications that are unduly hostile, threatening, obscene, illegal or similarly inappropriate will not be forwarded to any director. Matters deemed to be trivial in the sole discretion of the Corporate Secretary will be delivered to the appropriate director or directors at the next regularly scheduled meeting of the Board of Directors. The Corporate Secretary will periodically provide the Board with a summary of all communications received that were not forwarded and will make those communications available to any director upon request. The Board of Directors will determine whether any communications sent to the Board should be properly addressed by the entire Board or a committee thereof and whether a response to the communication is warranted.

### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors, executive officers and any person who owns more than 10% of our common stock, to file with the Securities and Exchange Commission initial reports of ownership of our common stock within 10 days of becoming a director, executive officer or greater than 10% stockholder, and reports of changes in ownership of our common stock before the end of the second business day following the day on which a transaction resulting in a change of ownership occurs. Directors, executive officers and greater than 10% stockholders are required by SEC regulations to provide us with copies of all Section 16(a) forms they file.

To our knowledge, based solely on our review of the copies of such reports provided to us and certain written representations that no other reports were required, during the fiscal year ended December 31, 2005, all Section 16(a) filing requirements applicable to our directors, executive officers and greater than 10% stockholders were complied with and there were no delinquent filers.

### **Code of Ethics**

We have adopted a Code of Ethics that applies to all of our executive officers. A copy of our Code of Ethics is available on our website at [www.cardiumthx.com](http://www.cardiumthx.com). A copy also will be provided, free of charge, upon written request to the Company at 3611 Valley Centre Drive, Suite 525 San Diego, California 92130, Attn: Chief Business Officer.

**Table of Contents****ITEM 10. EXECUTIVE COMPENSATION****Summary Compensation Table**

Except as noted, the following table shows the compensation earned by or paid or awarded to our named executive officers for all services rendered by them in all capacities to Cardium and its subsidiaries during each of the last three fiscal years ended December 31. For the purpose of the information provided under this Item 10, our named executive officers include our Chief Executive Officer and any other executive officer whose total salary and bonus for the applicable fiscal year exceeded \$100,000.

Name and Principal Position	Fiscal Year	Annual Compensation			Long-Term	All Other Compensation (\$) <sup>(5)</sup>
		Salary (\$)	Bonus (\$)	Other Annual Compensation (\$) <sup>(4)</sup>	Compensation Securities Underlying Options (#)	
Robert Weingarten <sup>(1)</sup>	2005 <sup>(2)</sup>	\$ 18,000	\$ 50,000 <sup>(3)</sup>			
Former President and Chief Financial Officer of Aries Ventures Inc.	2004 <sup>(2)</sup>	60,000				
	2003 <sup>(2)</sup>	60,000				
Christopher J. Reinhard						
Chief Executive Officer,	2005	\$ 54,519				\$ 1,000
President and Treasurer	2004					
	2003					

(1) All compensation shown for Mr. Weingarten was paid by Aries Ventures Inc. before its reverse merger with Cardium in October 2005.

(2) Refers to Aries Ventures' fiscal year ended September 30.

(3) Mr. Weingarten's bonus was recorded as a liability on Aries Ventures' books as of September 30, 2005, but was not paid until October 2005.

(4) Includes annual compensation not properly categorized as salary or bonus, such as perquisites and other personal benefits, unless the total amount of such compensation is the lesser of either \$50,000 or 10% of the total of annual salary and bonus.

(5) Includes premiums paid by the Company for term life insurance and long-term disability.

**Option Grants, Aggregated Option Exercises and Fiscal Year End Option Values**

No options were granted to or exercised by our named executive officers during the fiscal year ended December 31, 2005, and none of our named executive officers held any options as of December 31, 2005.

