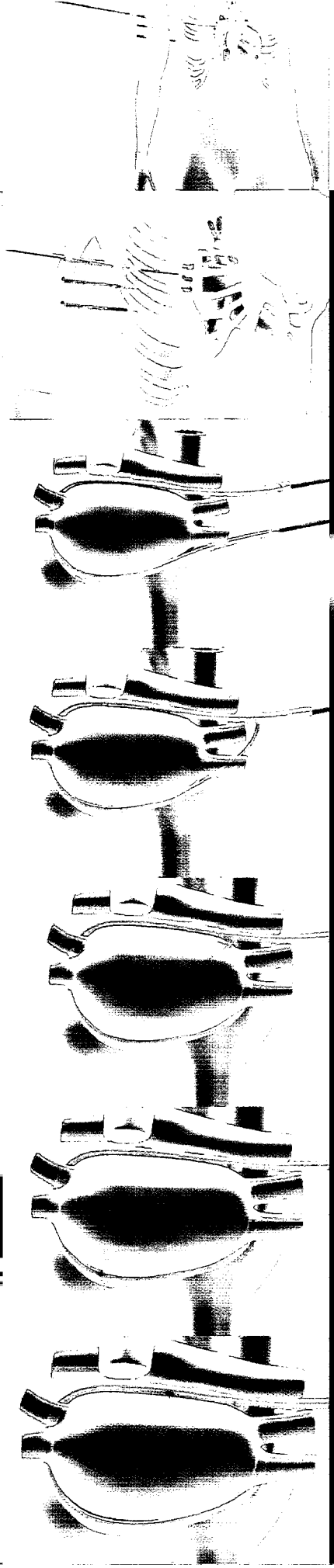
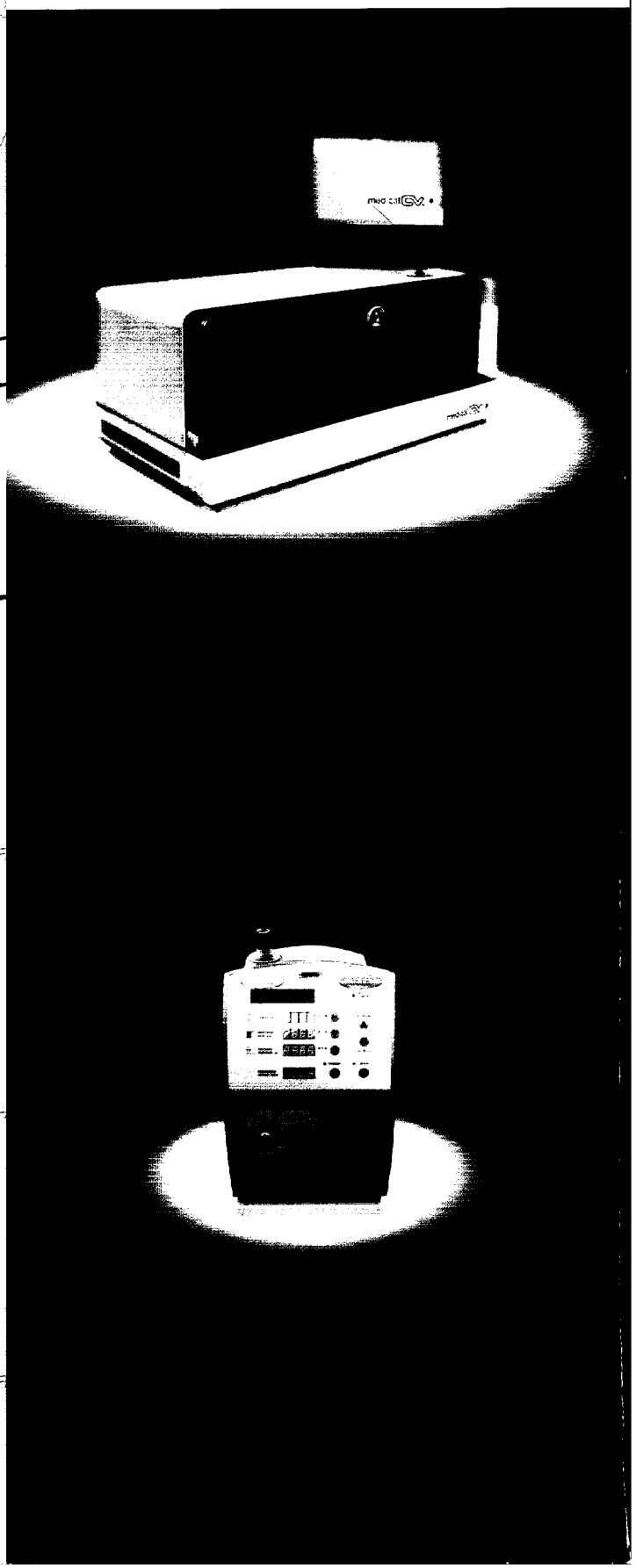
2006 Annual Report

MedicalCV, Inc.

Minimally Invasive Cardiac Ablation System





Dear Shareholders:

As I outlined to you in last year's letter, we repopulated management with new personnel, right-sized the company, exited the valve business, and refocused our efforts on developing a closed-chest, beating heart approach to treating atrial fibrillation (AF). I am pleased to say that we are focused and well positioned to enter a market that we believe represents one of the largest unmet clinical needs in cardiovascular medicine today.

