Cardium Therapeutics, Inc.
Form 10-K
March 26, 2009
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE

SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008

001-33635

(Commission file number)

CARDIUM THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**27-0075787**
(State of incorporation)	**(IRS Employer Identification No.)**
12255 El Camino Real, Suite 250	
San Diego, California 92130	**(858) 436-1000**
(Address of principal executive offices)	**(Registrant s telephone number)**

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

Title of each class	**Name of exchange on which registered**
Common Stock, $0.0001 par value per share	**NYSE Amex**

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

None

Indicate by check mark if Cardium Therapeutics, Inc. (Cardium) is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ¨ Yes x No

Indicate by check mark if Cardium is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. ¨ Yes x No

Indicate by check mark whether Cardium (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 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. x Yes ¨ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not 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-K or any amendment to this Form 10-K. ¨

Indicate by check mark whether Cardium is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨ Smaller reporting company ¨

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

The aggregate market value of Cardium s common stock held by non-affiliates of Cardium as of the last business day of Cardium s most recently completed second quarter (June 30, 2008) was approximately $86,208,000 (based on the closing sale price of $2.29 reported by AMEX on June 30, 2008). For this purpose, all of Cardium s officers and directors and their affiliates were assumed to be affiliates of Cardium.

As of March 23, 2009, 46,930,439 shares of Cardium s common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III (Items 10, 11, 12, 13 and 14) of this Form 10-K incorporates by reference portions of Cardium s definitive proxy statement for its Annual Meeting of Stockholders to be held June 4, 2009 to be filed on or before April 29, 2009.

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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, ap 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;

our ability to fund operations and business plans, and the timing of any funding or corporate development transactions we may pursue;

the timing, conduct and outcome of discussions with regulatory agencies, regulatory submissions and clinical trials, including the timing for completion of enrollment in clinical studies;

the performance of Innercool Therapies medical devices and related products, the safety and efficacy of Cardium s and Tissue Repair s biological 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 or commercialization of new products and product candidates and the timing of any product launches;

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;

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.

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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 expressed in or implied by the forward-looking statements. These factors include, among others, the risks described under Item 1A and elsewhere in this report, as well as in other reports and documents we file with the United States Securities and Exchange Commission (SEC).

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 Tissue Repair Company, each a wholly-owned subsidiary of Cardium.

PART I

ITEM 1. BUSINESS

Overview

Cardium Therapeutics, Inc. was organized as a Delaware corporation in December 2003. Cardium s business is focused on the acquisition and strategic development of product opportunities or businesses having the potential to address significant unmet medical needs, and definable pathways to commercialization, partnering or other monetization following the achievement of corresponding development objectives. In October 2005, we acquired a portfolio of biologic growth factors and related delivery techniques from the Schering AG Group, Germany (now part of Bayer AG), for potential use in treating ischemic and other cardiovascular conditions. In connection with this acquisition, we completed a reverse merger, whereby Cardium merged with a wholly-owned subsidiary of Aries Ventures, Inc. (Aries), a publicly traded company. In January 2006, Aries was merged with and into Cardium with Cardium as the surviving entity and successor issuer to Aries. As a result, we are now in our present form a publicly traded corporation.

In March 2006, we acquired the technologies and products of Innercool Therapies, Inc., a medical technology company in the emerging field of therapeutic hypothermia or patient temperature modulation, whose systems and products are designed to rapidly and controllably cool the body 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. In August 2006, we acquired rights to the assets and technologies of Tissue Repair Company, a company focused on the development of growth factor therapeutics for the potential treatment of tissue wounds such as chronic diabetic wounds, and whose product candidate, Excellarate™, is initially being developed as a single administration for the treatment of non-healing, neuropathic diabetic foot ulcers. Innercool Therapies and Tissue Repair Company are each operated as a wholly-owned subsidiary of Cardium.

Consistent with our overall business strategy, as our product opportunities and businesses are advanced and corresponding valuations established, we intend to consider various corporate development transactions designed to place our product candidates into larger organizations or with partners having existing commercialization, sales and marketing resources, and a need for innovative products. Such transactions could involve the sale, partnering or other monetization of particular product opportunities or businesses.

In November 2008, we reported that we were focusing efforts on our Innercool Therapies and Tissue Repair subsidiaries, both of which we believe are nearing completion of their strategic development programs initiated in 2006. In the case of InnerCool, its new endovascular-based cooling system RapidBlue™ was cleared by the U.S. Food and Drug Administration (FDA) in late-2008, and an application for FDA clearance of its UroCool™ system was submitted in the first quarter of 2009. In the case of Tissue Repair Company, its MATRIX Phase 2b

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clinical study is principally designed to evaluate the ability of Excellarate™ to promote rapid closure of previously non-healing diabetic foot ulcers, and to gather additional information regarding safety and clinical use. Enrollment in the MATRIX clinical study is expected to be completed and select top line data announced shortly. In keeping with Cardium s business model, we expect to consider strategic partnering or other transactions designed to further advance these products to commercialization.

As we near completion of our strategic development of our InnerCool and Tissue Repair businesses, we expect to continue to pursue opportunistic acquisitions, strategic development and partnering or other monetization transactions designed to enhance long-term stockholder value. Of course, there can be no assurance that we will successfully implement our business model or strategy.

Cardium and Tissue Repair Company Biologics for Wound Healing and Other Indications

Tissue Repair Company Transaction

In August 2006, we obtained the rights to develop various technologies and products now part of the Tissue Repair Company (TRC), a San Diego-based biopharmaceutical company focused on the development of growth factor therapeutics for the potential treatment of chronic diabetic wounds. TRC s lead product candidate, Excellarate, is a DNA-activated collagen gel for topical treatment formulated with an adenovector delivery carrier encoding human platelet-derived growth factor-B (PDGF-B). Excellarate is initially being developed as a single administration for the treatment of non-healing diabetic foot ulcers.

The Excellarate topical gel is designed to stimulate angiogenesis and granulation tissue formation through the recruitment and proliferation of chemotactic cells such as monocytes and fibroblasts, which are necessary for the stimulation of a variety of wound healing processes. Other potential applications for TRC s Gene Activated Matrix (GAM) technology include therapeutic angiogenesis (cardiovascular ischemia, peripheral arterial disease) and orthopedic products, including hard tissue (bone) and soft tissue (ligament, tendon, and cartilage) repair. We initiated the Phase 2b clinical study for Excellarate during the second half of 2007, and expect to complete enrollment and announce select top line data shortly.

Incidence of Chronic Wounds

An estimated 12.5 million patients worldwide suffer from chronic wounds with the industrialized countries making up 8 million, of which the U.S. totals approximately 3.7 million.

Over 800,000 patients in the U.S. develop diabetic foot ulcers annually.

Approximately 1.7 million patients suffer from pressure wounds, 1 million from diabetic foot ulcers and 1 million from venous status ulcers.

Diabetic ulcers cost the U.S. healthcare system approximately $5 billion per year with treatment and subsequent lower limb amputations adding an additional $1 billion per year.

Of the approximately 15 million diabetic patients, approximately 15 to 20 percent of this patient population will go on to suffer at least one chronic foot ulcer and of those six percent will be hospitalized due to infection or other ulcer-related complications.

Diabetes is the leading cause of non-traumatic lower extremity amputations and approximately 14 to 24 percent of patients with diabetes who develop foot ulcers eventually have an amputation.

Current Treatment Approaches for Chronic Wounds

There are several treatment modalities currently used for severe chronic ulcers in diabetic patients, including topical dressings, off-loading, debridement and skin grafts. Regranex® Gel (becaplermin), which is marketed by Johnson & Johnson s Ethicon Wound Management Division, is considered to be the only FDA-approved

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prescription medicine to treat such wounds. Regranex® Gel is a recombinant human platelet-derived growth factor (rrPDGF-BB) protein that is used as an adjunct with other current treatment modalities described above and is used to treat lower extremity diabetic neuropathic ulcers. Based on Regranex® Gel s instructions for use, an estimated 70 administrations and 70 wound cleanings and redressings would be required over a 10-week treatment period (once daily administration followed by a subsequent wound cleaning and redressing without gel).

Gene Activated Matrix (GAM) Technology

We believe that patient compliance can be a major factor preventing or limiting improved medical outcomes, particularly when repeated administrations are required at a wound site. Gene Activated Matrix technology is designed to provide a therapeutic level of protein synthesis at a particular site in the body and can be used in soft tissue such as skin, ligament, tendons and cartilage, as well as hard tissue such as bone. The technology is distinctive in that it is an immobilized form of local gene delivery that allows for control of gene uptake. GAM consists of a biocompatible matrix comprising a gene or DNA vector encoding a growth factor or other therapeutic protein.

For tissue repair, the application method involves placement of a GAM gel directly onto a wound site. TRC s studies have shown that proliferative cells in the body can migrate into the GAM, take up the immobilized vector and gene and then transiently express the encoded therapeutic protein. Compared with topical applications of proteins, this *in situ* expression method significantly prolongs the availability of therapeutic protein to the cells involved in tissue repair. TRC s GAM technology may have potential utility in several clinical indications where protein therapeutics have had limited success, including treatment of dermal wounds (such as diabetic foot ulcers), therapeutic angiogenesis (pharmacologically inducing new blood vessel growth), and orthopedic products for repair of various tissues, including hard tissue (bone) and soft tissue (ligament, tendon, cartilage).

Tissue Repair Product Candidate Excellarate

Excellarate is being developed as a next-generation treatment to leverage the established medical utility of PDGF-B, and to simplify treatment by stimulating the body s own localized and sustained production of PDGF-B at the wound site over a six to 12-day period following a single dose administration. We believe that a one-time administration, or in more severe cases several once-a-week administrations, of the Excellarate topical gel, which is designed to mediate a sustained cellular-release of PDGF-B at the injury site, could substantially simplify the treatment regimen, thus potentially enhancing patient compliance and improving medical outcomes.

Excellarate was evaluated in an initial multi-center Phase 1-2 clinical trial that evaluated preliminary safety and included an assessment of healing in 15 patients with diabetic foot ulcers that did not heal using conventional techniques. Based on the data obtained, Excellarate appeared to be safe and well tolerated in patients with diabetic foot ulcers. In addition, in the 12 patients that completed the treatment protocol and follow-up, over 80% of the patients exhibited complete closure of previously non-healing wounds by 14 weeks. Single dose applications were administered in 70% of the patients and the remaining patients received a weekly dose application over a four-week period. Based on the prior pre-clinical and toxicology database, and results from the Phase 1-2 clinical study, we advanced Excellarate into a randomized, double-blind, placebo-controlled, multi-center Phase 2b clinical study in the second half of 2007. The MATRIX Phase 2b clinical study is principally designed to evaluate the ability of Excellarate™ to promote rapid closure of previously non-healing diabetic foot ulcers, and to gather additional information regarding safety and clinical use. Consistent with Cardium s overall business strategy, if the data from the Phase 2b study indicate that Excellarate™ appears to be safe and effective in promoting the healing of such ulcers, then we would expect to pursue strategic discussions with respect to potential development and commercialization partnerships for Excellarate™.

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Other Biologics Growth Factors for Regenerative Medicine

Biologics and Stem Cells for Regenerative Medicine

Cardium has also developed additional biologics for potential application in other areas of regenerative medicine. Generx® (alferminogene tadenovec, Ad5FGF-4) is designed to leverage the body s natural healing processes in response to repeated ischemic stress (insufficient blood flow and myocardial oxygen supply due to coronary heart disease). Corgentin (Ad5IGF-1) is designed to enhance myocardial healing in and around the infarct zone when used as an adjunct to existing vascular-directed pharmacologic and interventional therapies. In November 2008, Cardium announced that it was focusing efforts on its Tissue Repair and InnerCool Therapies subsidiaries, both of which we believe are nearing completion of their strategic development programs initiated in 2006, and that the principal focus of Cardium s biologics program is to advance the Excellarate product candidate through its current Phase 2b MATRIX study. Once the MATRIX study is completed, additional resources may be applied toward these other biologic candidates, potentially in collaboration with a strategic development partner.

A complementary approach to the development of therapeutics for regenerative medicine involves the use of stem cells that can be incorporated into injured tissue like the heart as a means of preventing further damage and promoting healing of the affected organ. In that regard, filings by Cardium related to Ad5IGF-1 also described the potential use of stem cells, such as mesenchymal stem cells or MSCs transfected with an Ad5IGF-1 vector (such as that used in Corgentin), for addressing coronary syndromes such as heart disease or heart attack.

In March 2009, Cardium reported that studies conducted by independent researchers at the University of Cincinnati showed in a preclinical model of heart attack that MSCs transfected with Ad5IGF-1 were effective at promoting angiogenesis within the heart and that the zone of heart attack related tissue damage (the infarct zone) was significantly reduced, and contractile function significantly improved, following administration of Ad5IGF-1 transfected MSCs highlighting the potential value of these therapeutic approaches.

InnerCool Therapies Patient Temperature Modulation for Reducing Ischemic Injury

InnerCool Therapies Transaction and Subsequent Product Development

In March 2006, we acquired the technologies and products of InnerCool Therapies, Inc., a San Diego-based medical technology company in the emerging field of therapeutic hypothermia or patient temperature modulation, which is designed to controllably cool the body in order to reduce cell death and damage following acute ischemic events such as cardiac arrest or stroke, and to potentially lessen or prevent associated injuries such as adverse neurological outcomes, as well as in the management of patients experiencing trauma or fever. Rapid cooling and rewarming of patients can be accomplished from inside the body, using an endovascular catheter which is selectively chilled or warmed. For less acute needs, cooling and rewarming of patients can also be accomplished by surface-based systems which are applied to the outside of the body, such as a vest applied to the upper body. InnerCool s Celsius Control System is a rapid endovascular-based system, which has received regulatory clearance in the U.S., Europe and Australia.

Following the acquisition, we expanded InnerCool s business and operations, and introduced a new CoolBlue surface temperature modulation system. With the introduction of CoolBlue, and our next-generation RapidBlue endovascular cooling system which received FDA 510(k) approval in October 2008, we believe we have positioned InnerCool Therapies as the first and only comprehensive provider of temperature modulation solutions for hospital and medical centers. In November 2008, we announced the development of InnerCool s UroCool targeted tissue cooling system, which is designed to induce localized cooling during surgery for prostate cancer. We submitted an application for FDA 510(k) clearance of UroCool in the first quarter of 2009. Following these product and strategic development accomplishments, our goal is to place our products and product candidates with larger corporations having existing sales and marketing organizations to more fully commercialize these products.

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Incidence of Ischemic Injuries and Potentially Related Applications

Cardiac Arrest:

In the United States, an estimated 500,000 people experience cardiac arrest each year, of which approximately 150,000 survive and are treated with advanced care.

Outside the United States, it is estimated that approximately 900,000 people experience cardiac arrest each year, of which 200,000 survive and are treated with advanced care.

The American Heart Association recently revised its 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.

Heart Attack or Acute Myocardial Infarction (AMI):

In the United States, an estimated 865,000 people experience a new or recurrent heart attack each year.

An estimated 325,000 people in the U.S., and approximately 375,000 people outside the United States, receive emergency angioplasty or anti-clotting treatment as first-line care following a heart attack.

Stroke:

In the United States, approximately 700,000 people experience a stroke each year, and a comparable number of patients are affected outside the United States.

The American Stroke Association has identified the treatment of stroke victims with therapeutic hypothermia as a promising area of research.

Cardiothoracic Surgery:

Approximately 500,000 patients in the U.S., and 300,000 patients outside the United States, undergo cardiothoracic surgery each year.

Major medical societies, such as the American Society of PeriAnesthesia Nurses, American Society of Anesthesiologists, American Association of Nurse Anesthetists and Association of Perioperative Registered Nurses have issued specific guidelines for temperature management during cardiothoracic surgeries.

Prostate Surgery and Other Surgical Procedures:

In the United States, approximately 90,000 radical prostatectomy procedures are performed each year to address prostate cancer.

Recent evidence suggests that cooling the prostate and surrounding tissue during surgery has the potential to improve and accelerate the recovery of associated functions after surgery, such as urinary continence.

Achieving or Maintaining Normal Body Temperature:

Potential applications for achieving or maintaining normal body temperature or normothermia include warming trauma patients whose temperatures have dropped below normal due to extensive blood loss and subsequent fluid replacement therapy, cooling heat stroke victims, re-warming patients with accidental hypothermia caused by exposure, and warming burn victims whose temperatures are below normal due to exposure in the intensive care unit.

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Treatment of Acute Ischemic Conditions Using Patient Temperature Modulation

Numerous articles have been published in scientific and medical journals describing the usefulness of therapeutic cooling, which 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. Two international clinical trials on hypothermia after cardiac arrest published in The New England Journal of Medicine demonstrated that induced hypothermia reduced mortality and improved long-term neurological function. Based on these results, the American Heart Association (AHA) and the International Liaison Committee on Resuscitation (ILCOR) issued new guidelines recommending that cardiac arrest victims be treated with cooling or induced hypothermia. The AHA guidelines now 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.

Endovascular Temperature Control the InnerCool Celsius Control System and RapidBlue

Endovascular cooling, provided by InnerCool s Celsius Control System, is believed to offer more rapid and precise temperature control and ease of administration, which are believed to be important requirements for the potential treatment of patients presenting with acute ischemic stroke in a hospital setting. In addition, it offers the ability to cool awake patients without the need to anesthetize them, avoiding a potentially confounding factor.

InnerCool s Celsius Control System is currently being used in surgical and intensive care hospital units. The Celsius Control System is designed to rapidly and controllably cool the body in order to reduce cell death and damage following acute ischemic events such as cardiac arrest or stroke, and to potentially lessen or prevent associated injuries such as adverse neurological outcomes.

InnerCool s approach to therapeutic hypothermia is based on a single-use flexible metallic catheter and a fully integrated endovascular cooling system, which allows for rapid and controlled cooling and re-warming. InnerCool s Celsius Control System integrates a number of desirable features including a slim catheter profile, a highly efficient flexible metallic heat transfer element, a built-in temperature monitoring sensor, and a programmable console capable of rapidly and controllably inducing, maintaining and reversing therapeutic cooling.

InnerCool s Celsius Control System has received FDA 510(k) clearance for use in inducing, maintaining and reversing mild hypothermia in neurosurgical patients, both in surgery and in recovery or intensive care. The system has also received FDA clearance for use in cardiac patients to achieve or maintain normal body temperatures during surgery and in recovery/intensive care, and as an adjunctive treatment for fever control in patients with cerebral infarction and intracerebral hemorrhage. InnerCool has also received a CE mark allowing the Celsius Control System to be marketed in the European Community, and a TGA approval allowing the system to be marketed in Australia.

The Celsius Control System is now being used at a number of leading U.S. medical centers, including those at Stanford University, Cornell, Columbia, the University of Michigan, Harborview Medical Center, San Francisco General Hospital, the University of California Medical Centers at San Diego and San Francisco, and at medical centers in Australia and Sweden.

InnerCool s next-generation RapidBlue system for high-performance endovascular temperature modulation, which was launched in the second half of 2008 after receiving FDA 510(k) approval, includes a programmable console with an enhanced user interface and a catheter designed to quickly modulate patient

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temperature in association with surgery or other medical procedures. The RapidBlue system powers InnerCool s Accutrol catheter, which has a flexible metallic temperature control element and a built-in temperature feedback sensor to provide fast and precise patient temperature control.