**Employment Agreements with Named Executive Officers**

Effective as of October 20, 2005, the Company entered into a two-year employment agreement with Mr. Reinhard pursuant to which Mr. Reinhard will receive an annual salary of \$350,000. Mr. Reinhard may also receive certain employee benefits available generally to all employees or specifically to executives, including bonus and/or incentive equity compensation in a manner and at a level determined from time to time by the Board of Directors. Under the terms of his employment agreement, Mr. Reinhard will be entitled to a severance benefit, including standard employee benefits available to other executive officers, if he is terminated by the Company without cause in an amount equal to the greater of one year's annual salary or the salary payable on the remaining term of the employment agreement at the time of termination. In addition, upon a change of control or termination by the Company without cause, any and all then outstanding options held by Mr. Reinhard shall become fully exercisable and remain so for the remaining term of the option.

**Director Compensation**



## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

Each non-employee director receives an annual retention fee of \$24,000, payable quarterly, and members of the Audit Committee receive an additional annual fee of \$10,000 for their service on the Audit Committee.

**Table of Contents**

Directors appointed during a term year may receive a proportional amount of the annual retention fee for that year. Options and other equity awards may be granted to directors on a discretionary basis. Upon joining the Board of Directors, each non-employee director received an option under our 2005 Equity Incentive Plan to buy 100,000 shares of our common stock, vesting over a four year period, with an exercise price equal to \$2.75 per share (the last reported sale price of our common stock on the date of grant), and a ten year term. Neither Mr. Reinhard nor Dr. Dylan receive any additional compensation for serving as a director. Directors are reimbursed for travel and other expenses incurred in connection with attending Board and committee meetings. Mr. Weingarten, a former director of Aries Ventures Inc., received a retention fee of \$10,000 for serving as a member of the Board of Directors of Aries Ventures from and after its reverse merger with Cardium in October 2005 until our annual meeting of stockholders held in January 2006.

**ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

**Securities Authorized for Issuance Under Equity Compensation Plans**

The following table summarizes equity compensation plans approved by stockholders and equity compensation plans that were not approved by stockholders as of December 31, 2005.

	(a)	(b)	(c)
	Number of securities to be issued upon exercise of outstanding options and rights	Weighted-average exercise price of outstanding options and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
<b>Plan Category</b>			
Equity compensation plans approved by stockholders	2,095,000	\$ 1.95	3,570,856
Equity compensation plans not approved by stockholders			
<b>Total</b>	<b>2,095,000</b>	<b>\$ 1.95</b>	<b>3,570,856</b>

**Table of Contents****Stock Holdings of Certain Owners and Management**

The following table sets forth information on the beneficial ownership of our common stock by executive officers and directors, as well as stockholders who are known by us to own beneficially more than 5% of our common stock, as of March 28, 2006:

Name of Beneficial Owner	Number of Shares and Nature of Beneficial Ownership <sup>(1)</sup>	Percent of Common Stock Outstanding <sup>(2)</sup>
Christopher J. Reinhard	2,953,258	9.30%
Director, Chief Executive Officer, President and Treasurer		
Tyler M. Dylan, Ph.D., J.D.	2,550,000	8.03%
Chief Business Officer, Executive Vice President, General Counsel and Secretary		
Dr. Gabor M. Rubanyi	2,000,000	6.30%
Scientific Advisor		
Dennis Mulroy	0	0.00%
Chief Financial Officer		
Randall Moreadith, M.D., Ph.D.	0	0.00%
Executive Vice President and Chief Medical Officer		
Michael Magers	0	0.00%
President and Chief Operating Officer of Innercool		
Edward W. Gabrielson	41,666 <sup>(3)</sup>	Less than 1%
Director		
Murray H. Hutchison	8,332 <sup>(3)</sup>	Less than 1%
Director		
Gerald J. Lewis	41,666 <sup>(3)</sup>	Less than 1%
Director		
Lon E. Otremba	41,666 <sup>(3)</sup>	Less than 1%
Director		
Ronald I. Simon	8,332 <sup>(3)</sup>	Less than 1%
Director		
All directors and executive officers as a group (ten persons)	5,644,920 <sup>(4)</sup>	17.76%