At last year's annual meeting, I committed to focus the company's efforts on the following four key objectives. First, we would seek to extend the use of our existing AtriLaze™ System in concomitant cases to build a strong body of data demonstrating the efficacy of our laser technology for cardiac tissue ablation. Second, we would continue to finalize the development of our minimally invasive system in preparation for clinical adoption, data collection, and market development activity. Third, we would build on both established and new relationships with prominent cardiovascular surgeons and electrophysiologists throughout the country. Last, we would continue our efforts to broaden investor participation with an emphasis on increasing the liquidity and market value of our stock.

I'm pleased to report that, during the last year, we made significant strides on all four key objectives and more.

Extending Use of Existing Technology

During the last year, we completed an additional 16 human cases using our existing AtriLaze System. In October 2005, we received 510(k) clearance from the FDA for our malleable (Gen 2) AtriLaze System. In April 2006, we received 510(k) clearance from the FDA expanding our AtriLaze System laser platform.

Development of Minimally Invasive System

In addition to achieving the foregoing milestones with our existing technology, we debuted our minimally invasive system in April 2006 and completed development of the first generation minimally invasive system in the first half of calendar year 2006. We conducted numerous minimally invasive animal studies and submitted data for publication. In May 2006, we submitted an application for 510(k) clearance of our minimally invasive (Gen 3) AtriLaze System.

Building on Relationships

We continued to strengthen the company by adding experienced human capital to our Board of Directors, Scientific Advisory Board, and management team. We held our first annual Scientific Advisory Board meeting and added a key electrophysiologist to such board in the third quarter of calendar year 2005. And, in expectation of the market launch of our minimally invasive system during the third quarter of calendar year 2006, we plan to hold our second annual Scientific Advisory Board meeting in conjunction with our initial training meeting at the end of September 2006.

Broadening Our Investor Base

In the third quarter of fiscal year 2006, we simplified our capital structure and, in doing so, increased our cash position to fund our development. In particular, we executed preferred stock acquisition agreements and warrant amendments. The exercise of such warrants increased our cash position approximately $6.4 million. In May 2006, we filed a registration statement for a public offering of our securities and effected a reverse stock split. Unfortunately, we experienced significant adverse market conditions at the time our offering was being marketed. We were not alone. Unable to sell the securities we sought to sell on acceptable terms, we withdrew our registration in the best interests of our shareholders. Given the circumstances we faced and our belief that the market's assessment was not reflective of our "true" value, we now believe that our impending minimally invasive product launch will enhance the market's receptivity to the MedicalCV story.

Looking Toward the Future

During the next twelve months, we seek to commercialize our minimally invasive system within key U.S. markets. We expect to execute physician training and market development activities and enhance physician relationships to bolster our market presence. We plan to collect registry-based data to demonstrate technical efficacy. And we anticipate continued development of next generation systems and ancillary tools to further simplify procedural technique.

On a personal note, I have never been more excited by the opportunity before the company and its shareholders as we prepare to launch a truly minimally invasive system having the real potential to address the needs and wants of those patients suffering from atrial fibrillation. I believe we have the right people, the right product, and the right plan to do what this team does best: drive new technology adoption in cardiac surgery.

On behalf of both our Board of Directors and management, I wish to thank you, the owners of this company, for your support, feedback, and confidence as we continue to our mission to establish MedicalCV as the leading player in the surgical atrial fibrillation market.

September 8, 2006

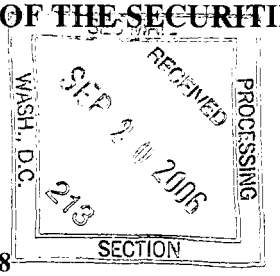
Marc P. Flores
President and Chief Executive Officer

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-KSB

☒ **ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED APRIL 30, 2006**

☐ **TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**



Commission File Number 000-33295

MedicalCV, Inc.
(Name of Small Business Issuer in Its Charter)

Minnesota	**41-1717208**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
9725 South Robert Trail, Inver Grove Heights, Minnesota	**55077**
(Address of Principal Executive Offices)	(Zip Code)

(651) 452-3000
(Issuer's Telephone Number, Including Area Code)

Securities registered under Section 12(b) of the Exchange Act:
None

Securities registered under Section 12(g) of the Exchange Act:
Common Stock ($0.01 par value)

(Title of Class)

Check whether the issuer is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. ☐

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

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

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

The issuer's revenues for its most recent fiscal year were $338,333.

The aggregate market value of the common equity held by non-affiliates of the issuer as of June 26, 2006, was $14,427,119, based upon the last sale price of one share on such date.

As of June 26, 2006, the issuer had outstanding 9,122,938 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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PART I

ITEM 1 DESCRIPTION OF BUSINESS

The following discussion contains various forward-looking statements within the meaning of Section 21E of the Exchange Act. Although we believe that, in making any such statement, our expectations are based on reasonable assumptions, any such statement may be influenced by factors that could cause actual outcomes and results to be materially different from those projected. When used in the following discussion, the words "anticipates," "believes," "expects," "intends," "plans," "estimates" and similar expressions, as they relate to us or our management, are intended to identify such forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from those anticipated. Factors that could cause actual results to differ materially from those anticipated, certain of which are beyond our control, include those discussed in our Cautionary Statement as well as those discussed elsewhere in this document.

Our actual results, performance or achievements could differ materially from those expressed in, or implied by, forward-looking statements. Accordingly, we cannot be certain that any of the events anticipated by forward-looking statements will occur or, if any of them do occur, what impact they will have on us. We caution you to keep in mind the cautions and risks described in our Cautionary Statement and to refrain from attributing undue certainty to any forward-looking statements, which speak only as of the date of the document in which they appear.