The RapidBlue endovascular system received FDA 510(k) clearance for the same indications as already obtained for the Celsius Control System. Studies for additional indications with InnerCool s endovascular cooling systems are expected to be conducted in collaboration with the National Institutes of Health, AHA and others. Potential future applications of the technology include endovascular cooling for cardiac arrest, acute ischemic stroke and myocardial infarction (heart attack), and acute traumatic injury.

Surface-Based Temperature Control CoolBlue

InnerCool s new CoolBlue surface temperature modulation system is designed to provide a complementary tool for use in less acute patients or in clinical settings best suited to prolonged temperature management. The CoolBlue system includes a console and a disposable vest with upper thigh pads.

Surface cooling devices are becoming one of several important therapies to help manage patients who experience fevers in association with severe neurologic injuries or other medical conditions. The American Society of Anesthesiologists (ASA) and the American Association of Neurological Surgeons (AANS), as well as other organizations internationally, now recommend proactive fever reduction following neurological injury. Innercool estimates that more than 450,000 hospital patients in the U.S. experience neurologic or non-neurologic fever conditions that either require or could benefit from proactive therapies to reduce patients body temperatures. Fever patients typically require treatment for multiple days, sometimes as long as a week.

Localized Cooling for Prostate Surgery UroCool

InnerCool is developing a new class of targeted organ-specific cooling applications, including the UroCool Targeted Tissue Cooling System, a pelvic cooling catheter system designed to induce localized cooling during surgery for prostate cancer. Dr. Thomas E. Ahlering and colleagues at the University of California, Irvine believe that therapeutic cooling during prostate surgery (which includes both traditional open surgical approaches and newer robotic-assisted techniques) can reduce tissue damage and inflammation and thereby provide a faster return of bladder control (continence) and possibly erectile function (potency). The specialized UroCool pelvic cooling catheter is being integrated with InnerCool s current Celsius Control Console which has been marketed and sold since 2003. A regulatory application for FDA 510(k) clearance of the UroCool catheter was submitted in the first quarter of 2009.

Therapeutic Hypothermia for Stroke the ICTuS-L Study

The ICTuS-L stroke study is sponsored by the National Institute of Neurological Disorders (NINDS), one of the National Institutes of Health (NIH). The NINDS sponsors and conducts research to learn about the healthy brain and to discover and disseminate information on ways to prevent, cure and treat neurological neuromuscular disorders and stroke. The NINDS leads the federal government s medical research effort to fight stroke. It funds research studies at universities, medical schools and hospitals across the country and conducts its own research on the grounds of the NIH campus in Bethesda, Maryland, as well as at the NIH Stroke Center at Suburban Hospital, Bethesda.

Positive Effects of Hypothermia Following Heart Attack

In October 2006, InnerCool announced preclinical data demonstrating a new and expanded benefit of early rapid cooling for the potential treatment of acute myocardial infarction (heart attack), as presented at the Transcatheter Cardiovascular Therapeutics (TCT) 2006 Annual Meeting in Washington, DC. Innercool also announced its plans for a new clinical study to further assess the safety and potential usefulness of early cooling for heart attack patients. The study began in 2007 and is being co-sponsored in Sweden.

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The research reported at TCT was conducted by a team of interventional cardiologists led by Drs. Goran Olivecrona and David Erlinge at the Lund University Hospital, Sweden. In the recently completed study in a preclinical porcine heart attack model, researchers evaluated rapid cooling, induced by a combination of cold saline infusion along with InnerCool s endovascular Celsius Control System, before or coincident with percutaneous coronary intervention (PCI) procedures, which are used to restore blood flow in the heart. The data showed that cooling before PCI reduced overall infarct size (reflecting tissue damage) by an additional 40%. These findings strongly support the use of early rapid cooling in planned clinical studies, and suggest that InnerCool s endovascular cooling system may have the potential to enable interventional cardiologists to dramatically reduce tissue damage following a heart attack.

Based on these findings, InnerCool is sponsoring a study on the use of early rapid cooling following heart attack, which is being co-sponsored and conducted by the interventional cardiology center at Lund University Hospital, Sweden. The study is a randomized human clinical trial designed to evaluate the potential use of InnerCool s hypothermia system in the treatment of heart attack patients. This study will randomize approximately twenty patients who present within six hours of their heart attack for PCI alone or PCI plus the new early rapid cooling protocol. The hypothermia arm will include iced saline infusion plus use of the InnerCool Celsius Control System catheter before reperfusion in patients undergoing PCI. The trial will employ cardiac magnetic resonance imaging (MRI) to provide an accurate assessment of the damage to the heart within days of the injury.

Benefits of Inducing Hypothermia During Aneurysm Surgery

In September 2006, Michael K. Morgan, M.D. reported on his direct experience and the benefits of the Celsius Control System in inducing hypothermia in cerebral vascular surgery patients at the Neurosurgical Society of Australasia (NSA) Annual Scientific Meeting in Cairns, Australia. It was reported by Dr. Morgan, a noted vascular neurosurgeon and Professor and Dean of the School of Advanced Medicine, Macquarie University, Sydney, that he had conducted retrospective review of over 600 aneurysms over a seven-year period, and found that patients with aneurysms greater than 12 millimeters are more likely to have over 20 minutes of temporary occlusion times. Temporary occlusion of arteries in the brain during aneurysm repair in such patients exposes the brain to ischemia (localized lack of oxygen), which can have negative consequences in terms of neurologic outcomes.

Dr. Morgan reported on the safety, efficient cooling and beneficial outcomes achieved using InnerCool s Celsius Control System in an open-label cohort of 26 patients with 33 aneurysms, and reported that based on his experience and the clinical data reviewed, aneurysms greater than 12 millimeters frequently require prolonged temporary occlusion times. It was also reported that the ability of InnerCool s Celsius Control System to safely and effectively cool patients with aneurysms provides an important new tool for protecting the brain from ischemic injury, especially in patients such as these who are at higher risk for tissue damage due to the prolonged lack of blood flow, and that, in addition to achieving positive outcomes, there were no clinically significant catheter-related complications.

Business Strategy

Strategic Goals

Building on 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:

- complete the Phase 2b clinical study for Excellarate;

- accelerate the commercialization of Innercool s therapeutic hypothermia technology and products and continue to develop additional products and applications;

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evaluate partnering opportunities designed to support the advancement of the Generx and Corgentin product candidates;

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 medical-related companies or product opportunities and/or securing additional capital; and

monetize the economic value of our product portfolio by establishing strategic collaborations and selling businesses and assets at appropriate valuation inflection points.

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.

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 NIH, on a case-by-case basis. The FDA and the NIH 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 present 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

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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 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.

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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 and the healing of chronic wounds. 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, some of which are described above, 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 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 Generx product development. These include biologic treatments using forms of genes and therapeutic proteins. For example, CardioVascular BioTherapeutics is developing injectable and topical forms of FGF-1 for the potential treatment of cardiovascular diseases. 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 tissue repair and wound healing, as being developed by our Tissue Repair subsidiary, there are a number of approaches being employed, including living skin equivalents, vacuum pumps and other devices, and biologics and small molecule drugs designed to promote repair and healing.

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 developed by Radiant Medical Inc. Zoll Medical Corporation purchased the assets of Radiant Medical in 2007, and in 2009 announced plans to acquire the assets of Alsius Corporation. There are also a number of actual or potential competitive approaches including alternative surface-based cooling devices that 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 one or more contract manufacturers of clinical drug products that

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operate manufacturing facilities in compliance with current 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 the 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 has taken 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.

The disposable portions of Innercool s products, the catheter and administrative set, are currently assembled at our 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. Our CoolBlue consoles and disposable pads are currently being assembled for us by a third party in the Midwest. In 2008 we completed the redesign of our Celsius Control System console to enhance functionality and manufacturability to allow for assembly at third party manufacturing facilities. The redesigned console, InnerCool s RapidBlue system, received FDA 510(K) clearance in October 2008.

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 its 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, RapidBlue endovascular cooling systems and CoolBlue surface cooling 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 using a small prototype sales force. 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 distributorship arrangements to commence sales efforts in Australia and Europe and has opened accounts at some of the country s premier hospitals.

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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. In August 2006, we acquired the rights to various technologies and products now part of TRC including Excellarate. 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.

Employees

As of December 31, 2008 we employed 43 full-time employees. We do not expect to hire 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.

Available Information

Our website address is www.cardiumthx.com. We make available, free of charge, through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file or furnish such reports to the SEC.

For additional financial information, including financial information about our business, please see the consolidated financial statements and accompanying notes to the consolidated financial statements included under Item 8 of this report.

ITEM 1A. RISK FACTORS

You should carefully review and consider the risks described below, as well as the other information in this report and in other reports and documents we file with the SEC when evaluating our business and future prospects. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties, not presently known to us, or that we currently see as immaterial, may also occur. If any of the following risks or any additional risks and uncertainties actually occur, our business could be materially harmed, and our financial condition, results of operations and future growth prospects could be materially and adversely affected. 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 stock. You should not draw any inference as to the magnitude of any particular risk from its position in the following discussion.

Risks Related to Our Business and Industry

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

We have sustained operating losses to date and will likely continue to sustain losses as we seek to develop our products and product candidates . We expect these losses to be substantial because our product development and other costs, including significant amounts we expect to spend on development activities and clinical trials for

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Excellarate and other product candidates, cannot be offset by our limited revenues during our development stage. As of December 31, 2008, our accumulated deficit was approximately $74 million, and our cash and cash equivalents were approximately $1 million. To date, we have generated limited revenues, consisting of revenues from sales of our InnerCool Celsius Control System, RapidBlue and CoolBlue systems, and associated disposables, grant revenue, as well as interest income. A large portion of our expenses are fixed, including expenses related to facilities, equipment, contractual commitments 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 additional revenues and potential to become profitable will depend largely on our ability, alone or with potential collaborators, to 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 products. 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.

Our business prospects are difficult to evaluate because we are a development stage company and are developing complex and novel medical products.

Since we have a relatively short operating history and our product candidates rely on complex technologies, it may be difficult for you to assess our growth, monetization and earnings potential. We have faced and it is likely we will continue to face many of the difficulties new technology companies often face. These include, among others: limited financial resources; developing, testing and marketing new products for which a market is not yet established and may never become established; challenges related to the development, approval and acceptance of a new technology or product; delays in reaching our goals; lack of substantial revenues and cash flow; high product 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 strategies 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 in the near term. If we are unable to obtain such funds when needed, we may have to delay, scale back or terminate our product development or our business.

Conducting 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 current and new product development programs; 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, enforcing and defending against patent claims and other intellectual property rights; competing technological and market developments; and our ability and costs to establish and maintain collaborative and other arrangements with third parties to assist in potentially bringing our products to market and/or to monetize the economic value of our product portfolio. We expect we will need to raise additional funds within the next four months. The audit opinion accompanying our consolidated financial statements for the year ended December 31, 2008, included under Item 8 of this report, includes an explanatory paragraph indicating substantial doubt about our ability to continue as a going concern

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. To the extent we raise additional capital through the sale of equity securities or we issue securities in connection with another transaction, the ownership position of existing stockholders could be substantially diluted.Anti-dilution adjustments to our securities currently outstanding would cause further dilution. If additional funds are raised through the issuance of preferred stock or debt

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securities, these securities are likely to have rights, preferences and privileges senior to our common stock and may involve significant fees, interest expense, restrictive covenants and the granting of security interests in our assets. Fluctuating interest rates could also increase the costs of any debt financing we may obtain. Raising capital through a licensing or other transaction involving our intellectual property could require us to relinquish valuable intellectual property rights and thereby sacrifice long term value for short-term liquidity.

Our failure to successfully address ongoing liquidity requirements would have a substantially negative impact on our business. If we are unable to obtain additional capital on acceptable terms when needed, we may need to take actions that adversely affect our business, our stock price 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.

Our debt limits our ability to fund general corporate requirements, limits our flexibility in responding to competitive developments and increases our vulnerability to adverse economic and industry conditions.

The indebtedness we have incurred could have important adverse consequences on our future operations, including:

- making it more difficult for us to meet our payment and other obligations;
- reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes, and limiting our ability to obtain additional financing for these purposes;
- limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, the industries in which we operate and the general economy; and
- placing us at a competitive disadvantage compared to our competitors that have less debt.

Moreover, if we fail to make any required payments under our debt, or otherwise breach the terms of our debt, a substantial portion of our debt could be subject to acceleration. In such a situation, we may not be able to repay the accelerated debt, which would have a material adverse impact on our business and ability to continue to operate as a going concern.

We acquired the assets and business of InnerCool Therapies, Inc. in March 2006 and rights to develop the Excellarate product candidate of the Tissue Repair Company in August 2006 and may, in the future, pursue acquisitions of other companies or product rights 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. On August 11, 2006, we acquired rights to develop the Excellarate product candidate of the Tissue Repair Company, a medical technology company focused on the development of growth factor therapeutics for the potential treatment of chronic wounds such as dermal ulcers. These businesses are subject to all of the operational risks that can affect medical technology companies, 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 retention of key personnel.

In the future, we may pursue additional acquisitions of other companies, technologies or products. Acquisitions of businesses or product rights, including the InnerCool and Tissue Repair Company transactions, involve numerous risks, including:

- our limited experience in evaluating businesses and product opportunities and completing acquisitions;
- the use of any existing cash reserves or the need to obtain additional financing to pay for all or a portion of the purchase price of such acquisitions and to support the ongoing operations of the businesses acquired;

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the potential need to issue convertible debt, equity securities, stock options and stock purchase warrants 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 or any revenue to offset acquisition costs or ongoing expenses;

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

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;

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, or greater than expected liabilities and expenses, associated with the acquired company, product or product rights;

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

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 InnerCool or Tissue Repair transactions, or other transactions that we may pursue, will ultimately prove 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 condition or results of operations could be harmed.

We are a development stage company and, other than InnerCool s Celsius Control System®, RapidBlue™ endovascular cooling system and CoolBlue™ surface-based system, and associated disposables, that are approved for limited uses, we 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 products and technology. If our product candidates are delayed or fail, our business and stockholder value will be negatively impacted, 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®, RapidBlue™ endovascular cooling system and CoolBlue™ surface-based system, and associated disposables, each of which is approved only for limited uses, we 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, and the potential expansion of our therapeutic hypothermia products into other medical indications and applications, require additional research and development, clinical testing and regulatory clearances before we can market them. To our knowledge, FDA has not yet approved any gene therapy or similar product and there can be no assurance that it will. 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;

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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 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 biologics, 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 products or related technology, our business, financial condition or results of operations will 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 business, financial results and commercial prospects.

To obtain regulatory approvals for new products or to expand indications for existing ones, we must, among other things, initiate and successfully complete multiple clinical trials demonstrating to the satisfaction of the FDA that our product candidates are sufficiently safe and effective for a particular indication. We are in ongoing discussions with the FDA regarding clinical trials of our Excellarate and Generx product candidates. While both product candidates began clinical trials in 2007, there is no assurance that they will complete the clinical trials, as the completion is dependent on, among other things, FDA reviews, clinical site approvals, successful manufacturing of clinical materials, sufficient funding and other factors outside of our control. Furthermore, there can be no assurance that our clinical trials will in fact demonstrate to the satisfaction of the FDA and others that our products are sufficiently safe or effective.

The FDA or we may also restrict or suspend our clinical trials at any time if either believes that we are exposing the subjects participating in the trials to unacceptable health risks. We expect to continue to rely on third party clinical investigators at medical institutions and healthcare facilities to conduct and monitor our clinical trials, and, as a result, we may face additional delaying factors outside of our control. Product development costs to us and our potential collaborators will increase, and our business may be negatively impacted, if we experience delays in testing or approvals or if we need to perform more or larger clinical trials than planned, for reasons such as the following:

the FDA or other health regulatory authorities, or institutional review boards, do not approve a clinical study protocol or place a clinical study on hold;

suitable patients do not enroll in a clinical study in sufficient numbers or at the expected rate, or data is adversely affected by trial conduct or patient drop out;

patients experience serious adverse events, including adverse side effects of our drug candidate or device;

patients die during a clinical study for a variety of reasons that may or may not be related to our products, including the advanced stage of their disease and medical problems;

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patients in the placebo or untreated control group exhibit greater than expected improvements or fewer than expected adverse events;

third-party clinical investigators do not perform the clinical studies on the anticipated schedule or consistent with the clinical study protocol and good clinical practices, or other third-party organizations do not perform data collection and analysis in a timely or accurate manner;

service providers, collaborators or co-sponsors do not adequately perform their obligations in relation to the clinical study or cause the study to be delayed or terminated;

regulatory inspections of manufacturing facilities, which may, among other things, require us or a co-sponsor to undertake corrective action or suspend the clinical studies;

the interim results of the clinical study are inconclusive or negative;

the clinical study, although approved and completed, generates data that is not considered by the FDA or others to be sufficient to demonstrate safety and efficacy; and

changes in governmental regulations or administrative actions affect the conduct of the clinical trial or the interpretation of its results.

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, or products for which we seek expanded approvals, then we will not be able to market them. Even successful clinical trials may not result in a marketable product and may not be predictive of a product s safety or efficacy in a larger and more diverse patient population.

Our Celsius Control System® and RapidBlue™ endovascular cooling system have received FDA 510(k) clearance for certain specified indications but we may elect to pursue other indications, which would generally require that collaborators or we conduct additional clinical studies and/or testing. Our Excellarate and Generx product candidates are 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 a collaborator or we will successfully complete the clinical trials necessary to receive regulatory product approvals. This process is lengthy, unpredictable and expensive. To obtain regulatory approvals, a collaborator or we must ultimately demonstrate to the satisfaction of the FDA and others that our product candidates are sufficiently safe and effective for their proposed use.

Many factors, known and unknown, can adversely impact clinical trials and the ability to evaluate a product s safety and efficacy. Such factors may have a negative impact on our business by making it difficult to advance product candidates or by reducing or eliminating their potential or perceived value. Further, if we are forced to contribute greater financial and clinical resources to a study, valuable resources will be diverted from other areas of our business. Any adverse results from clinical trials would adversely affect the Company.

Clinical trials for products such as ours are often conducted with patients who have more advanced forms of a particular disease. For example, in clinical trials for our Generx product candidate, we expect to study patients who are not only suffering from severe forms of heart disease but are also older and much more likely to develop cancers and other serious adverse conditions. During the course of treatment, these patients could die or suffer other adverse events for reasons that may or may not be related to the proposed product being tested. Our clinical trials may also be adversely impacted by patient deaths or problems that occur in other trials. Even if unrelated to our product, such events can nevertheless adversely impact our clinical trials. As a result, our business and ability to ultimately develop and market our products and obtain revenues would suffer.

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Deaths and other adverse events that occur in the conduct of clinical trials may also result in an increase in governmental regulations 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 impact 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 in the broader patient population. 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 or to have poorer risk to benefit or cost to benefit profiles as compared to other potential products or therapies.

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 failure, any of which can substantially affect our business or perceived value.

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 that negatively impact our business. Compliance with these regulatory requirements is also 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.

Ethical, social and legal concerns about gene therapy and genetic research could also 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.