## Edgar Filing: Cardium Therapeutics, Inc. - Form 10KSB

- (1) A person is considered to beneficially own any shares: (i) over which the person, directly or indirectly, exercises sole or shared voting or investment power, or (ii) of which the person has the right to acquire beneficial ownership at any time within 60 days (such as through the exercise of stock options or warrants). Unless otherwise indicated, voting and investment power relating to the shares shown in the table for our directors and executive officers is exercised solely by the beneficial owner or shared by the owner and the owner's spouse or children.
- (2) As of March 28, 2006, there were 31,749,801 shares of our common stock outstanding.
- (3) Includes 4,166 shares underlying options that are exercisable and an additional 4,166 shares underlying options that will become exercisable within 60 days.
- (4) Includes 20,830 shares underlying options that are exercisable and an additional 20,830 shares underlying options that will become exercisable within 60 days.

From time to time, the number of our shares held in the street name accounts of various securities dealers for the benefit of their clients or in centralized securities depositories may exceed 5% of the total shares of our common stock outstanding.

**Table of Contents****ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

In October 2005, Mr. Reinhard was issued 41,924 shares of our common stock as repayment for advances totaling \$62,882 that had been made to fund our early start-up costs.

From November 2005 until March 2006, Dr. Gabor Rubanyi provided consulting services to the Company under the terms of a Consulting Services Agreement. Dr. Rubanyi was paid a consulting fee of \$8,333 per month. In March 2006, Dr. Rubanyi became an employee and a Scientific Advisor of Cardium.

In March 2006, Cardium, through its newly-formed, wholly-owned subsidiary, Innercool Therapies, Inc., a Delaware corporation, acquired substantially all of the assets and the business of Innercool Therapies, Inc., an unaffiliated California corporation engaged in the business of researching, developing, manufacturing, marketing, selling and distributing products and services related to endovascular temperature control therapy. As partial consideration therefore, Cardium issued to the seller 2,500,000 shares of Cardium's common stock. In addition, as part of the acquisition, Cardium agreed to deliver to the seller \$5,000,000 in cash or shares of Cardium's common stock, at Cardium's election, if net sales revenue from certain of Innercool's products acquired in the acquisition equals or exceeds \$20,000,000 in any one calendar year beginning with 2006 and ending December 31, 2011. Michael Magers, the President and Chief Operating Officer of Cardium's Innercool subsidiary and the former President and Chief Operating Officer of the seller, may receive up to 3.52% of the 2,500,000 shares delivered to the seller, subject to certain escrow and holding requirements applicable to such shares, and 3.52% of the amount payable if the net sales revenue milestones are accomplished.

**ITEM 13. EXHIBITS**

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

**EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated By Reference To</b>
2.1	Agreement and Plan of Merger dated as of October 19, 2005 and effective as of October 20, 2005, by and among Aries Ventures Inc., Aries Acquisition Corporation and Cardium Therapeutics, Inc.	Exhibit 2.1 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
2.2	Certificate of Merger of Domestic Corporation as filed with the Delaware Secretary of State on October 20, 2005	Exhibit 2.1 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
2.3	Agreement and Plan of Merger dated January 17, 2006, between Aries Ventures Inc. and Cardium Therapeutics, Inc.	Exhibit 2.4 of our Registration Statement on Form SB-2 (File No. 333-131104), filed with the commission on January 18, 2006
2.4	Certificate of Merger, as filed with the Delaware Secretary of State on January 17, 2006	Exhibit 2.5 of our Registration Statement on Form SB-2 (File No. 333-131104), filed with the commission on January 18, 2006
3(i)	Second Amended and Restated Certificate of Incorporation of Cardium Therapeutics, Inc. as filed with the Delaware Secretary of State on January 13, 2006	Exhibit 3(i) of our Registration Statement on Form SB-2 (File No. 333-131104), filed with the commission on January 18, 2006
3(ii)	Amended and Restated Bylaws of Cardium Therapeutics, Inc. as adopted on January 12, 2006	Exhibit 3(ii) of our Registration Statement on Form SB-2 (File No. 333-131104), filed with the commission on January 18, 2006