Overview

Our ATRILAZE system utilizes laser energy in cardiac tissue ablation procedures in open-heart surgery. We acquired the initial technology in August 2003 and we have developed several generations of products beyond the initial technology purchase. We received FDA 510(k) clearances for the first generation product in November 2004 and the second generation product in October 2005. In addition, we received a third 510(k) clearance in April 2006 which covered an additional laser wavelength.

The ATRILAZE system with its laser technology platform is currently being utilized to ablate cardiac tissue concomitantly, or in conjunction, with open-heart surgical procedures. Our strategy is to leverage our laser technology to develop a stand-alone, minimally invasive treatment for atrial fibrillation, or AF. We define a minimally invasive treatment as being one in which the procedure is performed on a beating heart in a closed-chest setting. We submitted an application for FDA 510(k) clearance of our minimally invasive system in May 2006 and expect to introduce this system for commercial use in the second half of 2006.

AF is the most commonly occurring cardiac arrhythmia. AF is an erratic heartbeat that causes the atria to contract rapidly and ineffectively and is associated with abnormal electrical impulses that alter a patient's normal cardiac function. AF reduces cardiac output, is a major precursor to congestive heart failure, and is associated with an increased incidence of stroke. Patients afflicted with AF are five times more likely to suffer a stroke and are more likely to suffer increased mortality at an earlier age. According to the Framingham Study published in 2004, one in four people over 40 years of age in United States has a lifetime risk of developing AF and the incidence of AF increases with age. More than 5.0 million people worldwide are afflicted with AF. Of the approximately 5.0 million, approximately 2.5 million Americans are afflicted with AF, with more than 200,000 new diagnoses each year. The annual market for open-chest surgical AF procedures is expected to reach $190 million to $250 million. The projected annual market for stand-alone, minimally invasive AF surgical procedures is expected to reach $2.1 billion.

We have begun supplying our current product, the ATRILAZE system, a hand-held wand, to select centers for surgical ablation in concomitant open-heart procedures to increase surgeon exposure to our products. We do not expect significant revenue until we introduce our ATRILAZE minimally invasive system.

MedicalCV, Inc. was incorporated in Minnesota on March 30, 1992, under the name CV Dynamics, Inc.

AF Treatment Options

There are currently four primary treatment modalities for AF with a wide range of success and morbidity rates.

- *Drugs*—As a first line of treatment, patients typically receive drug therapy to prevent blood clots, control heart rate and restore the heart rhythm. These drugs are often ineffective, not well tolerated and may be associated with significant side effects. For these reasons, drug therapy for AF fails for up to 50% of patients within one year and 60% of patients within two years.
- *Implantable Devices*—Implantable devices, such as defibrillators and pacemakers, can be effective in reducing the symptoms and number of AF episodes, but neither device is intended to treat AF. Patients may continue to experience the adverse effects of AF as well as some of the symptoms, including dizziness and fatigue, because the AF continues.
- *Catheter-Based Treatment*—Catheter-based AF treatments are technically challenging, can be associated with serious complications and yield inconsistent results. In proportion to the prevalence of AF, only a small number of catheter-based AF treatments are performed each year in the United States.
- *Surgery*—There are two types of surgical approaches to treating AF. These procedures are frequently done concomitantly with mitral valve or coronary artery bypass surgery:
  - *Classic Maze Procedure*—The standard for curative treatment of atrial fibrillation is known as the classic Maze procedure. This is a maximally invasive procedure that is routinely done concomitantly and requires cracking the sternum, opening the patient's chest, placing the patient on the heart-lung machine, stopping the heart, disassembling, and finally reassembling the atrial chambers of the heart. This is done to create lesion lines using the surgeon's scalpel to interrupt the erratic electrical impulses that cause AF. This procedure has a success rate of approximately 90 percent, but is a technically difficult and time-consuming procedure. The postoperative recovery times are long, and the morbidity and mortality risks of this procedure are significant.
  - *Modified Maze Procedure*—Because of the significant technical challenges associated with the classic Maze procedure, modifications were developed. These involved using ablation techniques rather than a scalpel to achieve lesion transmurality, or full-thickness necrosis, in the target tissue. These technologies, however, have been designed to facilitate ablation mainly in the open-chest setting.

Minimally Invasive Cardiovascular Surgery—Stand-Alone Procedure

During the last several years, newer minimally invasive cardiac surgery techniques have gained momentum as they have been proven to lower costs, reduce patient trauma and provide better outcomes. We believe that these techniques are being used more frequently and represent one of the fastest growing segments within the cardiovascular surgery market. Closed-chest procedures are done utilizing thoracoscopic and/or robotic techniques that allow the cardiovascular surgeon access through ports. This technology allows the cardiovascular surgeon's hands to be placed inside the patient's closed chest cavity through instrumentation and to view the cardiac anatomy as in an open-chest setting. Because of cardiac surgeons' growing familiarity with these techniques outside of the AF space, we believe there are significant opportunities in minimally invasive AF treatments. We believe MedicalCV's technology is ideal

for the minimally invasive setting because of the size and flexibility of the optical fiber and its delivery system.

We began providing the ATRILAZE system, which includes a hand-held wand, to surgeons in January 2005 to help validate the use of laser in ablation. We intend to compete in the market by leveraging laser technology in developing a stand-alone, minimally invasive system for ablating cardiac tissue.

Alternative Energy Sources for Surgical Ablation

A number of energy sources are currently used to ablate cardiac tissue in an open-chest, modified Maze procedure. These energy sources are used to create transmural lesions which prevent the abnormal electrical impulses that cause AF.