With respect to markets in other countries, we or a collaborator 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, or the

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perception or possibility that our products cause or could cause such side effects, could delay or prevent approval of our products and negatively impact our business. For example, possible serious side effects of viral vector-based gene transfer could potentially include viral or gene product toxicity resulting in inflammation or other injury to the heart or other parts of the body. In addition, the development or worsening of cancer in a patient could potentially 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.

Even if approved for marketing, our technologies and product candidates are relatively novel and unproven and they may fail to gain market acceptance.

Our ongoing business and 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 biologic-based products to date and no gene therapy has yet been successfully commercialized . 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 even if they are approved for use. Our success will depend in part on our ability to demonstrate sufficient clinical benefits, reliability, safety and cost effectiveness of our product candidates and technology relative to other approaches, as well as on our ability to continue to develop our product candidates to respond to competitive and technological changes. If the market does not accept our products or product candidates, when and if we are able to commercialize them, then 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 licensors and other third parties. For example, we have various licenses from third parties relating to the use and delivery of our Generx product candidates. We may not be able to maintain or expand these or other 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 service providers and 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 collaborators 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 collaborators 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.

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Our success hinges on the proper and effective performance of our service providers and 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 and our present and future collaborators may fail to develop or effectively commercialize products covered by our present and future collaborations if, among other things:

- we do not achieve our objectives under our collaboration agreements;
- we or our collaborators are unable to obtain patent protection for the products or proprietary technologies we develop in our collaborations;
- we are unable to manage multiple simultaneous product discovery and development collaborations;
- our collaborators become competitors of ours or enter into agreements with our competitors;
- we or our collaborators encounter regulatory hurdles that prevent commercialization of our products; or
- we develop products and processes or enter into additional collaborations that conflict with the business objectives of our other collaborators.

In addition, conflicts may arise with our collaborators, such as conflicts concerning the interpretation of clinical data, the achievement of milestones, the interpretation of financial provisions or the ownership of intellectual property developed during the collaboration. If any conflicts arise with our existing or future collaborators, they may act in their self-interest, which may be adverse to our best interest. If we or our collaborators are unable to develop or commercialize products, or if conflicts arise with our collaborators, we will be delayed or prevented from developing and commercializing products, which will harm our business and financial results.

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 and other regulators. 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 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 before commercializing and manufacturing any of our biologic product candidates. Additionally, if the manufactured products fail to perform as specified, our business and reputation could be severely impacted.

If any manufacturing agreement is terminated or any third party service provider or 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. 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, or in accordance with our product specifications and applicable FDA or other governmental regulations. 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, which would negatively impact our business.

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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 financial condition and ability to become profitable.

Our failure or the failure of our potential collaborators or third party manufacturers to comply with applicable FDA or other product-related 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. 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 for any products that we market directly. Developing a marketing and sales force is also time consuming and could delay the 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, 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, in which event our business prospects may suffer.

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

We are engaged in DNA-based therapies and 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

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temperature control therapy such as those being developed by Radiant Medical (now part of Zoll Corporation), Alsius Corporation (which Zoll announced it intends to acquire), Medivance, Gaymar Industries and Cincinnati Sub-Zero, 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®, RapidBlue™ endovascular cooling system and CoolBlue™ surface-based system, and associated disposables, 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 will 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. 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. The announcement or considerations of these proposals or reforms could impair our ability to raise capital and negatively affect our business.

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 connection with our InnerCool products. The loss of any of our senior management team, in particular Christopher J. Reinhard, our Chairman of the Board, Chief Executive Officer, President and Treasurer, Tyler M. Dylan, our director, Chief Business Officer, General Counsel, Executive Vice President and Secretary, and Dennis M. Mulroy, our Chief Financial Officer, or our vice presidents, or the operating officers of our subsidiaries, could harm our business. We do not maintain any key man life insurance on any of our executive officers.

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, manufacturing, marketing

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.

Our facilities are located in or near seismic zones, and an earthquake or other natural disaster or resource shortage could delay our research and development efforts and adversely affect our business.

Our headquarters and research and development facilities in San Diego, California, and our third party manufacturing and storage facilities in Carlsbad, California, are both located in or near seismic zones, and there is a constant possibility that an earthquake or other natural disaster or resource shortage could be disruptive to our operations and result in delays in our research and development efforts. In the event of a natural or other disaster such as an earthquake, fire, flood or terrorist attack, if our facilities or the equipment in our facilities, or our clinical supplies, are significantly damaged or destroyed, we may not be able to rebuild or relocate our facility or replace any damaged equipment, records or clinical supplies in a timely manner and our business, financial condition and results of operations could be materially and adversely affected.

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.

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Risks Related to Our Intellectual Property and Potential Litigation

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, or if our right to use intellectual property that 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.

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, 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 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.

Our business substantially relies on our own or in-licensed intellectual property related to various technologies that are material to our products and processes. We depend on our and our licensors abilities to successfully 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 and termination or reduction 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.

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.

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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 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.

If we are unsuccessful in defending against any adverse claims, we could be compelled to seek licenses from one or more third parties who could be direct or indirect competitors and who might not make licenses available on terms that we find commercially reasonable or at all. In addition, such proceedings, even if decided in our favor, involve lengthy processes, are subject to appeals, 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, wound healing, adenoviral vectors 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 manufacturing, 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, or face an injunction to block our sale or marketing of affected products or use of the affected process. Costs of a license may be substantial and could include up-front payments as well as ongoing royalties. We may not be able to obtain such a license on acceptable terms, or at all, which could substantially impact our business.

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

We also 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.

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

Our marketing and sale of therapeutic hypothermia products as well as our other 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 or maintain 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 expose us to substantial liabilities and diversions of resources, all of which can negatively impact our business. 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, such as 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 various risks involved with participating in the trial. However, patient consents provide only a limited level of protection, and it may be alleged that the consent did not address or did not adequately address a risk that the patient suffered from. Additionally, we will generally be required to indemnify the clinical product manufacturers, clinical trial centers, medical professionals and other parties conducting related activities 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.

Risks Related to Our Common Stock

The exercise of our outstanding warrants will significantly dilute the ownership interest of existing stockholders.

The exercise of some or all of our outstanding warrants would significantly dilute the ownership interests of existing stockholders. Any sales in the public market of the common stock issuable upon such exercise could adversely affect prevailing market prices of our common stock.

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

In light of our small size and limited resources, as well as the uncertainties and risks that can affect our business and industry, our stock price is expected to be highly volatile and can be subject to substantial drops, with or even in the absence of news affecting our business. The following factors, in addition to the 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:

- changes in economic conditions in the United States and worldwide;
- the availability to us or other companies of credit;

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anticipated or unanticipated changes in financial condition, operating results or the perceived value of our business;

anticipated or unanticipated changes that affect our ability to maintain the listing of our common stock on a national exchange;

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

our announcement of significant acquisitions, strategic collaborations, 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 or other estimates by securities analysts or other reviewers or evaluators of our business;

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

regulatory developments in the United States and other countries;

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

additions or departures of key personnel;

sales or other transactions involving our common stock; and

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

The stock market in general has recently experienced relatively large price and volume fluctuations. In particular, the market prices of securities of smaller biotechnology and medical device companies have experienced dramatic 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. You should also be aware that price volatility may be worse if the trading volume of the common stock remains limited or declines.

A delisting from the NYSE Amex could adversely affect the price of our common stock.

Our common stock is currently listed on the NYSE Amex (the Exchange). To maintain that listing, we must comply with the applicable listing standards of the Exchange. On December 23, 2008, we received notice from the staff of the Exchange that, based on their review of publicly available information, we do not currently meet certain of the Exchange s continued listing standards as set forth in Part 10 of the Exchange s Company Guide. In particular, the Exchange noted we are not considered to be in compliance with (i) Section 1003(a)(i) of the Company Guide

because we reported stockholders equity of less than $2,000,000 and losses from continuing operations and net losses in two of our three most recent fiscal years, and (ii) Section 1003(a)(iv) of the Company Guide because we had sustained losses that are so substantial in relation to our overall operations or our existing financial resources, or our financial condition has become so impaired that it appeared questionable, in the opinion of the Exchange, as to whether we would be able to continue operations and/or meet our obligations as they mature.

To maintain listing of our common stock on the Exchange, we were required to submit a plan by January 23, 2009, advising the Exchange of the actions we have taken, or will take, that would bring us into compliance with

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Section 1003(a)(iv) by March 23, 2009 and in compliance with all sections including Section 1003(a)(i) by June 23, 2010. We submitted a plan to the Exchange on January 23, 2009, and the Exchange accepted our plan on February 17, 2009. Since the Exchange accepted our plan, we may be able to continue our listing during the plan period, up to June 23, 2010, during which time we will be subject to periodic review to determine whether we are making progress consistent with the plan. However, if we are not in compliance with the continued listing standards at the end of the plan period or we do not make progress consistent with the plan during such period, then the Exchange would be expected to initiate delisting proceedings. If our common stock were delisted from the Exchange, we believe our common stock would likely be traded on the OTC Bulletin Board or the Pink Sheets, which may reduce the liquidity of, and may adversely affect the price of, our common stock.

We could be difficult to acquire due to anti-takeover provisions in our charter, our stockholder rights plan and Delaware law.

Our board of directors has adopted a stockholder rights plan in which preferred stock purchase rights were distributed as a dividend. These provisions may make it more difficult for stockholders to take corporate actions and may have the effect of delaying or preventing a change in control. These provisions also could deter or prevent transactions that stockholders deem to be in their interests. In addition, we are subject to the anti- takeover provisions of Section 203 of the Delaware General Corporation Law. Subject to specified exceptions, this section provides that a corporation may not engage in any business combination with any interested stockholder during the three-year period following the time that such stockholder becomes an interested stockholder. This provision could have the effect of delaying or preventing a change of control of our company. The foregoing factors could reduce the price that investors or an acquirer might be willing to pay in the future for shares of our common stock.

We have never paid cash dividends on our capital stock and we do not anticipate paying dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of our debt financings completed in November 2008 and March 2009 preclude us from paying a cash dividend and any future debt or credit facility we obtain also may preclude or limit our ability to pay any dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of potential gain for the foreseeable future.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

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

Location	Nature of Use	Square Feet	How Held	Monthly Base Rent	Lease Expiration Date
12255 El Camino Real, Suite 250 San Diego, CA USA	Corporate headquarters (Principal executive offices)	11,184	Leased	$ 46,973[1]	July 31, 2013[2]
6740 Top Gun St. San Diego, CA USA	Office, Research Development, Production and Related Uses[3]	29,706	Leased	$ 41,506[4]	January 19, 2013[5]

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[1] The monthly base rent increases to $48,650 in 2009 and is subject to an additional increase each year thereafter. In addition to base rent, we are also required to pay our proportionate share of any increase in operating expenses from 2008 levels for the office park in which our space is located.

[2] The lease contains an option for one five-year lease renewal.

[3] This facility is used by Innercool Therapies, Inc., and Tissue Repair Company, each a wholly-owned subsidiary.

[4] 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.

[5] The lease contains an option allowing us to cancel the last two years of the lease for a one time fee of $75,000 if we provide written notice of our intent to exercise the option no later than July 20, 2010 and an option to cancel only the last year of the lease for a one time fee of $50,000 if we give written notice no later than September 20, 2011. The lease contains an option to renew the lease for an additional six year period, provided the lessor does not elect to sell the property at the end of the current lease term.

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 the filing date of this report, 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. In the course of our business, however, we could become engaged in various intellectual property, product-related and other matters in connection with the technology we develop or license and the products we develop or sell. To the extent we are not successful in defending against any adverse claims concerning our technology, we could be compelled to seek licenses from one or more third parties who could be direct or indirect competitors and who might not make licenses available on terms that we find commercially reasonable or at all. In addition, any such proceedings, even if decided in our favor, involve lengthy processes, are subject to appeals, and typically result in substantial costs and diversion of resources. In the course of our business, we are also routinely involved in proceedings such as disputes involving goods or services provided by various third parties to Cardium or its subsidiaries, which we do not consider likely to be material to Cardium, but which can nevertheless result in costs and diversions of resources to pursue.

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, 2008.

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PART II

ITEM 5. MARKET FOR OUR COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock trades on NYSE Amex under the symbol CXM. Below are the high and low closing prices of our common stock for each quarter of the years ended December 31, 2008 and 2007:

	2008		2007	
	High	Low	High	Low
First Quarter	$ 2.63	$ 2.10	$ 3.63	$ 2.95
Second Quarter	$ 2.50	$ 2.03	$ 3.10	$ 2.45
Third Quarter	$ 2.24	$ 1.65	$ 2.95	$ 2.22
Fourth Quarter	$ 1.70	$ 0.48	$ 3.17	$ 2.38

From February 28, 2006 through July 31, 2007, our common stock traded on the Over-The-Counter Bulletin Board. The information above for periods before August 1, 2007 reflects inter-dealer prices, without retail mark-up, markdown or commissions, and may not represent actual transactions.

Holders

As of March 11, 2009, there were approximately 1,600 stockholders of record of our common stock.

Dividends

We have not declared or paid any cash dividends on our common stock and we do not intend to declare or pay 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. Additionally, under the terms of our debt financings completed in November 2008 and March 2009, we are precluded from paying a cash dividend.

Recent Sales of Unregistered Securities

Other than as previously reported, during the years ended December 31, 2008, 2007 and 2006, we did not sell any unregistered securities.

Repurchases

During the fourth quarter of the year ended December 31, 2008, we did not repurchase any shares of our common stock, nor were any repurchases made on our behalf.

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Performance Graph

The graph below provides a comparison of cumulative total returns for our common stock, the Nasdaq Composite Index, the Nasdaq Biotechnology Index, and the RDG MicroCap Biotechnology Index for the five year period ended December 31, 2008. Please note that the information used to calculate the returns for periods before December 2005 is based on the share price of Aries Ventures Inc. On October 20, 2005, Cardium completed a reverse merger whereby it merged with a wholly-owned subsidiary of Aries. Thereafter, Aries was merged with and into Cardium with Cardium as the surviving entity and successor issuer to Aries. For the period from December 31, 2002 until October 20, 2005, Aries had no business operations. The graph below assumes an investment of $100 on December 31, 2003 in each of our common stock, and the stock comprising each of the indices shown. Each of the indices assumes that all dividends were reinvested. The graph lines merely connect the prices on the dates indicated and do not reflect fluctuations between those dates.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Cardium Therapeutics, The NASDAQ Composite Index,

The NASDAQ Biotechnology Index And The RDG MicroCap Biotechnology Index

The stock performance shown above is not indicative of future performance.

The performance information above is not deemed to be filed with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be deemed incorporated by reference by any general statement incorporating by reference this report into any filing with the SEC, except to the extent we specifically incorporate this information by reference.

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ITEM 6. SELECTED FINANCIAL DATA

The following tables contain certain financial information about the Company, including its subsidiaries. You should review this information together with our audited consolidated financial statements and the notes to the consolidated financial statements included under Item 8 in this report. Our future financial condition and results of operations will vary from our historical financial information below based on a variety of factors. You should carefully review the risks described under Items 1A and 7A and elsewhere in this report, which identify certain important factors that could cause our future financial condition and results of operations to vary.

Annual Financial Data

	Years Ended December 31,				
	2008	2007	2006	2005	2004
Consolidated Statements of Operations Data:					
Revenues	$ 2,417,385	$ 1,586,519	$ 756,137	$	$
Loss from operations	$ (23,719,612)	$ (25,803,878)	$ (19,309,141)	$ (5,588,288)	$ (3,961)
Net loss	$ (24,598,058)	$ (25,321,770)	$ (18,593,165)	$ (5,441,694)	$ (3,961)
Net loss per common share basic and diluted	$ (0.55)	$ (0.64)	$ (0.59)	$ (0.54)	$ (0.00)
Weighted average shares outstanding basic and diluted	44,978,169	39,311,359	31,308,650	9,992,426	1,700,000

	Years Ended December 31,				
	2008	2007	2006	2005	2004
Consolidated Balance Sheets Data:					
Current assets, net of current liabilities	$ (6,814,721)	$ 4,592,268	$ 4,754,127	$ 21,344,443	$ 13,039
Total assets	$ 10,296,921	$ 16,925,689	$ 14,117,423	$ 22,351,624	$ 13,039
Long-term liabilities, less current portion	$ 195,315	$ 3,241,992	$	$	$
Total stockholder s (deficiency) equity	$ (754,756)	$ 8,428,305	$ 11,153,355	$ 21,738,116	$ 13,039

Quarterly Consolidated Financial Data Unaudited

Year Ended December 31, 2008	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenues	$ 646,002	$ 626,841	$ 585,421	$ 559,121
Gross profit	$ 275,306	$ 312,587	$ 71,178	$ 326,740
Loss from operations	$ (6,680,154)	$ (6,550,792)	$ (5,960,322)	$ (4,528,344)
Net loss	$ (6,734,128)	$ (6,634,462)	$ (6,151,515)	$ (5,077,953)
Net loss per common share basic and diluted	$ (0.16)	$ (0.15)	$ (0.13)	$ (0.11)

Year Ended December 31, 2007	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenues	$ 309,331	$ 229,472	$ 364,330	$ 683,386
Gross profit (loss)	$ 62,766	$ (28,705)	$ 45,396	$ 158,727
Loss from operations	$ (5,926,244)	$ (6,629,409)	$ (6,214,717)	$ (7,033,508)
Net loss	$ (5,839,849)	$ (6,401,181)	$ (6,067,969)	$ (7,012,771)
Net loss per common share basic and diluted	$ (0.17)	$ (0.16)	$ (0.15)	$ (0.16)

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ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION

The following discussion and analysis is intended to help you understand our financial condition and results of operations for the last three years ended December 31, 2008. You should read the following discussion and analysis together with our audited consolidated financial statements and the notes to the consolidated financial statements included under Item 8 in this report. Our future financial condition and results of operations will vary from our historical financial condition and results of operations described below based on a variety of factors. You should carefully review the risks described under Item 1A and 7A and elsewhere in this report, which identify certain important factors that could cause our future financial condition and results of operations to vary.

Executive Overview

The following overview does not address all of the matters covered in the other sections of this Item 7 or other items in this report or contain all of the information that may be important to our stockholders or the investing public. This overview should be read in conjunction with the other sections of this Item 7 and this report.

Cardium s business is focused on the acquisition and strategic development of product opportunities or businesses having the potential to address significant unmet medical needs, and definable pathways to commercialization, partnering or other monetization following the achievement of corresponding development objectives. Consistent with our overall business strategy, as our product opportunities and businesses are advanced and corresponding valuations established, we intend to consider various corporate development transactions designed to place our product candidates into larger organizations or with partners having existing commercialization, sales and marketing resources, and a need for innovative products. Such transactions could involve the sale, partnering or other monetization of particular product opportunities or businesses. To that end, during the year ended December 31, 2008, we (i) advanced our Phase 2b clinical trial (MATRIX) to evaluate the safety and efficacy of Tissue Repair s product candidate, Excellarate, for the potential treatment of non-healing diabetic foot ulcers; (ii) completed the development and regulatory approval of InnerCool s next generation RapidBlue endovascular system; (iii) advanced the use of InnerCool s new CoolBlue surface temperature modulation system and developed a new tissue targeted cooling system, UroCool, for potential use in conjunction with prostate surgery; (iv) advanced studies of our Generx clinical candidate and our Corgentin preclinical candidate for the potential treatment of cardiovascular disease; and (v) supported studies funded by governmental authorities in the United States and Sweden designed to evaluate potential additional applications of InnerCool s therapeutic hypothermia technology in the areas of stroke and heart attack.