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated By Reference To</b>
4.1	Form of Warrant issued to National Securities Corporation as Placement Agent	Exhibit 4.1 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
4.2	Form of Warrant issued to Lead Investors and Mark Zucker	Exhibit 4.2 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
4.3	Form of Lock-Up Agreement executed by officers, directors and employees of Cardium Therapeutics, Inc.	Exhibit 4.3 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
4.4	Form of Warrant issued to employees and consultants of Innercool Therapies, Inc.	Exhibit 4.1 of our Current Report on Form 8-K dated March 8, 2006, filed with the commission on March 14, 2006
4.5	Form of Common Stock Certificate for Cardium Therapeutics, Inc.	Filed herewith
10.1	Transfer, Consent to Transfer, Amendment and Assignment of License Agreement effective as of August 31, 2005, by and among New York University, Collateral Therapeutics, Inc. and Cardium Therapeutics, Inc.	Exhibit 10.1 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.2	Transfer, Consent to Transfer, Amendment and Assignment of License Agreement effective as of August 31, 2005, by and among Yale University, Schering Aktiengesellschaft and Cardium Therapeutics, Inc.	Exhibit 10.2 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.3	Transfer, Consent to Transfer, Amendment and Assignment of License Agreement effective as of July 31, 2005, by and among the Regents of the University of California, Collateral Therapeutics, Inc. and Cardium Therapeutics, Inc.	Exhibit 10.3 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.4	Transfer, Consent to Transfer, Amendment and Assignment of License Agreement effective as of July 31, 2005, by and among the Regents of the University of California, Collateral Therapeutics, Inc. and Cardium Therapeutics, Inc.	Exhibit 10.4 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.5	Technology Transfer Agreement effective as of October 13, 2005, by and among Schering AG, Berlex, Inc., Collateral Therapeutics, Inc. and Cardium Therapeutics, Inc.	Exhibit 10.5 of Aries Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.6	Amendment to the Exclusive License Agreement for Angiogenesis Gene Therapy effective as of October 20, 2005, between the Regents of the University of California and Cardium Therapeutics, Inc.	Exhibit 10.6 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.7	Amendment to License Agreement effective as of October 20, 2005, by and between New York University and Cardium Therapeutics, Inc.	Exhibit 10.7 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated By Reference To</b>
10.8	Second Amendment to Exclusive License Agreement effective as of October 20, 2005, by and between Yale University and Cardium Therapeutics, Inc.	Exhibit 10.8 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.9	2005 Equity Incentive Plan as adopted effective as of October 20, 2005*	Exhibit 10.9 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.10	Employment Agreement dated as of October 20, 2005 by and between Aries Ventures Inc. and Christopher Reinhard*	Exhibit 10.10 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.11	Employment Agreement dated as of October 20, 2005 by and between Aries Ventures Inc. and Tyler Dylan*	Exhibit 10.11 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.12	Office Lease between Cardium and Kilroy Realty, L.P. dated as of September 30, 2005 and commencing on November 1, 2005	Exhibit 10.12 of our Annual Report on Form 10-KSB for the fiscal year ended September 30, 2005, filed with the commission on December 22, 2005
10.13	Yale Exclusive License Agreement between Yale University and Schering Aktiengesellschaft dated September 8, 2000	Exhibit 10.13 of our Annual Report on Form 10-KSB for the fiscal year ended September 30, 2005, filed with the commission on December 22, 2005
10.14	Research and License Agreement between New York University and Collateral Therapeutics, Inc. dated March 24, 1997 (with amendments dated April 28, 1998 and March 24, 2000)	Exhibit 10.14 of our Annual Report on Form 10-KSB for the fiscal year ended September 30, 2005, filed with the commission on December 22, 2005
10.15	Exclusive License Agreement for Angiogenesis Gene Therapy between the Regents of the University of California and Collateral Therapeutics, Inc. dated as of September 27, 1995 (with amendments dated September 19, 1996, June 30, 1997, March 11, 1999 and February 8, 2000)	Exhibit 10.15 of our Annual Report on Form 10-KSB for the fiscal year ended September 30, 2005, filed with the commission on December 22, 2005
10.16	Placement Agency Agreement dated July 1, 2005 by and between Cardium Therapeutics, Inc. and National Securities Corporation	Exhibit 1.1 of our Current Report on Form 8-K dated October 20, 2005, filed with the commission on October 26, 2005
10.17	Asset Purchase Agreement dated as of March 8, 2006, by and among Cardium Therapeutics, Inc., Innercool Therapies, Inc. (a Delaware corporation), and Innercool Therapies, Inc. (a California corporation) (without schedules)	Exhibit 10.1 of our Current Report on Form 8-K dated March 8, 2006, filed with the commission on March 14, 2006
10.18	Production Service Agreement effective as of January 24, 2006, by and between Molecular Medicine Bioservices, Inc. and Cardium Therapeutics, Inc.	Filed herewith
10.19	Executive Employment Agreement dated March 8, 2006 by and between Innercool Therapies, Inc. and Michael Magers*	Filed herewith