- *Cryothermy*—also referred to as cryoenergy or "cryo." This type of energy uses either a catheter or hand-held probe to ablate cardiac tissue by freezing at extreme temperatures of up to negative 60°C.
- *Radiofrequency*—Monopolar—also referred to as RF. This type of energy uses either a catheter or hand-held probe or pen to ablate cardiac tissue by using heat from radio waves.
- *Radiofrequency*—Bipolar—also referred to as Bipolar RF. This type of energy uses a hand-held clamp device with two poles to ablate cardiac tissue by using heat from radio waves.
- *Microwave*—This type of energy uses either a catheter or hand-held probe to ablate cardiac tissue by using heat from microwave.
- *Ultrasound*—sometimes referred to as high-intensity focused ultrasound, or HIFU. This type of energy uses either a catheter or hand-held probe to ablate cardiac tissue by using heat from ultrasonic energy.
- *Laser*—also referred to as light energy or photocoagulation. This type of energy functions at varying wavelengths and uses either a catheter or hand-held device to ablate cardiac tissue by using absorptive heating.

There is currently an interest among both hospitals and physicians to use minimally invasive procedures. While the systems that utilize these energy sources have achieved some acceptance in open-chest concomitant procedures, we believe current systems do not address the needs of the minimally invasive market because of either design or performance limitations. In part, this is because most of these systems were not specifically designed for minimally invasive applications, but rather modified in an attempt to adapt them for that application.

Laser technology has a long history of use in numerous surgical procedures. Laser devices are valued for their coherent energy source which can create precise tissue ablations. Different wavelength lasers can be selected depending on the desired depth of penetration and absorption characteristics of the target and surrounding tissues. Many cardiovascular surgeons are already comfortable with laser devices, using them to bore small holes in the heart to achieve transmyocardial revascularization for patients with persistent angina. The small diameter and flexibility of the laser fiber make it possible to design a low-profile device that can be introduced into the body through a minimally invasive access port.

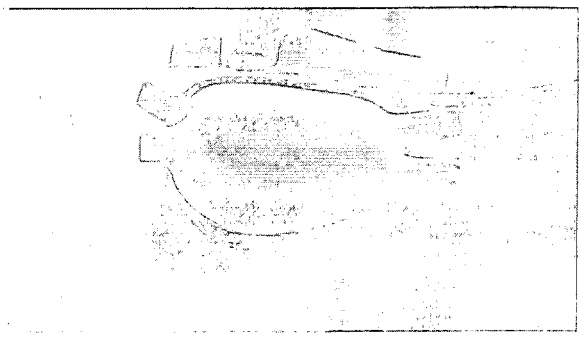
In contrast, other devices, because they were designed for open-chest procedures, require large incisions or use energy sources that are not ideal for the creation of transmural lesions in a closed-chest, beating heart setting.

Expenses related to research and development services were $3,471,241 for the fiscal year ended April 30, 2006, compared to $1,581,016 for the fiscal year ended April 30, 2005. Research and development

services include expenses we previously referred to as research and development expenses and engineering and regulatory expenses.

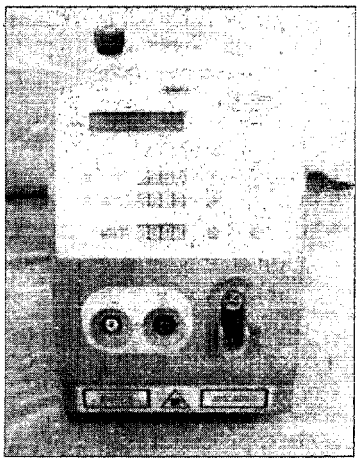
MedicalCV's ATRILAZE Minimally Invasive Solution

MedicalCV's ATRILAZE minimally invasive system is specifically designed to enable access to and ablation of cardiac tissue for the potential treatment of AF in a closed-chest beating heart. We expect that the ablation procedure would be completed in one to two hours under general anesthesia. The surgeon would access the patient's heart through three approximately 1 cm incisions, thread a unidirectional laser guide through the incisions and position it around the pulmonary veins. As shown in the figure below, once the guide is in place, the surgeon initiates the ablation sequence, which lasts no more than 15 minutes. MedicalCV's system is pre-programmed and automatically navigates the laser energy around the heart delivering precise ablation—minimizing the potential for surgeon error. Once the ablation is complete, the guide is removed and the approximately 1 cm incisions are closed. Because this treatment will be minimally invasive, we anticipate patients should experience significantly less pain and shorter recovery time than they would in open-chest procedures.

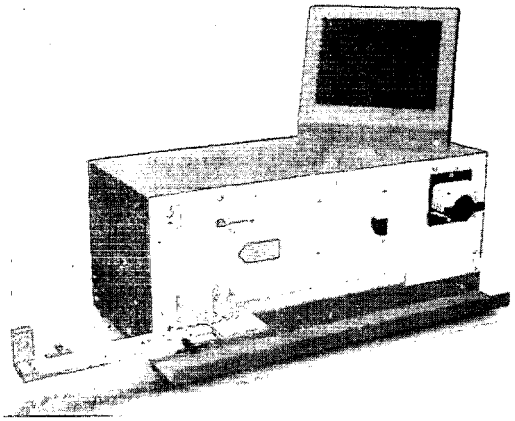


ATRILAZE Minimally Invasive Application

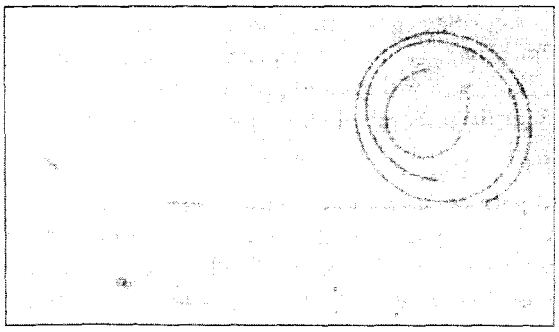
There are three main components of our minimally invasive system including the laser, the controller, and the disposable kit that contains the delivery system with unidirectional laser guide.