As a development stage company, our revenues are generally limited to those generated by the sale of InnerCool s endovascular system, RapidBlue system and its CoolBlue surface temperature modulation system. We do not have any other products available for sale or use. Because of the limited nature of our revenues and the high costs we must incur to develop our product candidates, we have yet to generate positive cash flows or income from operations and do not anticipate doing so in the foreseeable future. As a result, we are currently dependent on debt and equity funding to finance our operations.

Going forward, the key elements of our strategy are to:

- complete the Phase 2b clinical study for Excellarate;
- accelerate the commercialization of Innercool s therapeutic hypothermia technology and products and continue to develop additional products and applications;
- evaluate partnering opportunities designed to support the advancement of the Generx and Corgentin product candidates;

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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 medical-related companies or product opportunities and/or securing additional capital; and

monetize the economic value of our product portfolio by establishing strategic collaborations and selling businesses and assets at appropriate valuation inflection points.

We recognize that the practical realities of developing therapeutic products and devices 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.

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

Critical Accounting Policies and Estimates

Our consolidated financial statements included under Item 8 in this report have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of our 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 such as the allowance for doubtful accounts receivable, inventory allowance, the useful lives of fixed assets, the valuation of intangible assets and the accrued expense estimates, 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.

Results of Operations

Fiscal 2008 Compared to Fiscal 2007

Product sales for the year ended December 31, 2008 were $2,000,473 compared to $1,140,921 for the year ended December 31, 2007. The $859,552 increase in product sales during 2008 was due in large part to an increase in sales of Innercool Therapies Celsius Control System resulting from our expanded sales and marketing efforts at Innercool Therapies, as well as new sales from the launch of Innercool Therapies CoolBlue system in late 2007. Tissue Repair Company generated $416,912 in grant revenue during the year ended December 31, 2008, compared to $445,598, for the year ended December 31, 2007. The $28,686 decrease was directly attributable to the level of activity expended on the grant. During 2008 the primary focus was on the Excellarate clinical research study.

Cost of goods sold for the year ended December 31, 2008 was $1,431,574 compared to $1,348,335 for the year ended December 31, 2007. The increase of $83,239 in cost of goods sold was directly related to the increase in revenues from the sale of Innercool Therapies products, which accounted for a significant portion of our revenues offset by our $339,000 reversal of the obsolescence reserve associated with the Celsius Control Console based on its new application to support our organ cooling system Urocool.

Research and development expenses for the year ended December 31, 2008 were $12,315,652 compared to $13,117,849 for the year ended December 31, 2007. The decrease of $802,197 was primarily due to a reduction in the development costs for InnerCool s RapidBlue product as it moved from development to production, and

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increased expenses in our efforts to advance our Excellarate product candidate in its Phase 2b clinical trial, offset by reductions in Generx (AWARE) Phase 3 clinical trial costs as spending in the year ended December 31, 2007 included product material and initial start-up costs not required in 2008. In addition we recorded a $500,000 reversal of research and development bonuses that were accrued at the end of 2007 and not paid. As of December 31, 2007, the Company recorded a liability for discretionary employee and officer bonuses for past performance. The payment of such bonuses was expected to take place sometime in 2008. Given the ongoing difficulties in the financial markets, which made it more challenging and expensive for companies to raise funds, the Compensation Committee of our Board of Directors felt it appropriate to forego the planned payment of these bonuses.

For the year ended December 31, 2008, selling, general and administrative expenses were $11,600,115 compared to $12,134,557 for the year ended December 31, 2007. The $534,442 decrease in selling, general and administrative expenses was mainly due to decreases in payroll and payroll related cost with the reversal of $700,000 in administrative bonuses that were accrued at the end of 2007 and not paid, as explained above, and a significant reduction in our head count in the fourth quarter of 2008 as we moved towards strategic distribution relationships.

We derive interest income from the investment of our available cash in various short-term obligations, such as certificates of deposit, commercial paper and money market funds. Interest income for the year ended December 31, 2008 was $102,201 compared to $555,572 for the same period last year. The $453,371 decrease in interest income for the year when compared to the same period last year was directly related to the decrease in cash available for investment as we used the proceeds from our commercial credit facility, equity financings and debt financing to fund operations. Interest expense for the year ended December 31, 2008 was $980,647 compared to $73,464 for the year ended December 31, 2007. The $907,183 increase was a result of our commercial credit facility with Life Sciences Capital LLC, which was paid off in July 2008, and our secured debt financing in November 2008.

Fiscal 2007 Compared to Fiscal 2006

Revenues for the year ended December 31, 2007 were $1,587,000, of which Innercool Therapies generated $1,141,000, compared to $756,000 for the year ended December 31, 2006. Our increase in revenues during 2007 was due in large part to an increase in sales of Innercool Therapies Celsius Control System resulting from our expanded sales and marketing efforts at Innercool Therapies, as well as new sales from the launch of Innercool Therapies CoolBlue system in late 2007 and the timing of our acquisition of Innercool Therapies in March 2006. Before March 2006, we had no products available for sale or use and thus the amount for 2006 reflects only ten months of revenues. In addition, Tissue Repair Company generated $446,000 in grant revenue during the year ended December 31, 2007, compared to $71,000 during the five months of 2006 following our acquisition of Tissue Repair Company in August 2006.

Cost of goods sold for the year ended December 31, 2007 was $1,348,000 compared to $954,000 for the year ended December 31, 2006. The increase in cost of goods sold was directly related to the increase in revenues from the sale of Innercool Therapies products, which accounted for a significant portion of our revenues.

Research and development expenses for the year ended December 31, 2007 were $13,118,000 compared to $8,384,000 for the same period last year. The increase of $4.7 million over last year was primarily due to our efforts to (i) advance our lead product candidate, Generx, to a Phase 3 clinical trial (AWARE), (ii) develop and launch a next-generation console for the Celsius Control System, and (iii) advance our Excellarate product candidate to a Phase 2b clinical study. In the first half of 2006, we classified our clinical staff as general and administrative expense, as during that time the staff was focused on the technology transfer from Schering AG Group, Germany. As our clinical staff has transitioned to development activities and clinical studies for our product candidates, as of July 1, 2006, their related expenses were included in research and development. Because we did not acquire Innercool Therapies and its Celsius Control System until March 2006, research and

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development expenses for the year ended December 31, 2006 included only ten months of expenses related to Innercool Therapies and the development of its products. Similarly, due to the timing of the Tissue Repair Company acquisition in August 2006, research and development expenses for the year ended December 31, 2006 included only four and a half months of expenses related to the development of Tissue Repair Company s products.

For the year ended December 31, 2007, selling, general and administrative expenses were $12,135,000 compared to $10,054,000 for the year ended December 31, 2006. The $2,081,000 increase in selling, general and administrative expenses was due to increased expenses related to our acquisitions of Innercool Therapies and Tissue Repair Company and our expanded sales and marketing efforts at Innercool, partially offset by the reclassification of our clinical staff expenses from selling, general and administrative to research and development as discussed above. Amortization expense for the year ended December 31, 2007 was $790,000 compared to $673,000 for the year ended December 31, 2006. Our amortization expenses were in connection with our acquisition of Innercool Therapies as we recorded patented technology and other intangibles at the time of purchase. The increase of $117,000 in 2007 compared to the previous year was due to the timing of the InnerCool acquisition in March 2006 and the inclusion of only ten months of amortization in 2006.

We derive interest income from the investment of our available cash in various short-term obligations, such as certificates of deposit, commercial paper and money market funds. Interest income for the year ended December 31, 2007 was $556,000 compared to $716,000 for the same period last year. The $160,000 decrease in interest income for the year when compared to the same period last year was directly related to the decrease in cash available for investment as we used the proceeds from our October 2005 private placement to fund operations, partially offset by the investment of the proceeds received from the private placement we completed in March 2007.

Liquidity and Capital Resources

Our primary source of liquidity has been cash flows from financing activities and in particular proceeds from the sale of our common stock and our debt financing. Net cash provided by financing activities was $11,675,000 for the year ended December 31, 2008, and was primarily derived from proceeds we received from the sale of our common stock and debt financing, net of issuance costs. For the period December 22, 2003 (inception) to December 31, 2008, net cash provided by financing activities was $63,743,000. Net cash used in operating activities was $17,114,000 for the year ended December 31, 2008 compared to $ 21,356,000 for the same period last year. For the period December 22, 2003 (inception) to December 31, 2008, net cash used in operating activities was $58,380,000. The decrease in net cash used in operating activities was a result of the increase in our accounts payable, depreciation and amortization expense. Net cash used in investing activities was $1,182,000 for the year ended December 31, 2008 compared to $1,227,000 for the year ended December 31, 2007. The increase was due to the purchase of in-process technology from Tissue Repair Company offset by a reduction in the purchases of property and equipment. Net cash used in investing activities for the period December 22, 2003 (inception) to December 31, 2008 was $4,260,000.

Since inception, our operations have consumed substantial amounts of cash and we have had only limited revenues. We anticipate the negative cash flow from operations will continue because our product development and other costs, including significant amounts we expect to spend on development activities and clinical trials for Excellarate and other product candidates, cannot be offset by our limited revenues during our development stage. As of December 31, 2008, our accumulated deficit was approximately $74 million, and our cash and cash equivalents were approximately $1.1 million. To date, we have generated limited revenues, consisting of revenues from sales of our InnerCool Celsius Control System, RapidBlue system, CoolBlue system and associated disposables, grant revenue, as well as interest income. A large portion of our expenses are fixed, including expenses related to facilities, equipment, contractual commitments 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 additional

revenues and potential to become profitable will depend largely on our ability, alone or with potential

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collaborators, to 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 products. 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. On March 5, 2009 we completed a subordinated secured debt financing for which we received proceeds of approximately $3.5 million before placement agent fees and offering expenses. With the completion of our recent debt offering, we believe we will be able to fund required operations for approximately the next three months, not including efforts to accelerate the study of our Excellarate and Generx product candidates and actively promote the launches of InnerCool s CoolBlue and RapidBlue product lines. As a result, we will need to raise additional funds through the sale of equity securities, debt financings, strategic licensing agreements and/or other corporate transactions. If we do not raise such funds, we will not be able to accelerate our product development activities or maintain operations. Management has been in discussions to raise additional funds but there is no assurance we will succeed in these efforts. If we are not successful in obtaining additional funds, we will need to scale back our operations and/or sell or partner certain development projects or products, or our operations may not be able to continue as planned or at all. The previously described conditions raise substantial doubt about the Company s ability to continue as a going concern. For these reasons, our financial statements for the fiscal year ended December 31, 2008, contain a going concern qualification from our independent registered public accounting firm, Marcum & Kliegman LLP. The consolidated financial statements do not include any adjustments related to the recoverability of assets or classifications of liabilities that might be necessary should we be unable to continue as a going concern

Off-Balance Sheet Arrangements

As of December 31, 2008, we did not have any significant 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 have or are reasonably likely to 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 material to investors. As of December 31, 2008, we had operating lease obligations of approximately $3,948,253 extending through 2013.

Contractual Obligations

The following table summarizes our known contractual obligations and commercial commitments at December 31, 2008:

	Payments Due By Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Long-Term Debt	$	$	$	$	$
Operating Leases	3,948,253	1,094,285	2,469,015	384,953	
Total Obligations	$ 3,948,253	$ 1,094,285	$ 2,469,015	$ 384,953	$

Recent Accounting Pronouncements

In April, 2008, the FASB issued FSP FAS 142-3, Determination of the Useful Life of Intangible Assets (FAS 142-3). This proposed FSP amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of an intangible asset under FASB Statement No. 142, Goodwill and Other Intangibles. The FSP aims to improve the consistency between the useful life of an intangible asset as determined under FAS 142 and the period of expected cash flows used to measure the fair value of the asset under FASB Statement No. 141, Business Combinations , and other applicable accounting literature. This FSP will be effective for financial statements issued for fiscal years beginning after December 15,

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2008, and interim periods within those fiscal years. We are currently evaluating the effect, if any, of this statement on our consolidated financial statements.

In October 2008, The FASB issued FSP 157-3 Determining Fair Value of a Financial Asset in a Market That is Not Active (FSP 157-3). FSP 157-3 classified the application of SFAS No. 157 in an inactive market. It demonstrated how the fair value of a financial asset is determined when the market for that financial asset is inactive. FSP 157-3 was effective upon issuance, including prior periods for which financial statements had not been issued. The implementation of FSP 157-3 did not have a material effect on the Company s consolidated financial statements.

In March 2008, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 161, Disclosures about Derivative Instruments and Hedging Activities an amendment of FASB Statement No. 133 (SFAS No. 161). SFAS No. 161 changes the disclosure requirements for derivative instruments and hedging activities. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity s financial position, financial performance and cash flows. The guidance in SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. This Statement encourages, but does not require, comparative disclosures for earlier periods at initial adoption. Management has concluded that the implementation of SFAS No. 161 will have no impact on the Company s consolidated financial statements.

In April 2008, the Financial Accounting Standards Board (FASB) issued EITF 07-05, Determining whether an Instrument (or Embedded Feature) Is Indexed to an Entity s Own Stock, (EITF 07-05). EITF 07-05 provides guidance on determining what types of instruments or embedded features in an instrument held by a reporting entity can be considered indexed to its own stock for the purpose of evaluating the first criteria of the scope exception in paragraph 11(a) of SFAS 133. EITF 07-05 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and early application is not permitted if an entity has previously adopted an alternative policy. We are currently evaluating the effect, if any, of EITF 07-05 on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), Business Combinations, which replaces SFAS No. 141. The Statement retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It also changes the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related costs as incurred. SFAS 141 (revised 2007) is effective for acquisitions occurring in fiscal periods beginning after December 15, 2008 and is required to be adopted by the Company in its first quarter of fiscal 2009. The Company believes that the adoption of SFAS 141 (revised 2007) would have an impact on the accounting for any future acquisition, if one were to occur.

In December 2007, the FASB issued SFAS No. 160, Non-controlling Interests in Consolidated Financial Statements An Amendment of ARB No. 51 (SFAS 160). SFAS 160 establishes accounting and reporting standards for the non-controlling interest in a subsidiary (previously referred to as minority interests). SFAS 160 also requires that a retained non-controlling interest upon the deconsolidation of a subsidiary be initially measured at its fair value. Upon adoption of SFAS 160, the Company would be required to report any non-controlling interests as a separate component of stockholders equity. The Company would also be required to present any net income allocable to non-controlling interests and net income attributable to the stockholders of the Company separately in its consolidated statements of income. SFAS 160 is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. SFAS 160 requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements of SFAS 160 shall be applied prospectively. SFAS 160 would have an impact on the presentation and disclosure of the non-controlling interests of any non wholly-owned businesses acquired in the future.

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In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities (SFAS 159). SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS 159 is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. The FASB has indicated it believes that SFAS 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities.

SFAS 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS 157 and SFAS No. 107, Disclosures about Fair Value of Financial Instruments. SFAS 159 is effective for the Company as of the beginning of fiscal year 2009. The Company has not yet determined the impact SFAS 159 may have on its consolidated financial position, results of operations, or cash flows.

In September 2006, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 157, Fair Value Measurements (SFAS 157). SFAS 157 defines fair value, establishes a framework and gives guidance regarding the methods used in measuring fair value and expands disclosures about fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. On February 12, 2008, the FASB issued FSP No. SFAS 157-2, Effective Date of FASB Statement No. 157 (FSP SFAS 157-2). The adoption of this statement did not have a material impact on the Company s consolidated financial position and results of operations. FSP SFAS 157-2 amends SFAS 157, to delay the effective date of SFAS 157 for nonfinancial assets and nonfinancial liabilities, except for the items that are recognized or disclosed at fair value in the financial statements on a recurring basis. For items within its scope, FSP SFAS 157-2 defers the effective date of SFAS 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years. The Company is required to adopt the pronouncement in the first quarter of fiscal 2009. The Company does not believe that the impact of the adoption of this FSP will be material to its financial position and results of operations.

In December 2007, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 141R, Business Combinations (SFAS 141R), which replaces SFAS No. 141, Business Combinations. SFAS 141R establishes principles and requirements for determining how an enterprise recognizes and measures the fair value of certain assets and liabilities acquired in a business combination, including non-controlling interests, contingent consideration, and certain acquired contingencies. SFAS 141R also requires acquisition-related transaction expenses and restructuring costs be expensed as incurred rather than capitalized as a component of the business combination. SFAS 141R will be applicable prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. SFAS 141R would have an impact on accounting for any businesses acquired after the effective date of this pronouncement.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a limited level of market risk, which is the potential loss arising from adverse changes in market rates and prices, such as interest rates, due to the investment of our available cash in various instruments.

The goal of our investment activities is to preserve principal while seeking to increase income received on our investments without significantly increasing risk. In the normal course of business, we employ established policies and procedures to manage our exposure to changes in the fair value of our investments. We generally do not, however, enter into derivatives or other financial instruments for trading or speculative purposes or to

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otherwise manage our exposure to interest rate changes. Generally, we seek to limit our exposure to risk by investing substantially in short-term, investment grade securities, such as commercial paper, certificates of deposit and money market funds. The amount of interest income we receive on our investments will vary with changes in the general level of interest rates in the United States, generally decreasing as interest rates decrease and increasing as interest rates increase.

While we cannot predict with any certainty our future exposure to fluctuations in interest rates or other market risks or the impact, if any, such fluctuations may have on our future business, consolidated financial condition, results of operations or cash flows, due to the short-term, investment grade nature of our investments, we do not believe our exposure to market risk from our investments is material.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Audit Committee of

The Board of Directors and Stockholders of

Cardium Therapeutics, Inc.

We have audited the accompanying consolidated balance sheets of Cardium Therapeutics, Inc. (the Company) (a development stage company) as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders (deficiency) equity and cash flows for each of the years in the three-year period ended December 31, 2008 and for the period from December 22, 2003 (date of inception) through December 31, 2008. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. 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 consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cardium Therapeutics, Inc. (a development stage company) at December 31, 2008 and 2007, and the consolidated results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2008 and for the period from December 22, 2003 (date of inception) through December 31, 2008 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that Cardium Therapeutics, Inc. will continue as a going concern. As more fully described in Note 1, the Company has suffered recurring operating losses, continues to generate negative cash flows from operating activities, and is dependent on the sale of equity securities and debt financings to operate its business. These conditions raise substantial doubt about the Company s ability to continue as a going concern. Management s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Cardium Therapeutics, Inc. s internal control over financial reporting as December 31, 2008, based on the criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report, dated March 25, 2009, expressed an unqualified opinion on the effectiveness of the Company s internal control over financial reporting.

/s/ Marcum & Kliegman LLP

Marcum & Kliegman LLP

New York, New York

March 25, 2009

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CARDIUM THERAPEUTICS, INC.