**Table of Contents**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated By Reference To</b>
10.20	Master License Agreement effective as of December 1, 1999, by and between SurModics, Inc. and Innercool Therapies, Inc.	Filed herewith
10.21	Lease dated August 12, 1997, by and between R.G. Harris Co., and Elizabeth G. Harris, Henry K. Workman and Don C. Sherwood, Trustees of the Harris Family Revocable Trust (as landlord) and Copper Mountain Networks, Inc. (as tenant)	Filed herewith
10.22	Lease Amendment No. 1 effective as of August 1, 1999, by and among R.G. Harris Co., and Elizabeth G. Harris, Henry K. Workman and Don C. Sherwood, Trustees of the Harris Family Revocable Trust (as landlord), Copper Mountain Networks, Inc. (as tenant), and Neurothermia, Inc. (as assignee)	Filed herewith
10.23	Assignment, Assumption and Consent effective as of October 2, 1999, by and among Copper Mountain Networks, Inc., Neurothermia, Inc., and R.G. Harris Co., and Elizabeth G. Harris, Henry K. Workman and Don C. Sherwood, Trustees of the Harris Family Revocable Trust	Filed herewith
10.24	Lease Amendment No. 2 effective as of October 16, 2002, by and between E.G. Sirrah, LLC, as successor-in-interest to R.G. Harris Co., and Elizabeth G. Harris, Henry K. Workman and Don C. Sherwood, Trustees of the Harris Family Revocable Trust, and Innercool Therapies, Inc. (formerly known as Neurothermia, Inc.)	Filed herewith
10.25	Sublease dated August 30, 2005, by and between Innercool Therapies, Inc., and Acadia Pharmaceuticals Inc.	Filed herewith
21	Subsidiaries of Cardium Therapeutics, Inc.	Filed herewith
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer	Filed herewith
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer	Filed herewith
32	Section 1350 Certification	Filed herewith

\* Indicates management contract or compensatory plan or arrangement.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES****Audit Fees**

Marcum & Kliegman LLP has been our independent auditor since May 31, 2005. During the year ended December 31, 2005, Marcum & Kliegman performed an audit of our financial statements for the year ended December 31, 2004 and of the financial statements of Aries Ventures Inc. for its fiscal year ended September 30,



**Table of Contents**

2005. The table below shows the aggregate fees billed by Marcum & Kliegman during the year ended December 31, 2005, for professional services rendered for the audit of our annual financial statements, certain interim reviews of our financial statements, and other services provided in connection with our statutory and regulatory filings.

Before the reverse merger between Cardium and Aries Ventures in October 2005, Weinberg & Company, P.A. served as the independent auditor of Aries Ventures. The table below reflects the aggregate fees billed by Weinberg & Company for professional services rendered for the audit of the annual financial statements of Aries Ventures Inc. for its fiscal year ended September 30, 2004, the reviews of the financial statements included in the Quarterly Reports of Aries Ventures on Form 10-QSB during its fiscal years ended September 30, 2005 and 2004, and other services provided in connection with the statutory and regulatory filings of Aries Ventures for its fiscal years ended September 30, 2005 and 2004, and for the period from October 1, 2005 through December 31, 2005.