ATRILAZE Laser



ATRILAZE Controller



ATRILAZE Delivery System with
unidirectional laser guide

We believe MedicalCV's minimally invasive surgical ablation system has significant clinical advantages:

Feature	Benefit	Advantage
Submillimeter Fiber Optic	Allows for miniaturization of delivery device	Facilitates closed-chest treatment
Coherent Energy	Allows for surgical precision and provides transmurality	Limits collateral damage and delivers effective lesion on beating heart
Ideal Wavelength	Provides deep tissue penetration and scatters when contacts blood	Increases efficacy and safety
Smart Automated Ablation	Delivers rapid and consistent ablation to tissue	Minimizes the potential for surgeon error

The MedicalCV Strategy

MedicalCV intends to compete in the cardiac tissue ablation market by introducing products which it believes are ideally designed for stand-alone, minimally invasive surgical procedures. The key elements of this strategy are:

- **Capitalize on the potentially large atrial fibrillation market.** The AF market is one of the fastest growing segments in cardiovascular surgery and interventional cardiology. MedicalCV's minimally invasive system allows the surgeon to achieve a high quality transmural lesion by mimicking the classic Maze procedure. The similarity of the laser to the surgical scalpel provides precise, transmural lesions. We believe that this will lead to rapid acceptance of our system as providing stand-alone, minimally invasive cardiac tissue ablation.
- **Focus on leading surgeons to drive initial market acceptance.** We will first focus our efforts on surgeons who have active open-heart practices and who are considered to be opinion leaders in minimally invasive cardiovascular surgical techniques. As these leading surgeons incorporate our minimally invasive system into their standard practices, we believe they will help accelerate broader awareness within the medical community through peer communication, the presentation of results at surgical conferences and the publication of results in leading surgical and medical journals. We plan to educate, inform and heighten awareness as we further develop the market for a stand-alone, minimally invasive system.

- **Continue to penetrate the cardiac tissue ablation and atrial fibrillation markets using a dedicated sales team.** We intend to leverage the extensive cardiac experience of our dedicated sales team to leverage key cardiovascular relationships and provide effective customer assistance to accelerate market definition and adoption, thereby increasing the penetration of our cardiac tissue ablation systems.
- **Educate physicians and patients about our minimally invasive system.** We believe education of physicians and patients regarding the benefits of laser ablation is critical to the successful adoption of our minimally invasive system. We intend to develop cardiovascular surgeon and electrophysiologist training and education programs which will emphasize the clinical efficacy and ease of use of our minimally invasive system. We also intend to develop patient-oriented marketing materials for cardiovascular surgeons and hospitals to use to inform patients of the availability and potential benefits of our minimally invasive system.
- **Conduct clinical studies to support our market initiatives.** We intend to create a clinical registry in our initial centers. We will also be conducting additional studies to support the efficacy of our ablation systems. We intend to initiate a pre-clinical study after the clearance by the FDA of our minimally invasive system. This study will be designed to pursue expanded labeling for the specific indication of AF. We expect to initiate the study in fiscal year 2008. We believe the results of this and other studies, if successful, will allow us to expand our marketing and clinical sales efforts.

Regulatory Clearance

Our ATRILAZE system has received three 510(k) clearances:

- In November 2004, our hand-held wand received 510(k) clearance for delivery of laser light to soft tissue, including cardiac tissue, during surgical procedures. Indications include the incision, excision, dissection, vaporization, ablation, or coagulation of soft tissue.
- In October 2005, our malleable hand-held wand received 510(k) clearance for delivery of laser light to soft tissue, including cardiac tissue, during surgical procedures with the same indications, including the incision, excision, dissection, vaporization, ablation, or coagulation of soft tissue.
- In April 2006, both hand-held devices were the subject of a third 510(k) clearance allowing for the expansion of our laser base platform by the addition of a second wavelength.

In May 2006, we filed an application for 510(k) clearance for our minimally invasive system. We expect to introduce this system for commercial use in the second half of 2006.

Sales and Marketing

In the United States, we plan to market the ATRILAZE minimally invasive system through a specialized, direct sales organization. In expectation of a commercial launch of our minimally invasive system during the second half of 2006, we have hired a Vice President of Sales, a Vice President of Marketing, and a Clinical Specialist. In addition to supporting our current efforts, this team will be responsible for the hiring and training of our sales organization. We expect to initially focus on cardiovascular surgeons who have active open heart practices and are considered to be opinion leaders in minimally invasive surgical techniques, and on hospitals with well-established cardiovascular programs. Over time, we expect to expand our sales and marketing organizations to service a broader group of potential customers. In addition, we intend to build patient awareness through partnerships with cardiovascular surgeons, their cardiac services partners, and hospitals. Outside the United States, we intend to develop a network of distributors to assist in our international sales and marketing efforts.