(a development stage company)

CONSOLIDATED BALANCE SHEETS

	December 31, 2008	2007
Assets		
Current assets:		
Cash and cash equivalents	$ 1,102,894	$ 7,722,816
Accounts receivable, net	296,116	565,613
Inventories, net	2,000,385	1,037,164
Deferred financing costs, net	432,966	
Prepaid expenses and other current assets	209,280	522,067
Total current assets	4,041,641	9,847,660
Restricted cash	400,000	500,000
Property and equipment, net	1,706,065	1,650,632
Patented technology, net	3,836,370	4,582,009
Intangibles, net	140,304	184,321
Deferred financing costs, net		66,306
Deposits	172,541	94,761
Total assets	$ 10,296,921	$ 16,925,689
Liabilities and Stockholders (Deficiency) Equity		
Current liabilities:		
Accounts payable	$ 4,745,321	$ 1,461,458
Accrued liabilities	2,074,265	2,311,849
Short-term debt, net of debt discount of $1,963,224 at December 31, 2008	4,036,776	
Current portion of long-term debt, net of debt discount of $49,214 at December 31, 2007		1,482,085
Total current liabilities	10,856,362	5,255,392
Deferred rent	195,315	
Long-term debt, less current portion, net of debt discount of $90,224 at December 31, 2007		3,241,992
Total liabilities	11,051,677	8,497,384
Commitments and contingencies		
Stockholders (deficiency) equity:		
Common stock, $0.0001 par value; 200,000,000 shares authorized; issued and outstanding 46,930,439 at December 31, 2008 and 40,955,291 at December 31, 2007	4,693	4,095
Additional paid-in capital	73,199,199	57,784,800
Deficit accumulated during development stage	(73,958,648)	(49,360,590)
Total stockholders (deficiency) equity	(754,756)	8,428,305
Total liabilities and stockholders (deficiency) equity	$ 10,296,921	$ 16,925,689

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

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CARDIUM THERAPEUTICS, INC.

(a development stage company)

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,			Period From December 22, 2003 (Inception) to December 31, 2008
	2008	2007	2006	
Revenues				
Product sales	$ 2,000,473	$ 1,140,921	$ 684,912	$ 3,826,306
Grant revenues	416,912	445,598	71,225	933,735
Total revenues	2,417,385	1,586,519	756,137	4,760,041
Cost of goods sold	1,431,574	1,348,335	954,194	3,734,103
Gross profit (loss)	985,811	238,184	(198,057)	1,025,938
Operating expenses				
Research and development	12,315,652	13,117,849	8,384,324	37,817,825
Selling, general and administrative	11,600,115	12,134,557	10,053,530	35,380,451
Amortization intangibles	789,656	789,656	673,230	2,252,542
Total operating expenses	24,705,423	26,042,062	19,111,084	75,450,818
Loss from operations	(23,719,612)	(25,803,878)	(19,309,141)	(74,424,880)
Interest income	102,201	555,572	715,976	1,520,343
Interest expense	(980,647)	(73,464)		(1,054,111)
Net loss	$ (24,598,058)	$ (25,321,770)	$ (18,593,165)	$ (73,958,648)
Net loss per common share basic and diluted	$ (0.55)	$ (0.64)	$ (0.59)	
Weighted average shares outstanding basic and diluted	44,978,169	39,311,359	31,308,650	

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

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CARDIUM THERAPEUTICS, INC.

(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIENCY)

YEARS ENDED DECEMBER 31, 2008, 2007 AND 2006

	Common Stock					
	Shares	Amount	Additional Paid-In Capital	Stock Subscription Receivable	Deficit Accumulated During Development Stage	Total Stockholders Equity (Deficiency)
Balance December 31, 2005	29,249,801	$ 2,924	$ 27,180,847	$	$ (5,445,655)	$ 21,738,116
Issuance of common stock for purchase of business (March 8, 2006; $2.35 per share)	2,500,000	250	5,874,750			5,875,000
Stock option compensation expense			1,634,806			1,634,806
Exercise of warrants (June 30 December 31, 2006; $1.13 per share)	441,003	44	498,554			498,598
Net Loss					(18,593,165)	(18,593,165)
Balance December 31, 2006	32,190,804	3,218	35,188,957		(24,038,820)	11,153,355
Issuance of common stock for cash (March 9, 2007; $2.50 per share)	8,636,000	875	20,092,489			20,093,364
Stock option compensation expense			2,329,440			2,329,440
Exercise of warrants ($1.50 per share)	128,487	2	26,274			26,276
Warrants issued with debt (November 12, 2007)			147,640			147,640
Net Loss					(25,321,770)	(25,321,770)
Balance December 31, 2007	40,955,291	4,095	57,784,800		(49,360,590)	8,428,305
Issuance of common stock for cash (January 31, 2008; $2.00 per share)	2,655,000	266	4,907,368			4,907,634
Issuance of common stock for cash (June 27, 2008; $2.00 per share)	1,625,000	163	3,010,297			3,010,460
Issuance of common stock for cash (July 18, 2008; $2.00 per share)	1,670,000	167	3,009,646			3,009,813
Stock option compensation expense			1,983,189			1,983,189
Exercise of warrants ($1.50 per share)	25,148	2	22,499			22,501
Warrants issued in exchange for services and fees			162,382			162,382
Warrants issued with debt (November 10, 2008)			2,319,018			2,319,018
Net Loss					(24,598,058)	(24,598,058)
Balance December 31, 2008	46,930,439	$ 4,693	$ 73,199,199	$	$ (73,958,648)	$ (754,756)

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

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CARDIUM THERAPEUTICS, INC.

(a development stage company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,			Period from December 22, 2003 (Inception) To December 31, 2008
	2008	2007	2006	
Cash Flows From Operating Activities				
Net loss	$ (24,598,058)	$ (25,321,770)	$ (18,593,165)	$ (73,958,648)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation	626,171	367,881	248,041	1,253,739
Amortization intangibles	789,656	789,656	673,230	2,252,542
Amortization debt discount	495,233	8,202		503,435
Amortization deferred financing costs	180,938	6,028		186,966
Provision for obsolete inventory	(450,881)	50,402	600,479	200,000
Provision for doubtful accounts	(5,936)	5,936		
Common stock and warrants issued for services and reimbursement of expenses	162,382			203,882
Stock based compensation expense	1,983,189	2,329,440	1,634,806	5,947,435
In-process purchased technology	1,000,000		1,027,529	2,027,529
Changes in operating assets and liabilities, excluding effects of acquisition:				
Accounts receivable	275,433	(295,959)	(98,996)	(119,522)
Inventories	(512,340)	(230,532)	(1,360,849)	(2,103,721)
Prepaid expenses and other current assets	276,620	168,547	(465,818)	(190,733)
Deposits	(77,780)	(42,796)	(3,828)	(145,880)
Accounts payable	3,283,863	472,437	777,722	4,696,891
Accrued liabilities	(737,584)	336,802	620,757	670,614
Deferred rent	195,315			195,315
Net cash used in operating activities	(17,113,779)	(21,355,726)	(14,940,092)	(58,380,156)
Cash Flows From Investing Activities				
In-process technology purchased from Tissue Repair Company	(500,000)		(1,000,000)	(1,500,000)
Purchases of property and equipment	(681,604)	(1,227,236)	(467,052)	(2,759,735)
Net cash used in investing activities	(1,181,604)	(1,227,236)	(1,467,052)	(4,259,735)
Cash Flows From Financing Activities				
Proceeds from officer loan				62,882
Cash acquired in Aries merger and Innercool acquisition			51,800	1,551,800
Restricted cash	100,000	(500,000)		(400,000)
Proceeds from the exercise of warrants, net	22,501	26,276	498,598	547,375
Proceeds from debt financing agreement, net of deferred financing costs of $511,432 at December 31, 2008 and $108,500 at December 31, 2007	5,488,568	4,891,500		10,380,068
Repayment of debt	(4,863,515)	(136,485)		(5,000,000)
Proceeds from the sale of common stock	10,927,907	20,093,364		56,600,660
Net cash provided by financing activities	11,675,461	24,374,655	550,398	63,742,785
Net (decrease) increase in cash	(6,619,922)	1,791,693	(15,856,746)	1,102,894
Cash and cash equivalents at beginning of period	7,722,816	5,931,123	21,787,869	
Cash and cash equivalents at end of period	$ 1,102,894	$ 7,722,816	$ 5,931,123	$ 1,102,894

Supplemental Disclosures of Cash Flow Information:				
Cash payments made for interest	$ 282,575	$ 73,731	$	$ 356,306
Cash payments made for income taxes	$ 2,400	$ 9,284	$ 8,078	$ 19,762
Non-Cash Activity:				
Subscription receivable for common shares	$	$	$	$ 17,000
Common stock and warrants issued for services and reimbursement of expenses	$ 162,382			$ 162,382
Common stock issued for repayment of loans	$	$	$	$ 62,882
Net assets acquired for the issuance of common stock (exclusive of cash)	$	$	$ 5,824,000	$ 5,824,000
Warrants issued in connection with debt financing	$ 2,319,018	$ 147,640		$ 2,466,658
In-process technology included in accrued liabilities	$ 500,000	$	$	$ 500,000

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

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CARDIUM THERAPEUTICS, INC.

(a development stage company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 Organization and Liquidity

Organization

Cardium Therapeutics, Inc. (the Company, Cardium, we, our and us) was organized in Delaware in December 2003. Cardium s business is focused on the acquisition and strategic development of product opportunities or businesses having the potential to address significant unmet medical needs, and definable pathways to commercialization, partnering or other monetization following the achievement of corresponding development objectives. In October 2005, we acquired a portfolio of biologic growth factors and related delivery techniques from the Schering AG Group (now part of Bayer AG) for potential use in treating ischemic and other cardiovascular conditions. In March 2006, we acquired the technologies and products of Innercool Therapies, Inc., a medical technology company in the emerging field of therapeutic hypothermia, or patient temperature modulation, whose systems and products are designed to rapidly and controllably cool the body 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. In August 2006, we acquired rights to assets and technologies of Tissue Repair Company, a company focused on the development of growth factor therapeutics for the potential treatment of tissue wounds such as chronic diabetic wounds, and whose product candidate, Excellarate™ is initially being developed as a single administration for the treatment of non-healing, neuropathic diabetic foot ulcers. Innercool Therapies and Tissue Repair Company are each operated as a wholly-owned subsidiary of Cardium.

We are a development stage company. We have yet to generate positive cash flows from operations, and are essentially 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 private placement, we completed a reverse merger, whereby Cardium merged with a wholly-owned subsidiary of Aries Ventures Inc. (Aries), a publicly-traded company. 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.

Our common stock is currently listed on the NYSE Amex (the Exchange). To maintain that listing, we must comply with the applicable listing standards of the Exchange. On December 23, 2008, we received notice from the staff of the Exchange that, based on their review of publicly available information, we do not currently meet certain of the Exchange s continued listing standards as set forth in Part 10 of the Exchange s Company Guide. In particular, the Exchange noted we are not considered to be in compliance with (i) Section 1003(a)(i) of the Company Guide because we reported stockholders equity of less than $2,000,000 and losses from continuing operations and net losses in two of our three most recent fiscal years, and (ii) Section 1003(a)(iv) of the Company Guide because we had sustained losses that are so substantial in relation to our overall operations or our existing financial resources, or our financial condition has become so impaired that it appeared questionable, in the opinion of the Exchange, as to whether we would be able to continue operations and/or meet our obligations as they mature.

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To maintain listing of our common stock on the Exchange, we were required to submit a plan by January 23, 2009, advising the Exchange of the actions we have taken, or will take, that would bring us into compliance with Section 1003(a)(iv) by March 23, 2009 and in compliance with all sections including Section 1003(a)(i) by June 23, 2010. We submitted a plan to the Exchange on January 23, 2009, and the Exchange accepted our plan on February 17, 2009. Since the Exchange accepted our plan, we may be able to continue our listing during the plan period, up to June 23, 2010, during which time we will be subject to periodic review to determine whether we are making progress consistent with the plan. However, if we are not in compliance with the continued listing standards at the end of the plan period or we do not make progress consistent with the plan during such period, then the Exchange would be expected to initiate delisting proceedings. If our common stock were delisted from the Exchange, we believe our common stock would likely be traded on the OTC Bulletin Board or the Pink Sheets, which may reduce the liquidity of, and may adversely affect the price of, our common stock.

Liquidity and Going Concern

Since inception, our operations have consumed substantial amounts of cash and we have had only limited revenues. We anticipate that the negative cash flow from operations will continue. On January 31, 2008, we completed a registered direct offering of our common stock that resulted in net proceeds to the Company of approximately $5 million. On June 27, 2008, we completed a follow-on registered direct offering of our common stock that resulted in net proceeds to the Company of approximately $3 million. On July 1, 2008 we paid off the principal balance on our commercial credit facility out of the proceeds from the June 2008 offering. On July 18, 2008, we completed another registered direct offering for which we received net proceeds of approximately $3 million. On November 10, 2008, we completed a secured debt financing for which we received proceeds of approximately $6 million before placement agent fees and offering expenses of $349,000.

As of December 31, 2008, we had $1,102,894 in cash and cash equivalents. On March 5, 2009 we completed a subordinated secured debt financing for which we received proceeds of approximately $3.5 million before placement agent fees and offering expenses of approximately $275,000. With the completion of our recent debt offering, we believe we will be able to fund required operations for approximately the next three months, not including efforts to accelerate the study of our Excellarate and Generx product candidates and actively promote the launches of InnerCool s CoolBlue and RapidBlue product lines. As a result, we will need to raise additional funds through the sale of equity securities, debt financings, strategic licensing agreements and/or other corporate transactions. If we do not raise such funds, we will not be able to accelerate our product development activities or maintain operations. Management has been in discussions to raise additional funds but there is no assurance we will succeed in these efforts. If we are not successful in obtaining additional funds, we will need to scale back our operations and/or sell or partner certain development projects or products, or our operations may not be able to continue as planned or at all. The previously described conditions raise substantial doubt about the Company s ability to continue as a going concern. The consolidated financial statements do not include any adjustments related to the recoverability of assets or classifications of liabilities that might be necessary should we be unable to continue as a going concern.

NOTE 2 Summary of Significant Accounting Policies

Basis of Presentation

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

FDIC Insured Limits

Financial instruments that subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and restricted cash. The Company maintains all of its cash, cash equivalents and restricted cash

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in two financial institutions, although substantially all of the balance is within one institution. The Company performs periodic evaluations of the relative credit standing of the institutions. As of December 31, 2008, the Company s cash and cash equivalents and restricted cash were primarily invested indirectly in cash. The cash balances are insured by either the Federal Deposit Insurance Corporation (FDIC), up to $250,000 per depositor (currently set to expire on December 31, 2009, after which the limit will reduce to $100,000 per depositor), or the FDIC s Transaction Account Guarantee Program for all non-interest bearing transaction accounts (currently set to expire on December 31, 2009). The Company has cash balances on deposit with a financial institution at December 31, 2008 that exceed the insured limit in the amount of $500,000.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities approximate fair value due to the short term maturities of these instruments.

Intangible Assets

In July 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 142, Goodwill and Other Intangible Assets. SFAS No. 142 requires companies to stop amortizing goodwill and certain other intangible assets with indefinite useful lives. Instead, goodwill and other intangible assets deemed to have an indefinite useful life will be subject to an annual review for impairment. Based upon annual impairment tests performed as of December 31, 2008 and 2007, no impairment was indicated. Separable intangible assets that are not deemed to have indefinite useful lives will continue to be amortized over their estimated useful lives (but with no maximum life).

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

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of Cardium and its wholly-owned subsidiaries, Innercool Therapies, Inc. and Tissue Repair Company. All inter-company balances and transactions have been eliminated in consolidation.

Restricted Cash

The Company has a total of $500,000 invested in a certificate of deposit that serves as collateral for an outstanding letter of credit, and is therefore restricted. The letter of credit is a security deposit towards tenant improvements for the Company s new office space and is reduced by $100,000 every year on March 1. Therefore, $400,000 is classified as non-current restricted cash and $100,000 is classified as a cash equivalent.

Accounts Receivable

Accounts receivable represent amounts due from the sale of our products and for services provided under the grant. The Company provides allowances against trade receivables estimated losses resulting from customers inability to pay. The adequacy of this allowance is determined by regularly reviewing specific account payment history and circumstances, the accounts receivable aging, accounts receivable payments, and historical write-off rates. If customer payment timeframes were to deteriorate, additional allowance for doubtful accounts would be

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required. As of December 31, 2007 the allowance for doubtful accounts amounted to $5,936. There was no allowance for doubtful accounts at December 31, 2008.

Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or market. The Company evaluates inventories on hand against historical and planned usage to determine appropriate provisions for obsolete, slow-moving and demonstration inventory. Inventories include material, labor and overhead costs. The provision for inventory was $200,000 as of December 31, 2008 and $650,881 as of December 31, 2007.

Deferred Financing Costs

The costs incurred in connection with the issuance of certain indebtedness were capitalized as deferred costs and are being amortized over the term of the related indebtedness as a financing cost over the period of future benefit. The Company incurred related amortization expense of $ 180,938 for the year ended December 31, 2008, $6,028 for the year ended December 31, 2007 and none for the year ended December 31, 2006. For the period December 22, 2003 (inception) to December 31, 2008 amortization expense was $186,966.

Accounting for Debt/Proceed Allocations

In accordance with Accounting Principles Board Opinion No. 14 Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants, the Company recorded a $2,319,018 discount on notes payable based on the relative fair values of the notes and the common stock purchase warrants issued in connection with the notes and is amortizing the discount over the one year term of the notes. Amortization of the discount on the notes payable for the year ended December 31, 2008 was $495,233 and is included as interest expense in the accompanying consolidated statements of operations. In addition, the Company recorded $61,191 of accrued interest in the accompanying consolidated statements of operations.

Long-Lived Assets

The Company adopted SFAS No. 144 Accounting for the Impairment or Disposal of Long-Lived Assets. Long-lived assets held for use are subject to an impairment assessment if the carrying value is no longer recoverable based upon the undiscounted cash flows of the assets. The amount of the impairment is the difference between the carrying amount and the fair value of the asset. Management does not believe there was any impairment of long-lived assets at December 31, 2008.

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). Leasehold improvements are being amortized on a straight-line basis over a period of six years.

Common Stock Purchase Warrants

The Company accounts for the issuance of common stock purchase warrants issued in connection with capital financing transactions in accordance with the provisions of Emerging Issues Task Force (EITF) Issue No. 00-19 Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company s Own Stock. Based upon the provisions of EITF Issue No. 00-19, the Company classifies as equity any contracts that (i) require physical settlement or net-share settlement or (ii) gives the Company a choice of net-cash settlement or settlement in its own shares (physical settlement or net-share settlement). The Company classifies as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle

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the contract if an event occurs and if that event is outside the control of the Company) or (ii) gives the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement).

The Company assessed the classification of its derivative financial instruments as of December 31, 2008, which consisted of common stock purchase warrants, and determined that such derivatives meet the criteria for equity classification under EITF 00-19.

Revenue Recognition

We earn revenue from two main sources, the sale of our products to major medical teaching universities, hospitals and private surgical centers located throughout the United States, and funds received from a government grant. For sales of our products we recognize revenue pursuant to Staff Accounting Bulletin (SAB) No. 104, Revenue Recognition issued by the U.S. Securities and Exchange Commission. Accordingly, revenue is recognized when all four of the following criteria are met: (i) persuasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the selling price is fixed or determinable; and (iv) collectability is reasonably assured.