	<b>Weinberg &amp; Company, P.A.</b>	<b>Marcum &amp; Kliegman LLP</b>	<b>Total</b>
2005	\$ 11,000 <sup>(1)</sup>	\$ 154,275 <sup>(3)</sup>	\$ 165,275
2004	\$ 22,000 <sup>(2)</sup>	\$ 0	\$ 22,000

(1) For the period October 1, 2004 through December 31, 2005.

(2) For the period October 1, 2003 through September 30, 2004.

(3) For the year ended December 31, 2005.

**Audit-Related Fees**

There were no fees billed to the Company during its last two fiscal years by either Marcum & Kliegman LLP or Weinberg & Company, P.A. for assurance and related services reasonably related to the performance of the audit or review of our financial statements that are not included under Audit Fees above.

**Tax Fees**

There were no fees billed to the Company during its last two fiscal years by either Marcum & Kliegman LLP or Weinberg & Company, P.A. for professional services for tax compliance, tax advice or tax planning.

**All Other Fees**

There were no fees billed to the Company during its last two fiscal years by either Marcum & Kliegman LLP or Weinberg & Company, P.A. for products and services provided during the last two fiscal years.

**Pre-Approval Policies and Procedures**

On January 18, 2006, the Audit Committee approved its charter, which contains certain policies and procedures under which all audit and non-audit services performed by our auditors must be approved in advance by the Audit Committee. Under these policies and procedures, unless a type of service has received general pre-approval, it will require specific pre-approval by the Audit Committee if it is to be provided by our auditors. Any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval by the Audit Committee. In granting both general and specific pre-approval, the Audit Committee will consider whether such services are consistent with the rules of the Securities and Exchange Commission on auditor independence. The Audit Committee will also consider whether the auditors are best positioned to provide the most effective and efficient service, for reasons such as familiarity with our business, people, culture, accounting systems, risk profile and other factors, and whether the service might enhance our ability to manage or control risk or improve audit quality. The term of any general pre-approval will be 12 months, unless the Audit Committee determines otherwise. The Audit Committee will annually review and pre-approve the services that may be provided by our auditors without obtaining specific pre-approval from the Audit Committee.

**Table of Contents****SIGNATURES**

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, Cardium Therapeutics, Inc., the registrant, caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 31, 2006

CARDIUM THERAPEUTICS, INC.

By: /s/ CHRISTOPHER J. REINHARD  
**Christopher J. Reinhard,**

**Chief Executive Officer**

In accordance with the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of Cardium Therapeutics, Inc., in the capacities and on the dates indicated.

Signature	Title	Date
/s/ CHRISTOPHER J. REINHARD  <b>(Christopher J. Reinhard)</b>	Chief Executive Officer and Chairman of the Board of Directors (principal executive officer)	March 31, 2006
/s/ DENNIS M. MULROY  <b>(Dennis M. Mulroy)</b>	Chief Financial Officer (principal financial officer and principal accounting officer)	March 31, 2006
/s/ TYLER M. DYLAN  <b>(Tyler M. Dylan)</b>	Director	March 31, 2006
/s/ EDWARD WILLIAM GABRIELSON  <b>(Edward William Gabrielson)</b>	Director	March 31, 2006
/s/ MURRAY HUNTER HUTCHISON  <b>(Murray Hunter Hutchison)</b>	Director	March 31, 2006
/s/ GERALD J. LEWIS  <b>(Gerald J. Lewis)</b>	Director	March 31, 2006
/s/ LON EDWARD OTREMBIA  <b>(Lon Edward Otremba)</b>	Director	March 31, 2006
/s/ RONALD I. SIMON  <b>(Ronald I. Simon)</b>	Director	March 31, 2006