Manufacturing

The minimally invasive system has been designed internally. We expect that the assembly of the disposable system components and quality control will also take place internally. The manufacture of the hardware system components will be outsourced to qualified vendors. Product sterilization and related testing will also be outsourced to qualified vendors.

Intellectual Property

We intend to aggressively document and protect our intellectual property by obtaining U.S. and foreign patents to protect technology important to the development of our business. We have filed 14 U.S. non-provisional patent applications, one provisional U.S. patent application, one international patent application and one European patent application, relating to products we have designed for use in treating AF. Obtaining patent protection for our products will be critical to our commercial success. We regularly conduct searches of third party patents. This includes a review of patents owned by third parties and patent applications pending known to us as attempting to address treatment of atrial fibrillation using a laser to ablate cardiac tissue. We regularly search publicly available records for relevant patents assigned to other companies. During the course of these searches, we identified two issued patents in our field relating to the use of laser technology for which we deemed it advisable to seek the advice of patent counsel. Based upon advice from our patent counsel, we believe that the sale and use of our cardiac tissue ablation systems using infrared laser energy would not infringe any valid claim of these patents.

We cannot assure you that any patents issued to us will be valid, enforceable or otherwise be of value to us in relation to products of our competitors or the market in general, or that any patent for which we have applied or may apply will issue.

In April 2005, we received a letter from Edwards Lifesciences, LLC ("Edwards") concerning our ATRILAZE system, which is the subject of some of our patent applications. Edwards did not claim that our products infringe any of its patents. Edwards' letter called to our attention six of its patents and requested us to comment on how our products differ from the claimed methods and apparatus of the six specified Edwards patents. We reviewed the specified Edwards' patents and discussed them with our patent counsel, and believe that our cardiac ablation systems do not infringe any of these patents. In response to a further inquiry from Edwards on May 25, 2006, we responded through patent counsel outlining our position on at least one of the Edwards' patents. While Edwards did not claim in its letter that our products infringe its patents, it is likely that in the future, Edwards or others will continue to inquire regarding our products and patents and possibly make intellectual property claims relating to our tissue ablation devices. Our defense of any claims made by Edwards, or of any other intellectual property claims made in the future, regardless of the merits of such claims, could divert the attention of our technical and management personnel away from developing and marketing our products for significant periods of time. Further, the cost incurred to defend such claims could be substantial and adversely affect us, even if we are ultimately successful in defending such claims. An adverse determination in connection with any of such claims in the future could affect our ability to sell our products, subject us to significant liabilities to third parties, or require us to modify our products to be non-infringing or seek licenses from third parties. There can be no assurance that we could be able to so modify our products or obtain licenses on satisfactory terms.

We also rely upon trade secrets and proprietary know-how. We require our technical employees and consultants to agree in writing to keep our proprietary information confidential and, with certain limitations, to assign all inventions relating to our business to us.

We have used, and therefore claim common law rights in, the following trademarks: GLIDETHRU, ULTRAPURE and ATRILAZE. We have filed an application for a U.S. federal registration for the mark: ATRILAZE. We also have a federal registration for the marks: MEDICALCV and OMNICARBON.

Competition

Our industry is highly competitive, subject to change, and significantly affected by new product introductions and other activities of industry participants. Many of our competitors have significantly greater financial and human resources than we do and have established reputations with our target customers, as well as worldwide distribution channels that are more established and developed than ours. Our primary competitors include AtriCure, Inc., Boston Scientific Corp., CryoCath Technologies, Inc., Edwards Lifesciences Corp., ESTECH, Inc., Medtronic, Inc., and St. Jude Medical, Inc. As of May 2006, no company had received FDA approval or clearance to market an ablation system for use as a treatment for AF in the United States. However, our competitors provide products that have been adopted by physicians for the off-label treatment of AF.

We and many of our competitors have developed surgical ablation devices that have been used to treat AF concomitant with an open-heart surgical procedure. We and these competitors utilize different technologies as energy sources for their ablation devices, including cryothermy, radiofrequency, microwave, high-intensity focused ultrasound, and laser. Each of these companies is also currently working with its core technology to develop devices that can be used as a stand-alone therapy minimally invasive AF treatment.

Some of our competitors offer catheter-based treatments, including Boston Scientific Corp., Cardima, Inc., CryoCath Technologies, Inc., CryoCor, Inc., Johnson and Johnson, Inc., Medtronic, Inc., and St. Jude Medical, Inc. These companies sell products that are used by physicians to treat the population of patients that have AF, but are not candidates for open-heart surgery, which is the same group of patients that we believe would most benefit from stand-alone AF treatments using our minimally invasive system. Some of these catheter-based treatments already have FDA clearance or approval for cardiac use, including the treatment of certain arrhythmias, although none has approval for the treatment of AF.

We believe that once our ATRILAZE minimally invasive system is cleared pursuant to the FDA 510(k) process, we will compete favorably in the minimally invasive cardiac ablation market. Because of the size of the AF market and the unmet need for an AF cure, competitors have and will continue to dedicate significant resources to aggressively market their products. New products that could compete with us more effectively are likely because the surgical AF treatment market is characterized by extensive research efforts and technological progress.

Government Regulation

The medical devices we manufacture and market are subject to regulation by the FDA and, in most instances, by state and foreign authorities or their designated representatives. Under the U.S. Federal Food, Drug and Cosmetic Act and the regulations promulgated thereunder, as a manufacturer of medical devices, we must comply with policies and procedures that regulate the manufacturing, composition, labeling, testing, packaging and distribution of medical devices. In addition, medical devices are subject to different levels of government approval requirements, the most comprehensive of which requires the completion of an FDA approved clinical evaluation program and submission, and approval of a premarket approval application before a device may be commercially marketed. The FDA also conducts inspections before approving a premarket approval application to determine compliance with the quality system regulations which cover manufacturing and design.