Revenue is recognized on the grant when the services are provided and direct costs are incurred. Grant revenues are received by the Company to further advance its research and development activities associated with product development. As of December 31, 2008, the remaining funds that can be received under the grant amount to approximately $445,000.

Reclassification

Certain prior year amounts have been reclassified to conform to the current year presentation. The reclassification did not have any effect on reported consolidated net losses for any periods presented.

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

In accordance with SFAS No. 109 Accounting for Income Taxes we account for deferred income taxes under the liability method. Under this method, we recognize deferred tax assets and liabilities based on the tax effects of temporary differences between the financial statement and tax bases of assets and liabilities, as measured by current enacted tax rates. A valuation allowance is recorded to reduce deferred tax assets when necessary.

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,

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resulting from the exercise of outstanding stock options and warrants. These potentially dilutive securities were not included in the calculation of loss per common share for the years ended December 31, 2008, 2007 and 2006 because, due to the loss we incurred during such periods, their inclusion would have been anti-dilutive. Accordingly, basic and 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 has 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 22,023,870 shares as of December 31, 2008. As of December 31, 2007, potentially dilutive securities consisted of outstanding stock options and warrants to acquire 11,193,110 shares. At December 31, 2006, potentially dilutive securities consisted of outstanding stock options and warrants to acquire 7,611,853 shares.

Stock-Based Compensation

Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS No. 123 (revised 2004), Share-Based Payment (SFAS 123R), using the modified prospective transition method. Under the transition method, stock-based compensation expense is recognized (i) for all stock-based compensation awards granted before, but not yet vested as of, January 1, 2006, based on the grant date fair value estimated in accordance with the original provision of SFAS No. 123, Accounting for Stock-Based Compensation (SFAS 123), and (ii) for all stock-based compensation awards granted after January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS 123R.

Stock-based compensation costs are recognized on a straight-line basis over the requisite service period of the award, which is generally the vesting term of the award. Total stock-based compensation expense included in the consolidated statements of operations was $ 1,983,189, $2,329,440 and $1,634,806 for the years ended December 31, 2008, 2007 and 2006, respectively. During the year ended December 31, 2008 $900,922 was recorded as a component of research and development expenses and $1,082,268 was recorded as a component of selling, general and administrative expenses. During the year ended December 31, 2007 $1,064,554 was recorded as a component of research and development expenses and $1,264,886 was recorded as a component of selling, general and administrative expenses. During the year ended December 31, 2006 $747,586 was recorded as a component of research and development expenses and $887,220 was recorded as a component of selling, general and administrative expenses. As of December 31, 2008, the Company had $2,165,014 of unvested stock-based compensation at fair value remaining to be expensed ratably over the period January 2009 through May 2013.

The fair value of the stock options and similar stock-based compensation granted is estimated on the date of grant using the Black-Scholes option valuation model. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. Option valuation models require the input of highly subjective assumptions, including expected life and stock price volatility. The following weighted-average assumptions were used:

	December, 31		
	2008	2007	2006
Dividend yield	0%	0%	0%
Expected life (years)	5.25	5.25	5.25
Risk-free interest rate	3.20%	4.40%	4.60%
Volatility	76%	76%	67%

Recently Issued and Adopted Accounting Pronouncements

In April, 2008, the FASB issued FSP FAS 142-3, Determination of the Useful Life of Intangible Assets (FAS 142-3). This proposed FSP amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of an intangible asset under FASB Statement No. 142,

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Goodwill and Other Intangibles. The FSP aims to improve the consistency between the useful life of an intangible asset as determined under FAS 142 and the period of expected cash flows used to measure the fair value of the asset under FASB Statement No. 141, Business Combinations , and other applicable accounting literature. This FSP will be effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. We are currently evaluating the effect, if any, of this statement on our consolidated financial statements.

In October 2008, The FASB issued FSP 157-3 Determining Fair Value of a Financial Asset in a Market That is Not Active (FSP 157-3). FSP 157-3 classified the application of SFAS No. 157 in an inactive market. It demonstrated how the fair value of a financial asset is determined when the market for that financial asset is inactive. FSP 157-3 was effective upon issuance, including prior periods for which financial statements had not been issued. The implementation of FSP 157-3 did not have a material effect on the Company s consolidated financial statements.

In March 2008, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 161, Disclosures about Derivative Instruments and Hedging Activities an amendment of FASB Statement No. 133 (SFAS No. 161). SFAS No. 161 changes the disclosure requirements for derivative instruments and hedging activities. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity s financial position, financial performance and cash flows. The guidance in SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. This Statement encourages, but does not require, comparative disclosures for earlier periods at initial adoption. Management has concluded that the implementation of SFAS No. 161 will have no impact on the Company s consolidated financial statements.

In April 2008, the Financial Accounting Standards Board (FASB) issued EITF 07-05, Determining whether an Instrument (or Embedded Feature) Is Indexed to an Entity s Own Stock, (EITF 07-05). EITF 07-05 provides guidance on determining what types of instruments or embedded features in an instrument held by a reporting entity can be considered indexed to its own stock for the purpose of evaluating the first criteria of the scope exception in paragraph 11(a) of SFAS 133. EITF 07-05 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and early application is not permitted if an entity has previously adopted an alternative policy. We are currently evaluating the effect, if any, of EITF 07-05 on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), Business Combinations, which replaces SFAS No. 141. The Statement retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting. It also changes the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related costs as incurred. SFAS 141 (revised 2007) is effective for acquisitions occurring in fiscal periods beginning after December 15, 2008 and is required to be adopted by the Company in its first quarter of fiscal 2009. The Company believes that the adoption of SFAS 141 (revised 2007) would have an impact on the accounting for any future acquisition, if one were to occur.

In December 2007, the FASB issued SFAS No. 160, Non-controlling Interests in Consolidated Financial Statements An Amendment of ARB No. 51 (SFAS 160). SFAS 160 establishes accounting and reporting standards for the non-controlling interest in a subsidiary (previously referred to as minority interests). SFAS 160 also requires that a retained non-controlling interest upon the deconsolidation of a subsidiary be initially measured at its fair value. Upon adoption of SFAS 160, the Company would be required to report any non-controlling interests as a separate component of stockholders equity. The Company would also be required to present any net income allocable to non-controlling interests and net income attributable to the stockholders of

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the Company separately in its consolidated statements of income. SFAS 160 is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. SFAS 160 requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements of SFAS 160 shall be applied prospectively. SFAS 160 would have an impact on the presentation and disclosure of the non-controlling interests of any non wholly-owned businesses acquired in the future.

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities (SFAS 159). SFAS 159 provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS 159 is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. The FASB has indicated it believes that SFAS 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities.

SFAS 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS 157 and SFAS No. 107, Disclosures about Fair Value of Financial Instruments. SFAS 159 is effective for the Company as of the beginning of fiscal year 2009. The Company has not yet determined the impact SFAS 159 may have on its consolidated financial position, results of operations, or cash flows.

In September 2006, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 157, Fair Value Measurements (SFAS 157). SFAS 157 defines fair value, establishes a framework and gives guidance regarding the methods used in measuring fair value and expands disclosures about fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. On February 12, 2008, the FASB issued FSP No. SFAS 157-2, Effective Date of FASB Statement No. 157 (FSP SFAS 157-2). The adoption of this statement did not have a material impact on the Company s consolidated financial position and results of operations. FSP SFAS 157-2 amends SFAS 157, to delay the effective date of SFAS 157 for nonfinancial assets and nonfinancial liabilities, except for the items that are recognized or disclosed at fair value in the financial statements on a recurring basis. For items within its scope, FSP SFAS 157-2 defers the effective date of SFAS 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years. The Company is required to adopt the pronouncement in the first quarter of fiscal 2009. The Company does not believe that the impact of the adoption of this FSP will be material to its financial position and results of operations.

In December 2007, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 141R, Business Combinations (SFAS 141R), which replaces SFAS No. 141, Business Combinations. SFAS 141R establishes principles and requirements for determining how an enterprise recognizes and measures the fair value of certain assets and liabilities acquired in a business combination, including non-controlling interests, contingent consideration, and certain acquired contingencies. SFAS 141R also requires acquisition-related transaction expenses and restructuring costs be expensed as incurred rather than capitalized as a component of the business combination. SFAS 141R will be applicable prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. SFAS 141R would have an impact on accounting for any businesses acquired after the effective date of this pronouncement.

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NOTE 3 Business Combinations

Innercool Therapies Acquisition

On March 8, 2006, Cardium, through its 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, in the development stage, engaged in the emerging field of therapeutic hypothermia. 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 were payable to former employees of the seller for accrued and unpaid vacation , in the aggregate, amount of approximately $170,000, as well as certain audit fees and other expenses of approximately $100,000. The acquisition was recorded based on Cardium s then current common stock price of $2.35 per share.

The results of operations of Innercool Therapies have been included in the accompanying consolidated financial statements from the date of acquisition. The estimated total cost of the acquisition is as follows:

Issuance of common stock	$ 5,875,000
Transaction costs	$ 100,000
Total purchase price	$ 5,975,000

The allocation of the purchase price for the Innercool Therapies acquisition as of March 8, 2006, the date of the acquisition, was as follows:

Assets acquired:	
Cash	$ 51,800
Accounts receivable	176,593
Inventory	96,664
Property and equipment, net	110,943
Prepaid expenses	18,548
Deposits	24,381
Intangible assets (amortizable over 3-6 years)	264,102
Acquired technology (amortizable over 8 years)	5,965,114
Total assets acquired	$ 6,708,145
Liabilities assumed:	
Accounts payable	$ 387,105
Other accrued expenses	346,040
Total liabilities assumed	$ 733,145
Total consideration	$ 5,975,000

Tissue Repair Company Acquisition

On August 11, 2006, Cardium through its wholly-owned subsidiary, Cardium Biologics, Inc., a Delaware corporation, acquired rights to assets and technologies of Tissue Repair Company, a privately-held, San Diego-based Delaware corporation focused on the development of growth factor therapeutics for the potential treatment of tissue wounds such as dermal ulcers. The rights acquired included product rights to a lead product candidate, Excellarate™, a DNA-activated collagen gel for topical treatment formulated with an adenovector delivery

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carrier encoding human platelet-derived growth factor-B (PDGF-B). Excellarate is initially being developed as a single administration for the treatment of non-healing, neuropathic diabetic foot ulcers. The Excellarate topical gel is designed to stimulate angiogenesis and granulation tissue formation through the recruitment and proliferation of chemotactic cells such as monocytes and fibroblasts, which are necessary for the stimulation of a variety of wound healing processes. The rights acquired also included technologies applicable to the treatment of ischemic heart disease. Following the acquisition, Cardium Biologics, Inc. changed its name to Tissue Repair Company (TRC).

As consideration for the rights acquired, Cardium, through its TRC subsidiary, paid the seller $1.0 million and assumed approximately $120,000 in liabilities of the seller. Upon TRC s advancement of the Excellarate product candidate to a Phase 2 clinical study, TRC was obligated to pay a product advancement milestone of $1.0 million. If TRC successfully commercializes Excellarate, TRC would pay royalties based on worldwide net sales of such product. The royalty rate to the seller would be 10% minus any applicable third party royalties (including a royalty to the University of Michigan under a license agreement assumed by TRC), and would also be subject to a development cost-recovery offset that could be deducted at the rate of $5.0 million per year from any applicable royalty obligations. The deduction for third party royalties would apply until worldwide net sales exceeded $100 million per year. The cost-recovery offset would apply until TRC recovered 50% of its associated product development costs. TRC would also have a right to buy out the ongoing royalty obligation based on a one-time payment of 30% of net sales for the fifth calendar year or the first year in which sales exceeded $250 million. If pre-specified milestones relating to the commercial development of Excellarate are not satisfied, Cardium would issue to the seller stock purchase warrants to purchase up to an aggregate of 1.5 million shares of Cardium s common stock (one 500,000 share allotment for each of up to three missed events) at an exercise price of $4.00 per share. The seller could also require TRC to return certain product rights if TRC failed to meet the Excellarate development milestones by more than six months, excluding delays caused by defined product-related limitations. As of December 31, 2008, we paid $500,000 in cash and accrued another $500,000 payable in February 2009 representing product advancement milestone payment upon TRC s advancement of the Excellarate product candidate to a Phase 2 clinical study. The $500,000 accrual was subsequently substituted with a convertible promissory note in the same amount (Note 13).

The results of operations of TRC have been included in the accompanying consolidated financial statements from the date of acquisition.

Based on our evaluation, the allocation of the purchase price for the Tissue Repair Company acquisition was as follows as of August 11, 2006, the date of the acquisition:

Assets acquired:	
Property and equipment	$ 89,126
Deposits	2,280
In-process purchased technology	1,027,529
Total assets acquired	$ 1,118,935
Liabilities assumed:	
Other accrued expenses	$ 118,935
Total liabilities assumed	$ 118,935
Cash consideration	$ 1,000,000

Unaudited pro forma consolidated financial information is presented below as if the Innercool Therapies and Tissue Repair Company acquisitions had occurred before the beginning of the periods shown. The results have been adjusted to account for the amortization of acquired technology and intangibles and other pro forma adjustments. The pro forma information presented below does not purport to present what actual results would have been if the acquisition occurred at the beginning of such periods, nor does the information project results for

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any future period. The unaudited pro forma consolidated financial information should be read in conjunction with the historical financial information of Cardium included in this report, as well as the historical financial information of Cardium and Innercool Therapies included in other reports and documents we file with the SEC. The unaudited pro forma consolidated financial information for the year ended December 31, 2006 was as follows:

	December 31, 2006
Revenues	$ 1,550,854
Net loss	(19,902,386)
Net loss per common share basic and diluted	$ (0.63)
Weighted average common shares outstanding basic and diluted	31,767,554

NOTE 4 Inventories

Inventories consisted of the following:

	December 31,	
	2008	2007
Raw materials	$ 767,729	$ 490,688
Work in process	27,795	109,868
Finished goods	1,404,861	1,087,489
	2,200,385	1,688,045
Less provision for obsolete inventories	(200,000)	(650,881)
Inventories, net	$ 2,000,385	$ 1,037,164

NOTE 5 Property and Equipment

Property and equipment consisted of the following:

	December 31,	
	2008	2007
Computer and telecommunication equipment	$ 594,181	$ 670,387
Machinery and equipment	982,173	604,299
Office equipment	53,050	27,595
Instrumentation	115,421	115,421
Office furniture and equipment	536,980	320,773
Leasehold improvements	677,999	525,225
	2,959,804	2,263,700
Accumulated depreciation and amortization	(1,253,739)	(627,568)
	1,706,065	1,636,132
Construction in progress		14,500

Property and equipment, net	$ 1,706,065	$ 1,650,632

Depreciation and amortization of property and equipment totaled $626,171, $367,881, and $248,041 for the years ended December 31, 2008, 2007 and 2006, respectively. For the period from December 22, 2003 (date of inception) through December 31, 2008 depreciation and amortization of property and equipment totaled $1,253,739.

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NOTE 6 Accrued Liabilities

Accrued liabilities consisted of the following:

	December 31, 2008	2007
Accrued legal expenses	$	$ 57,867
Accrued expenses other	763,696	438,349
Accrued in-process purchased technology	500,000	
Accrued clinical trial costs	358,891	94,708
Accrued payroll and benefits	451,678	1,720,925
Total	$ 2,074,265	$ 2,311,849

NOTE 7 Patented Technology and Other Intangible Assets

In connection with the Company s acquisition of Innercool Therapies, the Company recorded patented technology and other intangibles. The following is a summary of intangible assets:

	December 31, 2008		
	Cost	Accumulated Amortization	Net Asset
Patented technology	$ 5,965,114	$ 2,128,744	$ 3,836,370
Tradenames and trademarks	264,102	123,798	140,304
Total	$ 6,229,216	$ 2,252,542	$ 3,976,674

	December 31, 2007		
	Cost	Accumulated Amortization	Net Asset
Patented technology	$ 5,965,114	$ 1,383,105	$ 4,582,009
Tradenames and trademarks	264,102	79,781	184,321
Total	$ 6,229,216	$ 1,462,886	$ 4,766,330

Amortization expense for the years ended December 31, 2008, 2007 and 2006 was $789,656, $789,656 and $673,230, respectively. For the period from December 22, 2003 (date of inception) through December 31, 2008 amortization expenses was $2,252,542.

Based on the carrying amount of the intangible assets as of December 31, 2008, the amortization expense for the next five years and thereafter is estimated as follows:

Years Ending December 31,	Amount
2009	$ 789,656
2010	789,656
2011	789,656
2012	789,656
2013	789,656

Thereafter	28,394
Total	$ 3,976,674

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NOTE 8 Commitments and Contingencies

Lease Commitments

Effective November 1, 2005, we entered into a two year lease for our principal executive offices. The lease contained two options, the first for an additional term of one year and the second for an additional term of two years. The second option was subject to a third party right of first refusal. During the first year of the lease, the monthly installment of base rent was approximately $21,500, which increased to approximately $22,335 in November 2006. In addition to base rent, we also were required to pay our proportionate share of operating and tax expenses for the office park in which our space was located. We chose not to exercise our option for an additional term and the lease expired in the fourth quarter of 2008.

On December 20, 2006, we entered into a six year lease for our technology center, which houses the operations of Innercool Therapies Inc. and Tissue Repair Company. The lease contains an option allowing us to cancel the last two years of the lease for a one time fee of $75,000 if we provide written notice of our intent to exercise the option no later than July 20, 2010 and an option to cancel only the last year of the lease for a one time fee of $50,000 if we give written notice no later than September 20, 2011. The lease also contains an option to renew the lease for an additional six year period, provided the lessor does not elect to sell the property at the end of the current lease term. During the first year of the lease, the monthly installment of base rent averaged $38,320, and increased to $40,103 in the second year of the lease, and further increased to $41,405 beginning January 20, 2008. 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.

On November 19, 2007 we entered into a lease for approximately 11,184 square feet of office space in San Diego, California to be used as Cardium s corporate headquarters. The lease commenced in April 2008 once substantial improvements were completed and has a term of 64 months from the commencement date with an option to renew for an additional five years. Monthly base rent was approximately $46,972 during the first year of the lease and increases to $48,650 in the second year. In addition to monthly base rent, we are also required to pay our proportionate share of any building operating expenses in excess of 2008 levels. In connection with entering into the lease, we paid a security deposit of $55,808 and delivered a $500,000 letter of credit to the landlord. The letter of credit is subject to annual reductions during the original term of the lease.

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

Year Ending December 31,	Facilities (Operating Lease)
2009	$ 1,094,285
2010	1,132,460
2011	695,041
2012	641,514
2013	384,953
Total	$ 3,948,253

Rent expense was $1,151,811, $677,516, and $363,685 for the years ended December 31, 2008, 2007 and 2006, respectively.

Future Sales Results Commitment

On March 8, 2006, we acquired substantially all of the assets of Innercool Therapies, Inc. and as part of the acquisition, we agreed to deliver to the seller $5,000,000 in cash or shares of our common stock, at our 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. No payments have been required through December 31, 2008.