After premarket approval is received, the FDA may require testing and surveillance programs to monitor the effectiveness of approved products which have been commercialized. It has the power to prevent or limit further marketing of a product based on the results of such post-marketing programs. In addition, the FDA may, at any time after the approval of a premarket approval application, conduct periodic inspections to determine compliance with good manufacturing practice regulations and current

medical device reporting regulations. If the FDA concludes that we are not in compliance with applicable laws or regulations, it can institute proceedings to:

- Seize our products;
- Require a product recall;
- Withdraw previously granted market clearances;
- Implement procedures to stop future violations; and/or
- Seek civil and criminal penalties against us.

The FDA also regulates recordkeeping for medical devices and reviews hospital and manufacturers' required reports of adverse experiences to identify potential problems with FDA-authorized devices.

Some of the products that we market, including our ATRILAZE system, can be cleared under Section 510(k) of the Federal Food, Drug and Cosmetic Act. Under Section 510(k) a new or significantly modified device must be shown to be "substantially equivalent" (SE) to an existing legally marketed device. The new/modified device can be commercially introduced after the filing of a 510(k) premarket application with the FDA and the subsequent issuance by FDA of a SE determination. The FDA has provided guidance documents to manufactures of devices governed by Section 510(k) whereby changes made to previously cleared devices can be evaluated by the manufacturer and a determination can be made as to the need to file an additional premarket application. We received Section 510(k) clearance for the first generation of our ATRILAZE system in November 2004 and the second generation product in October 2005. A third 510(k) clearance was received in April 2006. The process of obtaining Section 510(k) clearance typically requires less time and expense than the premarket approval process. Section 510(k) clearance normally takes from three to twelve months, but can take years, and generally requires the submission of supporting data, which in some cases can be extensive. In addition, the FDA may require review by an advisory panel as a condition for Section 510(k) clearance. We intend to rely on the Section 510(k) process with regard to future products that add to or enhance our current cardiac tissue ablation technology. However, we may develop or acquire technology that will require clearance under the FDA's lengthier and expensive premarket approval process, which can take a number of years and can require extensive supporting documentation. If we encounter difficulties in the premarket approval process, the commercial marketing of a product could be substantially delayed or prevented.

International sales of medical devices are also subject to extensive regulation. Foreign regulatory bodies have established varying regulations governing product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. Generally, the extent and complexity of the regulation of medical devices is increasing worldwide, with regulations in some countries already nearly as extensive as those in the U.S. This trend may continue, and the cost and time required to obtain marketing approval in any given country thus may increase. We cannot assure you that any foreign approvals will be allowed on a timely basis, or at all.

To market our products in countries of the European Union, we are required to obtain CE mark certification. CE mark certification is the international symbol of adherence to certain quality assurance standards and compliance with European medical device directives. We intend to apply for CE mark certification for our minimally invasive system product in fiscal year 2007.

Product Liability and Insurance

The development and sale of medical devices entails significant risk of product liability claims and, sometimes, product failure claims. We face an inherent business risk of financial exposure to product liability claims if the use of our products results in personal injury or death. We also face the possibility that defects in the design or the manufacturing of our products could necessitate a product recall. We have

not, to date, experienced significant product liability claims, and we have never had a product recall. We cannot assure you, however, that we will not experience losses in the future due to product liability claims or recalls.

If patients allege that the use of our cardiovascular surgery devices injured them, we may face substantial product liability claims. Substantial product liability litigation exists within the medical device industry. Our products are used in cardiovascular surgery, and their failure may result in patient injury or death. We have had product liability claims asserted against us in the past, which were resolved under our insurance coverage without significant financial cost to us. We cannot assure you, however, that future product liability claims will not exceed the limits of our insurance coverage or that such insurance will continue to be available to us on commercially reasonable terms, or at all. Consequently, a product liability claim or other claim with respect to uninsured liabilities, or in excess of insured liabilities, could have a material adverse effect on our business, financial condition, operating results and cash flows. In addition, adverse publicity resulting from product liability litigation may materially adversely affect us regardless of whether the claims are valid or whether we are liable. Furthermore, these claims would likely divert our financial and management resources that would otherwise be used to benefit the future performance of our operations.

We sold more than 50,000 mechanical heart valves between 1992 and 2005. We assume that a majority of the patients who received our heart valves are still alive. If any of these patients were to have a problem with a heart valve, they could assert claims for damages against us. In April 2005, we placed our product liability insurance with a new insurance carrier. Our new policy provides us with potential coverage for claims of up to $5,000,000 per occurrence and in the aggregate per policy year. Concurrently, we purchased a three-year extended reporting coverage endorsement from our former carrier, which was unwilling to renew our coverage on the previous terms. The extended reporting period coverage will allow us to seek coverage under the prior policy for products claims arising from occurrences which took place during such policy period but which were not asserted against us during the previous policy period.

In March 2005, we became aware that a patient who had been implanted with our heart valve had died. We have not received any claims related to this matter but believe that any such claim would be covered by our existing liability insurance. Based upon the expectation that insurance would cover the cost of any claims after our payment of the deductible, we do not expect the ultimate resolution of this matter to have a material effect on our business, financial condition, operating results or cash flows.

Employees

As of June 26, 2006, we had 23 full-time employees, including 12 who support or were in research and development, and the remainder of whom were in administration, regulatory and clinical, and sales and marketing. We are not a party to any collective bargaining agreement and believe that our relations with employees are good.