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Short-term Debt

On November 10, 2008, we completed a secured debt financing pursuant to the terms of a Note and Warrant Purchase Agreement entered into with certain accredited investors. Under the terms of the purchase agreement we issued notes in the aggregate principal amount of $6 million to the investors, and five year warrants to purchase an additional 9,386,625 shares of our common stock, in the aggregate, at an exercise price of $2.00 per share. The notes bear interest at a fixed rate of 12% per annum, payable monthly, have a one year term, are secured by all of our assets and intellectual property and are senior to, and have priority in right of payment over, any other indebtedness of our company. The notes may be prepaid, in whole or in part, at any time provided the investors receive an additional payment equal to the difference between the amount of interest they would have received through the maturity date of the notes and the amount of interest actually received as of the prepayment date. The warrants were fully exercisable when issued. We also recorded deferred financing costs in the amount of $511,432 and debt discount in the amount of $2,319,018 in connection with this debt financing.

Long-term Debt

On November 12, 2007, Cardium, InnerCool Therapies and Tissue Repair Company entered into a Loan and Security Agreement with Life Sciences Capital, LLC, whereby we obtained debt financing in the principal amount of $5 million to be used for general working capital purposes. In connection with the loan, we paid Life Sciences Capital, LLC a loan commitment fee and related legal expenses of $108,500, which was capitalized as deferred financing costs and amortized over the term of the loan. On July 1, 2008 we paid off the principal balance on our commercial credit facility out of the proceeds from the June 2008 offering, thereby retiring our remaining debt obligations to Life Sciences Capital.

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.

NOTE 9 Purchase of Technology from Schering AG

In October 2005, we completed a transaction with Schering AG Group, Germany (now part of Bayer AG) and related licensors, including the University of California, New York University and Yale University, for the transfer or license of certain assets and technology for potential use in treating ischemic and other cardiovascular conditions. Under the terms of the transaction, we paid Schering a $4 million fee, 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 future 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. As part of the Schering transaction, we acquired rights and corresponding obligations under the Regents of the University of California (Regents) September 1995 agreement, as amended. 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 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. To date, no royalty payments have been required.

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NOTE 10 Income Taxes

Effective January 1, 2007, the Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109 (FIN 48). FIN 48 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. Differences between tax positions taken or expected to be taken in a tax return and the benefit recognized and measured pursuant to the interpretation are referred to as unrecognized benefits. A liability is recognized (or amount of net operating loss carryforward or amount of tax refundable is reduced) for an unrecognized tax benefit because it represents an enterprise s potential future obligation to the taxing authority for a tax position that was not recognized as a result of applying the provisions of FIN 48.

In accordance with FIN 48, interest costs related to unrecognized tax benefits are required to be calculated (if applicable) and would be classified as Interest, net. Penalties if incurred would be recognized as a component of Selling, general and administrative expenses.

The Company files income tax returns in the United States (federal) and in various state and local jurisdictions. In most instances, the Company is no longer subject to federal, state and local income tax examinations by tax authorities for years prior to 2005.

The adoption of the provisions of FIN 48 did not have a material impact on the Company s consolidated financial position and results of operations. Upon the adoption and as of December 31, 2008, no liability for unrecognized tax benefits was required to be recorded. The Company does not expect its unrecognized tax benefit position to change during the next 12 months.

The Company recognized a deferred tax asset of approximately $ 28.6 million and a deferred tax liability of $15,000 as of December 31, 2008, primarily relating to net operating loss carryforwards of approximately $69 million (which excludes net operating losses of $71 million that represent pre-merger losses for which the use of these losses is limited in accordance with Section 382 of the Internal Revenue Code of 1986, as amended), available to offset future taxable income through 2028. The net operating losses begin to expire in 2023 for federal tax purposes and in 2013 for state income tax purposes.

The ultimate realization of deferred tax assets is dependent on the generation of future taxable income during the periods in which those temporary differences become deductible. The Company considers projected future taxable income and tax planning strategies in making this assessment. At present, the Company does not have a sufficient history of income to conclude that it is more-likely-than-not that the Company will be able to realize all of its tax benefits in the near future and therefore a valuation allowance was established for the full value of the deferred tax asset.

A valuation allowance will be maintained until sufficient positive evidence exists to support the reversal of any portion or all of the valuation. Should the Company become profitable in future periods with supportable trends, the valuation allowance will be reversed accordingly.

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The Company s net deferred tax asset consisted of the following at December 31, 2008 and 2007:

	December 31,	
	2008	2007
Deferred tax asset:		
Net operating loss carryforwards	$ 27,500,035	$ 17,701,546
Intangible assets	505,664	370,930
Inventory reserves	79,669	259,322
Deferred rent	77,803	
Accrued expenses	421,969	830,097
Other	8,802	2,191
Total deferred tax assets	28,593,942	19,164,086
Deferred tax liability:		
Property and equipment	(15,015)	(13,401)
Subtotal	28,578,927	19,150,685
Less: Valuation allowance	(28,578,927)	(19,150,685)
Net deferred tax asset	$	$

As a result of the Company s significant operating loss carryforwards and the corresponding valuation allowance, no income tax benefit was recorded at December 31, 2008, 2007 or 2006. The provision for income taxes using the statutory federal tax rate as compared to the Company s effective tax rate is summarized as follows:

	December 31,		
	2008	2007	2006
Tax benefit at statutory rate	(34.0)%	(34.0)%	(34.0)%
State income taxes	(8.8)%	(8.8)%	(8.8)%
Valuation allowance	42.8%	42.8%	42.8%
Total income tax provision	0.0%	0.0%	0.0%

NOTE 11 Stockholders (Deficiency) 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 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 had 2,032,226 shares of its common stock outstanding.

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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. These warrants expired in October 2008.

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. These warrants expired in October 2008.

On March 8, 2006, as described in Note 3 above, we acquired substantially all of the assets of Innercool Therapies, Inc. As partial consideration, we issued to the seller 2,500,000 shares of our common stock.

On March 9, 2007, we closed a private placement of 8,636,000 shares of common stock at a purchase price of $2.50 per share and received net proceeds of approximately $20 million. Investors received five-year warrants to buy up to 35% of the number of shares of common stock purchased in the private placement, at an exercise price of $3.75 per share. Warrants to purchase approximately 3,022,600 shares of common stock, in the aggregate, were issued to such investors. These warrants had a price protection provision which was triggered on January 31, 2008 and therefore were reduced to an exercise price of $2.00.

In connection with the private placement, we incurred selling commissions, and expenses payable to the placement agent, totaling approximately $1,480,300, and legal, accounting and other fees and expenses totaling approximately $100,000 In addition, a five-year warrant to purchase 518,160 shares of our common stock was issued to the placement agent at an exercise price of $3.78 per share.

In November 2007, we entered into a Loan and Security Agreement with Life Sciences Capital, LLC whereby we obtained debt financing in the principal amount of $5 million to be used for general working capital purposes. The proceeds were immediately made available to us under this credit agreement. In connection with this financing, we issued a warrant to Life Sciences Capital, LLC to purchase 93,333 shares of our common stock at an exercise price of $3.75. We also recorded deferred financing costs in the amount of $108,500 in connection with this debt financing.

On January 31, 2008, we completed a registered direct offering of our common stock that resulted in the sale of 2,655,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per share, and five year warrants to purchase an additional 929,250 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $5,300,000, before placement agent fees and offering expenses of approximately $400,000. In addition, we issued warrants to purchase 159,300 shares of our common stock to the placement agent on terms substantially the same as the warrants issued to investors.

On June 27, 2008, we completed a follow-on registered direct offering of our common stock that resulted in the sale of 1,625,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per share, and five year warrants to purchase an additional 568,750 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $3,250,000, before placement agent fees and offering expenses of approximately $224,000. In addition, we issued warrants to purchase 97,500 shares of our common stock to the placement agent. These warrants have an exercise price of $2.29 and otherwise have substantially the same terms as the warrants issued to investors.

On July 18, 2008, we completed a second follow-on registered direct offering of our common stock that resulted in the sale of 1,670,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per

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share, and five year warrants to purchase an additional 584,500 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $3,340,000, before placement agent fees, offering expenses and expense reimbursements of approximately $330,000. In addition, we issued warrants to purchase 100,200 shares of our common stock to the placement agent. These warrants have an exercise price of $2.20 and otherwise have substantially the same terms as the warrants issued to investors.

On November 10, 2008, we completed a secured debt financing pursuant to the terms of a Note and Warrant Purchase Agreement entered into with certain accredited investors. Under the terms of the purchase agreement we issued notes in the aggregate principal amount of $6 million to the investors, and five year warrants to purchase an additional 9,386,625 shares of our common stock, in the aggregate, at an exercise price of $2.00 per share. The notes bear interest at a fixed rate of 12% per annum, payable monthly, have a one year term, are secured by all of our assets and intellectual property and are senior to, and have priority in right of payment over, any other indebtedness of the Company. The notes may be prepaid, in whole or in part, at any time provided the investors receive an additional payment equal to the difference between the amount of interest they would have received through the maturity date of the notes and the amount of interest actually received as of the prepayment date. The warrants were fully exercisable when issued. We also recorded deferred financing costs in the amount of $511,432 and debt discount in the amount of $2,319,018 in connection with this debt financing.

During 2006, 108,592 shares of common stock were issued when warrants to purchase 216,554 shares of common stock were exercised in cashless transactions, whereby a portion of the respective warrants representing the right to purchase 107,962 shares of common stock, in the aggregate, was cancelled as the method of payment for the exercise of the warrants. Also during 2006, 332,411 shares of common stock were issued upon the exercise of a warrant for which Cardium received $498,598 as payment of the exercise price.

During 2007, 128,487 shares of common stock were issued when warrants to purchase 240,336 shares of common stock were exercised in cashless transactions, whereby a portion of the respective warrants representing the right to purchase 111,849 shares of common stock, in the aggregate, was cancelled as the method of payment for the exercise of the warrants.

During 2008, 10,148 shares of common stock were issued when warrants to purchase 25,000 shares of common stock were exercised in cashless transactions, whereby a portion of the respective warrants representing the right to purchase 14,852 shares of common stock, in the aggregate, was cancelled as the method of payment for the exercise of the warrants. Also during 2008, 15,000 shares of common stock were issued upon the exercise of a warrant for which Cardium received $22,500 as payment of the exercise price.

All warrants exercised in 2006, 2007 and 2008 had an exercise price of $1.50 per share.

Option Activity

We have an equity incentive plan that was established in 2005 under which 5,665,856 shares of our common stock 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 a ten year term and have an exercise price of $1.95 per share.

During the year ended December 31, 2006, options to purchase 1,770,000 shares were granted under the plan. The options granted in 2006 have exercise prices ranging from $1.90 to $3.05, terms ranging from seven to ten years, and vest over approximately four years. During the year ended December 31, 2006, unvested options to purchase 295,000 shares of our common stock were cancelled and are available for future issuance under the plan. Warrants to purchase 1,734,000 shares were granted outside the plan during the year ended December 31, 2006 to employees and consultants of our wholly-owned subsidiaries. The warrants granted in 2006 outside the plan have exercise prices ranging from $2.05 to $3.10, vest over three to four years and have a term of seven to

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ten years. The fair value of the 2006 grants was $1.15 to $2.02 for the grants made under the plan, and $1.15 to $2.05 for the warrants granted outside of the plan.

During the year ended December 31, 2007, options to purchase 350,000 shares were granted under the plan. The options granted in 2007 have exercise prices ranging from $2.60 to $2.95, terms ranging from seven to ten years, and vest over approximately four years. During the year ended December 31, 2007, vested options to purchase 41,656 shares of our common stock expired and unvested options to purchase 58,344 shares of our common stock were cancelled and are available for future issuance under the plan. Warrants to purchase 15,000 shares were granted outside the plan during the year ended December 31, 2007 to employees and consultants of our wholly-owned subsidiaries. The warrants granted in 2007 outside the plan have an exercise price of $2.95, vest over four years and have a term of seven years. The fair value of the 2007 grants was $1.72 to $1.95 for the grants made under the plan, and $1.95 for the warrants granted outside of the plan. During the year ended December 31, 2007 warrants to purchase 9,000 shares expired and warrants to purchase 68,500 warrants were cancelled.

During the year ended December 31, 2008, options to purchase 722,500 shares were granted under the plan. The options granted in 2008 have exercise prices ranging from $0.99 to $2.33, with a term of seven years, and vest over approximately four years. During the year ended December 31, 2008, unvested options to purchase 445,531 shares of our common stock were cancelled and are available for future issuance under the plan, Options issued under the plan to purchase 320,281 shares of our common stock expired during the year ended December 31, 2008. Warrants to purchase 45,367 shares which had been granted outside the plan were cancelled and 42,415 shares expired during the year ended December 31, 2008.

The following is a summary of stock option and warrant activity under our equity incentive plan and warrants issued outside of the plan to employees and consultants, during the years ended December 31, 2008, 2007 and 2006:

	Number of Options or Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)
Balance outstanding, December 31, 2005	2,095,000	$ 1.95	8.9
Granted	3,504,000	2.51	8.1
Exercised			
Cancelled	(295,000)	2.85	9.1
Expired			
Balance outstanding, December 31, 2006	5,304,000	$ 2.27	8.4
Granted	365,000	2.83	6.6
Exercised			
Cancelled	(126,844)	2.52	7.9
Expired	(50,656)	2.52	7.9
Balance outstanding, December 31, 2007	5,491,500	$ 2.30	7.3
Granted	722,500	2.12	6.5
Exercised			
Cancelled	(490,898)	2.32	6.9
Expired	(362,696)	2.72	7.1
Balance outstanding, December 31, 2008	5,360,406	$ 2.22	6.2
Exercisable, December 31, 2008	3,915,478	$ 2.18	

Based on the Company s stock price on December 31, 2008 of $0.75, there was no intrinsic value to options outstanding.

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At December 31, 2008 there were 3,915,478 options and warrants exercisable with a weighted-average exercise price of $2.18 and the weighted-average remaining contractual life was 6.5 years. At December 31, 2007 and 2006 the number of options and warrants exercisable were 2,758,302, and 1,069,947 respectively, and the weighted-average exercise prices of those options were $2.20 and $2.08, respectively.

The following table sets forth information regarding options and warrants outstanding at December 31, 2008:

	Options and Warrants Outstanding			Options and Warrants Exercisable	
Range of exercise prices	Number outstanding	Weighted-average remaining contractual life	Weighted-average exercise price	Number exercisable	Weighted-average exercise price
$ 0.50 to 1.50	75,000	6.9	$ 0.99		$
1.51 to 2.50	4,200,708	6.3	2.09	3,263,403	2.06
2.51 to 3.50	1,084,698	6.0	2.80	652,075	2.80
	5,360,406	6.2	$ 2.22	3,915,478	$ 2.18

The following is a summary of unvested options and warrants as of December 31, 2008, and changes during the years ended December 31, 2008, 2007 and 2006:

	Number of Options or Warrants	Weighted Average Grant Date Fair Value
Unvested balance outstanding, December 31, 2005	2,095,000	$ 1.17
Granted	3,504,000	1.38
Vested	(1,069,947)	1.25
Expired		
Cancelled	(295,000)	1.70
Unvested balance outstanding, December 31, 2006	4,234,053	$ 1.40
Granted	365,000	1.92
Vested	(1,688,355)	1.34
Expired	(50,656)	
Cancelled	(126,844)	1.39
Unvested balance outstanding, December 31, 2007	2,733,198	$ 1.48
Granted	722,500	1.33
Vested	(1,157,176)	1.09
Expired	(362,696)	1.21
Cancelled	(490,898)	1.36
Unvested balance outstanding, December 31, 2008	1,444,928	$ 1.50

Warrants

Concurrently with the reverse merger in October 2005, the Company closed a private placement of 19,325,651 shares of its common stock at a purchase price of $1.50 per share and received net proceeds of $25,542,389. In connection therewith, National Securities Corporation, the placement agent, received a five-year warrant to purchase 2,032,555 shares of our common stock at an exercise price of $1.50 per share. The warrant was fully exercisable when issued. As of December 31, 2008 warrants to purchase 1,203,254 shares of our common stock were still

outstanding.

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Investors who invested at least $1,000,000 in shares of common stock also received a three-year warrant to buy 10% of the number of shares of common stock purchased 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. These warrants expired in October 2008.

At the closing of the reverse merger, a three-year warrant to purchase 400,000 shares of Aries Ventures common stock at an exercise price of $1.75 per share was issued to an Aries Ventures stockholder who held of record or beneficially more than 45% of the outstanding common stock of Aries Ventures prior to the reverse merger. The warrant was issued as consideration for his agreement, subject to certain exceptions, not to sell any of his shares of Aries Ventures common stock for a period of approximately five months from the effective time of the reverse merger. This warrant expired in October 2008.

On March 9, 2007, we closed a private placement of 8,636,000 shares of common stock at a purchase price of $2.50 per share and received net proceeds of $20,093,364. Investors received five-year warrants to buy up to 35% of the number of shares of common stock purchased in the private placement, at an exercise price of $3.75 per share. Warrants to purchase approximately 3,022,600 shares of common stock, in the aggregate, were issued to such investors. These warrants had a price protection provision that was triggered on January 31, 2008 and the exercise price was reduced to $2.00. In addition, a five-year warrant to purchase 518,160 shares of our common stock was issued to the placement agent at an exercise price of $ 3.78 per share. As of December 31, 2008, all of these warrants remained outstanding.

In November 2007, we entered into a Loan and Security Agreement with Life Sciences Capital, LLC whereby we obtained debt financing in the principal amount of $5 million to be used for general working capital purposes. The proceeds were immediately made available to us under this credit agreement. In connection with this financing, we issued a warrant to Life Sciences Capital, LLC to purchase 93,333 shares of our common stock at an exercise price of $3.75. At December 31, 2008, this warrant remained outstanding.

On January 31, 2008, we completed a registered direct offering of our common stock that resulted in the sale of 2,655,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per share, and five year warrants to purchase an additional 929,250 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $5,300,000, before placement agent fees and offering expenses of approximately $400,000. In addition, we issued warrants to purchase 159,300 shares of our common stock to the placement agent on terms substantially the same as the warrants issued to investors. At December 31, 2008, all of these warrants remained outstanding.

On June 27, 2008, we completed a follow-on registered direct offering of our common stock that resulted in the sale of 1,625,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per share, and five year warrants to purchase an additional 568,750 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $3,250,000, before placement agent fees and offering expenses of approximately $224,000. In addition, we issued warrants to purchase 97,500 shares of our common stock to the placement agent. These warrants have an exercise price of $2.29 and otherwise have substantially the same terms as the warrants issued to investors. At December 31, 2008, all of these warrants remained outstanding.

On July 18, 2008, we completed a second follow-on registered direct offering of our common stock that resulted in the sale of 1,670,000 shares, in the aggregate, of our common stock at a purchase price of $2.00 per share, and five year warrants to purchase an additional 584,500 shares of our common stock at an exercise price of $2.00. The warrants were fully exercisable when issued. We received gross proceeds of approximately $3,340,000, before placement agent fees, offering expenses and expense reimbursements of approximately $330,000. In addition, we issued warrants to purchase 100,200 shares of our common stock to the placement agent. These warrants have an exercise price of $2.20 and otherwise have substantially the same terms as the warrants issued to investors. At December 31, 2008, all of these warrants remained outstanding.

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On November 10, 2008, we completed a secured debt financing pursuant to the terms of a Note and Warrant Purchase Agreement entered into with certain accredited investors. Under the terms of the purchase agreement we issued notes in the aggregate principal amount of $6 million to the investors, and five year warrants to purchase an additional 9,386,625 shares of our common stock, in the aggregate, at an exercise price of $2.00 per share. The warrants are subject to price protection provisions pursuant to the purchase agreement. At December 31, 2008, all of these warrants remained outstanding.

The following table summarizes warrant activity for the years ended December 31, 2008, 2007 and 2006:

	Number of Warrants	Exercise Price	Weighted Average Remaining Contractual Life (in years)
Balance outstanding, December 31, 2005	2,856,818	$ 1.50-$1.75	2-4
Warrants issued			
Warrants exercised	(548,965)	1.50	2-4
Warrants expired			
Warrants cancelled			
Balance outstanding, December 31, 2006	2,307,853	$ 1.50-$1.75	2-4
Warrants issued	3,634,093	3.75-3.78	4
Warrants exercised	(240,336)	1.50	3
Warrants expired			
Warrants cancelled			
Balance outstanding, December 31, 2007	5,701,610	$ 1.50-$3.78	1-4
Warrants issued	11,826,125	2.00	4.5
Warrants exercised	(40,000)	1.50	2
Warrants expired	(824,263)	1.50	
Warrants cancelled		1.50	2
Balance outstanding, December 31, 2008	16,663,472	$ 2.03	4.2
Warrants exercisable at December 31, 2008	16,663,472	$ 2.03	4.2

The table above does not include warrants issued to employees, non-employee directors and consultants as they are included under Option Activity above.

NOTE 12 Stockholder Rights Plan

On July 10, 2006, Cardium s Board of Directors approved the adoption of a Stockholder Rights Plan (Rights Plan) with the intention to protect against potential takeover tactics that are not in the best interest of Cardium and its stockholders, such as acquisitions of control without paying all stockholders a fair premium, coercive tender offers and inadequate offers. The Rights Plan was not adopted in response to any specific effort to acquire control of Cardium and it is not intended to prevent an offer that the Board of Directors concludes is in the best interests of Cardium and its stockholders. Pursuant to the Rights Plan, Cardium issued a dividend of one right for each share of its common stock held by stockholders of record as of the close of business on July 21, 2006. The rights are not immediately exercisable and will become exercisable only upon the occurrence of certain events. In general, if a person or group acquires, or announces a tender or exchange offer that would result in the acquisition of, 15% or more of Cardium s common stock while the Rights Plan remains in place, then, unless the rights are redeemed by Cardium for $0.001 per right, the rights will become exercisable by all rights holders except the acquiring person or group, for 0.001 of a share of newly created Series A Preferred Stock of the Company at an exercise price of $40.00. Until the rights become exercisable, the rights will be represented by, and will automatically trade with, the Company s common stock certificates.

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The Rights Plan will be reviewed and evaluated every three years by a committee of independent directors of Cardium s Board of Directors to consider whether the plan continues to be in the best interests of Cardium and its stockholders. The Rights Plan may be amended or revoked by Cardium at any time and unless earlier terminated or amended, the rights will expire on July 10, 2016.

NOTE 13 Subsequent Events

On March 5, 2009 we completed a $3.5 million financing in the form of senior subordinated secured debt with accompanying warrants to purchase 1,505,000 shares of our common stock. The notes issued in the financing are secured by our assets and intellectual property and bear interest at a fixed rate of 12% per annum. The maturity date of the notes is the earlier of June 27, 2009, or the closing of a qualified asset monetization qualified financing or qualified stock sale (as such terms are defined in the notes). The warrants were fully exercisable when issued, have a five year term and an exercise price of $2.00. We received gross proceeds of approximately $3.5 million, less placement agent fees and offering expenses. In addition, we issued warrants to purchase 90,300 shares of common stock to the placement agent on the same terms as the warrants issued to the lenders.

Under the terms of an Asset Purchase Agreement, dated as of August 11, 2006, Cardium, through its subsidiary, acquired substantially all of the assets and the business related to its wholly-owned subsidiary, Tissue Repair Company, from certain sellers now known as Tissue Repair Royalty Company, LLC (TRC RC). On February 23, 2009, Cardium, Tissue Repair and TRC RC agreed that a $500,000 milestone payment due in February 2009 in connection with Tissue Repair s Phase 2 MATRIX clinical study for its Excellarate product candidate for the potential treatment of non-healing diabetic ulcers, would be substituted by a convertible promissory note to TRC RC in the same amount (the Note). The Note bears interest at a rate of 0.6% per annum and provides for principal payments of $50,000 on each of March 1, 2009, April 1, 2009, May 1, 2009 and June 1, 2009 with the remaining principal balance and any interest due on June 11, 2009. If Cardium completes an equity financing of at least $2,000,000 or elects to sell its Innercool Therapies subsidiary, the maturity date would be accelerated and the remaining principal and unpaid interest would become due at that time. If Cardium did not repay the Note when due, TRC RC would have the option to convert the remaining principal balance and any interest due into shares of Cardium s common stock at a conversion price per share equal to the average of the closing or last sale price reported for the five trading days immediately preceding the maturity date of the Note, or such other price as specified in the Note if Cardium s common stock is not then traded on the NYSE Amex (subject to certain adjustments).

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NOTE 14 Supplemental Financial Data (unaudited)

The following table presents selected unaudited financial results for each of the eight quarters during the two-year period ended December 31, 2008. In the opinion of management, this unaudited information has been prepared on the same basis as the audited information and includes all adjustments (consisting of only normal recurring adjustments) necessary for the fair statement of the financial information for the periods presented.

Year Ended December 31, 2008	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenues	$ 646,002	$ 626,841	$ 585,421	$ 559,121
Gross profit	$ 275,306	$ 312,587	$ 71,178	$ 326,740
Loss from operations	$ (6,680,154)	$ (6,550,792)	$ (5,960,322)	$ (4,528,344)
Net loss	$ (6,734,128)	$ (6,634,462)	$ (6,151,515)	$ (5,077,953)
Net loss per common share basic and diluted	$ (0.16)	$ (0.15)	$ (0.13)	$ (0.11)

Year Ended December 31, 2007	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenues	$ 309,331	$ 229,472	$ 364,330	$ 683,386
Gross profit (loss)	$ 62,766	$ (28,705)	$ 45,396	$ 158,727
Loss from operations	$ (5,926,244)	$ (6,629,409)	$ (6,214,717)	$ (7,033,508)
Net loss	$ (5,839,849)	$ (6,401,181)	$ (6,067,969)	$ (7,012,771)
Net loss per common share basic and diluted	$ (0.17)	$ (0.16)	$ (0.15)	$ (0.16)

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ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE
None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain certain disclosure controls and procedures. They are designed to 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 SEC 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, 2008. 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.

Internal Control Over Financial Reporting

Management s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes policies and procedures for maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for the preparation of our financial statements; providing reasonable assurance that receipts and expenditures of the Company are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of Company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that the Company s internal control over financial reporting was effective as of December 31, 2008. Marcum & Kliegman LLP, our independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting as of December 31, 2008.

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Attestation Report of the Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Audit Committee of

The Board of Directors and Stockholders of

Cardium Therapeutics, Inc.

We have audited Cardium Therapeutics, Inc. s (the Company) internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that degree of compliance with the policies or procedures may deteriorate.

In our opinion, Cardium Therapeutics, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Cardium Therapeutics, Inc. as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders (deficiency) equity and cash flows for each of the years in the three-year period ended December 31, 2008 and for the period from December 22, 2003 (date of inception) through December 31, 2008, and our report, dated March 25, 2009, expressed an unqualified opinion on those consolidated financial statements and included an explanatory paragraph as to the Company s ability to continue as a going concern.

/s/ Marcum & Kliegman LLP

Marcum & Kliegman LLP

New York, New York

March 25, 2009

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Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2008 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

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PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

The information for this item is incorporated by reference to the sections Our Board of Directors, Our Executive Officers, Section 16(a) Beneficial Ownership Reporting Compliance, and Code of Ethics in our definitive proxy statement for our Annual Meeting of Stockholders to be held on June 4, 2009, to be filed on or before April 29, 2009.

ITEM 11. EXECUTIVE COMPENSATION

The information for this item is incorporated by reference to the sections Director Compensation and Executive Officer Compensation in our definitive proxy statement for our Annual Meeting of Stockholders to be held on June 4, 2009, to be filed on or before April 29, 2009.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information for this item is incorporated by reference to the sections Stock Holdings of Certain Owners and Management and Securities Authorized for Issuance Under Equity Compensation Plans in our definitive proxy statement for our Annual Meeting of Stockholders to be held on June 4, 2009, to be filed on or before April 29, 2009.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information for this item is incorporated by reference to the sections Certain Relationships and Related Transactions and Our Board of Directors in our definitive proxy statement for our Annual Meeting of Stockholders to be held on June 4, 2009, to be filed on or before April 29, 2009.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information for this item is incorporated by reference to the sections Audit Fees, Audit-Related Fees, Tax Fees, All Other Fees and Pre-Approval Policies and Procedures in our definitive proxy statement for our Annual Meeting of Stockholders to be held on June 4, 2009, to be filed on or before April 29, 2009.

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this report:

(1) **Financial Statements.** The financial statements listed below are included under Item 8 of this report:

Consolidated Balance Sheets as of December 31, 2008 and 2007;

Consolidated Statements of Operations for the years ended December 31, 2008, 2007 and 2006 and for the period from December 22, 2003 (inception) to December 31, 2008;

Consolidated Statements of Stockholders Equity (Deficiency) for the years ended December 31, 2008, 2007 and 2006;

Consolidated Statements of Cash Flows for the years ended December 31, 2008, 2007 and 2006 and for the period from December 22, 2003 (inception) to December 31, 2008; and

Notes to Consolidated Financial Statements.

(2) **Financial Statement Schedules.** The following financial statement schedules are included under Item 8 of this report: None.

(3) **Exhibits.** The following exhibit index shows those exhibits filed with this report and those incorporated by reference:

EXHIBIT INDEX

Exhibit Number	Description	Incorporated By Reference To
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
3(iii)	Certificate of Designation of Series A Junior Participating Preferred Stock	Exhibit 3.2 of our Registration Statement on Form 8-A, filed with the commission on July 11, 2006

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Exhibit Number	Description	Incorporated By Reference To
4.1	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
4.2	Form of Common Stock Certificate for Cardium Therapeutics, Inc.	Exhibit 4.5 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, filed with the commission on March 31, 2006
4.3	Form of Rights Agreement dated as of July 10, 2006, between Cardium Therapeutics, Inc. and Computershare Trust Company, Inc., as Rights Agent	Exhibit 4.1 of our Registration Statement on Form 8-A, filed with the commission on July 11, 2006
4.4	Form of Rights Certificate	Exhibit 4.2 of our Registration Statement on Form 8-A, filed with the commission on July 11, 2006
4.5	Form of Warrant issued to purchasers in 2007 private financing	Exhibit 4.1 of our Current Report on Form 8-K dated March 6, 2007, filed with the commission on March 6, 2007
4.6	Form of Warrant issued to Oppenheimer & Co. Inc. as Placement Agent in 2007 private financing	Exhibit 4.7 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007
4.7	Form of Warrant issued to purchasers in January 2008 registered direct offering	Exhibit 4.1 of our Current Report on Form 8-K dated January 30, 2008, filed with the commission on January 31, 2008
4.8	Form of Warrant issued to purchasers in June 2008 registered direct offering	Exhibit 4.1 of our Current Report on Form 8-K dated June 27, 2008, filed with the commission on June 30, 2008
4.9	Form of Warrant issued to Empire Asset Management Company in June 2008 registered direct offering	Exhibit 4.2 of our Current Report on Form 8-K dated June 27, 2008, filed with the commission on June 30, 2008
4.10	Form of Warrant issued to purchasers in July 2008 registered direct offering	Exhibit 4.1 of our Current Report on Form 8-K dated July 18, 2008, filed with the commission on July 21, 2008
4.11	Form of Warrant issued to Empire Asset Management Company in July 2008 registered direct offering	Exhibit 4.2 of our Current Report on Form 8-K dated July 18, 2008, filed with the commission on July 21, 2008
4.12	Form of Senior Secured Promissory Note issued to investors in the November 2008 debt financing	Exhibit 4.1 of our Current Report on Form 8-K dated November 5, 2008, filed with the commission on November 13, 2008
4.13	Form of Common Stock Purchase Warrant issued to investors and the placement agent in the November 2008 debt financing	Exhibit 4.2 of our Current Report on Form 8-K dated November 5, 2008, filed with the commission on November 13, 2008
4.14	Convertible Promissory Note dated February 23, 2009 made by Cardium for the benefit of TRC Royalty Company, LLC in the principal amount of $500,000	Exhibit 4.1 of our Current Report on Form 8-K dated February 23, 2009, filed with the commission on February 26, 2009

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Exhibit Number	Description	Incorporated By Reference To
4.15	Form of Senior Subordinated Secured Promissory Note issued to investors in the February 2009 debt financing	Exhibit 4.1 of our Current Report on Form 8-K dated February 27, 2009, filed with the commission on March 5, 2009
4.16	Form of Common Stock Purchase Warrant issued to investors and the placement agent in the February 2009 debt financing	Exhibit 4.2 of our Current Report on Form 8-K dated February 27, 2009, filed with the commission on March 5, 2009
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
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

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Exhibit Number	Description	Incorporated By Reference To
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	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
10.13	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
10.14	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
10.15	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
10.17	Master License Agreement effective as of December 1, 1999, by and between SurModics, Inc. and Innercool Therapies, Inc.	Exhibit 10.20 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, filed with the commission on March 31, 2006
10.18	Asset Purchase Agreement dated as of August 11, 2006, by and among Cardium Therapeutics, Inc., Cardium Biologics, Inc. (a Delaware corporation), and Tissue Repair Company (a Delaware corporation)	Exhibit 10.26 of our Current Report on Form 8-K dated August 11, 2006, filed with the commission on August 15, 2006
10.19	Office Lease dated as of September 16, 2006 and commencing on January 20, 2007, by and between Cardium Therapeutics, Inc. and Jaguar Properties, L.L.C.	Exhibit 10.30 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007
10.20	Michigan License agreement between the Regents of the University of Michigan and Matrigen, Inc. dated July 13, 1995	Exhibit 10.33 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007
10.21	Amendment to License agreement between the Regents of the University of Michigan and Matrigen, Inc. dated August 10, 1995	Exhibit 10.34 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007

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Exhibit Number	Description	Incorporated By Reference To
10.22	Second Amendment to the Michigan License agreement between the Regents of the University of Michigan and Selective Genetics, Inc. dated February 1, 2004	Exhibit 10.35 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007
10.23	Third Amendment to Michigan License Agreement between the Regents of the University of Michigan, and Tissue Repair Company, and Cardium Biologics Inc. dated August 10, 2006	Exhibit 10.36 of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2006, filed with the commission on March 15, 2007
10.24	First Amendment dated March 16, 2007 to Employment Agreement dated as of October 20, 2005 by and between Aries Ventures Inc. and Christopher Reinhard*	Exhibit 10.38 of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, filed with the commission on May 15, 2007.
10.25	First Amendment dated March 16, 2007 to Employment Agreement dated as of October 20, 2005 by and between Aries Ventures Inc. and Tyler Dylan*	Exhibit 10.39 of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, filed with the commission on May 15, 2007.
10.26	Form of Warrant issued to Life Sciences Capital LLC	Exhibit 10.42 of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, filed with the commission on November 14, 2007
10.27	Office Lease by and between Paseo Del Mar CA LLC and Cardium Therapeutics, Inc., effective as of November 19, 2007	Exhibit 10.43 of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, filed with the commission on November 14, 2007
10.28	Form of Securities Purchase Agreement dated January 30, 2008, by and between Cardium Therapeutics, Inc. and each purchaser in the January 2008 registered direct offering (an agreement on substantially this form was signed by each purchaser in the offering)	Exhibit 10.1 of our Current Report on Form 8-K dated January 30, 2008, filed with the commission on January 31, 2008
10.29	Form of Securities Purchase Agreement dated June 27, 2008, by and between Cardium Therapeutics, Inc. and each purchaser in the June 2008 registered direct offering (an agreement on substantially this form was signed by each purchaser in the offering)	Exhibit 10.1 of our Current Report on Form 8-K dated June 27, 2008, filed with the commission on June 30, 2008
10.30	Form of Securities Purchase Agreement dated July 18, 2008, by and between Cardium Therapeutics, Inc. and each purchaser in the July 2008 registered direct offering (an agreement on substantially this form was signed by each purchaser in the offering)	Exhibit 10.1 of our Current Report on Form 8-K dated July 18, 2008, filed with the commission on July 21, 2008
10.31	Form of Note and Warrant Purchase Agreement, dated as of November 5, 2008, by and among Cardium, Innercool Therapeis, Inc., Tissue Repair Company and each investor in the November 2008 debt financing	Exhibit 10.1 of our Current Report on Form 8-K dated November 5, 2008, filed with the commission on November 13, 2008

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Exhibit Number	Description	Incorporated By Reference To
10.32	Security Agreement dated as of November 5, 2008, by and among Cardium, Innercool Therapies, Inc., Tissue Repair Company and Robert Marvin as collateral agent	Exhibit 10.2 of our Current Report on Form 8-K dated November 5, 2008, filed with the commission on November 13, 2008
10.33	Form of Note and Warrant Purchase Agreement, dated as of February 27, 2009, by and among Cardium, Innercool Therapeis, Inc., Tissue Repair Company and each investor in the February 2009 debt financing	Exhibit 10.1 of our Current Report on Form 8-K dated February 27, 2009, filed with the commission on March 5, 2009
10.34	Security Agreement dated as of February 27, 2009, by and among Cardium, Innercool Therapies, Inc., Tissue Repair Company and Dr. Robert Marshall as collateral agent	Exhibit 10.2 of our Current Report on Form 8-K dated February 27, 2009, filed with the commission on March 5, 2009
10.35	Placement Agency Agreement dated February 27, 2009, by and among Cardium, Innercool Therapies, Inc., Tissue Repair Company and Empire Asset Management Company	Exhibit 10.3 of our Current Report on Form 8-K dated February 27, 2009, filed with the commission on March 5, 2009
21	Subsidiaries of Cardium Therapeutics, Inc.	Filed herewith
23.1	Consent of Marcum & Kliegman LLP	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.

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SIGNATURES

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

Date: March 26, 2009

CARDIUM THERAPEUTICS, INC.

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

Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, 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 **(Christopher J. Reinhard)**	Chief Executive Officer and Chairman of the Board of Directors (principal executive officer)	March 26, 2009
/s/ DENNIS M. MULROY **(Dennis M. Mulroy)**	Chief Financial Officer (principal financial officer and principal accounting officer)	March 26, 2009
/s/ TYLER M. DYLAN **(Tyler M. Dylan)**	Director	March 26, 2009
/s/ EDWARD W. GABRIELSON **(Edward W. Gabrielson)**	Director	March 26, 2009
/s/ MURRAY H. HUTCHISON **(Murray H. Hutchison)**	Director	March 26, 2009
/s/ ANDREW M. LEITCH	Director	March 26, 2009

(Andrew M. Leitch)		
/s/ GERALD J. LEWIS	Director	March 26, 2009
(Gerald J. Lewis)		
/s/ LON E. OTREMBA	Director	March 26, 2009
(Lon E. Otremba)		