Executive Officers of the Registrant

The following table provides information with respect to our executive officers as of June 26, 2006. Each executive officer has been appointed to serve until his successor is duly appointed by the board or his earlier removal or resignation from office. Each executive officer's position with MedicalCV represents such person's principal occupation.

Name	Age	Position with MedicalCV	Director Since
Marc P. Flores	41	President, Chief Executive Officer and Director	2004
Adam L. Berman	31	Vice President, Research and Development	N/A
Eapen Chacko*.....	58	Vice President, Finance and Chief Financial Officer	N/A
Robert W. Clapp	56	Vice President, Operations	N/A
James E. Jeter.....	43	Vice President, Sales	N/A
John H. Jungbauer*..	57	Principal Financial Officer and Principal Accounting Officer	N/A
Dennis E. Steger.....	59	Vice President, Regulatory Affairs and Quality Assurance	N/A
Gary O. Tegan	39	Vice President, Marketing	N/A

* Mr. Chacko is expected to assume the roles of principal financial officer and principal accounting officer upon Mr. Jungbauer's resignation.

Marc P. Flores became our President, Chief Executive Officer and one of our directors in August 2004. Mr. Flores served as Vice President of Sales & Marketing of Coalescent Surgical, Inc., a company focused on developing advanced technology for blood vessel anastomoses, from March 2000 to August 2004. Prior to joining Coalescent, Mr. Flores was Western Regional Manager of Sales for CardioThoracic Systems, Inc. from June 1997 to March 2000. Before joining CardioThoracic Systems, he held a variety of management and sales positions with Boston Scientific Corporation, GE Medical Systems and Xerox Corporation.

Adam L. Berman joined MedicalCV in September 2004 as Vice President, Research and Development. Mr. Berman has extensive experience and relationships within the cardiac surgery industry. From July 2001 to August 2004, he was a regional sales manager for Coalescent Surgical, Inc. From August 1998 to June 2001, he was a regional development manager for Computer Motion, a company focused on robotic-assisted, minimally invasive approaches for surgery. Before joining Computer Motion, Mr. Berman held various clinical research positions within the field of cardiac surgery.

Eapen Chacko joined MedicalCV effective June 21, 2006, as Vice President, Finance and Chief Financial Officer. Mr. Chacko will assume the roles of principal financial officer and principal accounting officer upon the resignation of John H. Jungbauer. Mr. Chacko has over 30 years of experience in strategic planning, investor relations, equity research and economics. From September 2000 to May 2005, he was Chief Financial Officer of Possis Medical, Inc., a developer, marketer and manufacturer of medical devices for the endovascular treatment market. Mr. Chacko was Vice President for Investor and Public Relations, Corporate Communication at Possis from September 1999 to August 2000. From 1995 to 1999, he was Director of Investor Relations at Fingerhut Companies, a direct marketer and financial services company. Mr. Chacko is a director of Hawkins, Inc., a company that formulates, blends and distributes bulk and specialty chemicals. Mr. Chacko has been named, along with his former employer Possis Medical, Inc. and another officer of that company, as a defendant in a securities class action case entitled Crowell, et al. v. Possis Medical, Inc. et al., No. 05-CV-01084-JMR-FLN, originally filed on June 3, 2005 in the United States District Court for the District of Minnesota. The consolidated amended class action complaint alleges violations of Section 10(b) and Rule 10b-5 of the Exchange Act against all defendants and claims under Section 20(a) against the officer defendants, all arising out of alleged misstatements and omissions about that company's AngioJet product and clinical trials for that product.

Robert W. Clapp joined MedicalCV in August 2004 as Vice President, Operations. From March 1993 to August 2004, Mr. Clapp was Vice President of Manufacturing, Quality, and Research/Development for EMPI, where he developed and introduced many new products, improved manufacturing efficiencies and lowered manufacturing costs. From February 1987 to March 1993, he was Vice President of Manufacturing for Dacomed Corporation, where he helped introduce five new products into the marketplace in 18 months. Prior to that, Mr. Clapp held engineering and operations positions at Xerxes Corporation, Medtronic, Inc., Control Data Corporation and AMF Paragon Electric.

James E. Jeter joined MedicalCV in November 2005 as Vice President, Sales. Mr. Jeter most recently served as a Central States Region Manager for Medtronic, Inc. from August 2004 to November 2005, where he led a team charged with revenue growth across three product platforms: cardiac revascularization, atrial fibrillation and Coalescent anastomotic devices. From January 2001 to August 2004, Mr. Jeter was a Regional Sales Manager, then a Divisional Sales Manager, with Coalescent Surgical, Inc. tasked with starting and building the anastomotic device business for cardiac and vascular surgeons in the company's Central States Division. From July 1999 to January 2001, Mr. Jeter was a co-managing partner of Innovative Surgical Products. Previously, he held a series of positions, including Director of Sales, Cardiac Division, with the Genzyme Corporation.

John H. Jungbauer joined MedicalCV in February 2004 as Vice President, Finance and Chief Financial Officer. Mr. Jungbauer came to our company with more than 26 years of experience in financial management and long-range planning, international financial/treasury operations, information technology systems. From 1990 to 2002, Mr. Jungbauer was Vice President of Finance and Chief Financial Officer with ATS Medical, Inc. During 1988 and 1989, he was Executive Vice President of Titan Medical, Inc. From 1977 to 1987, he held several financial management positions at St. Jude Medical, Inc., including Vice President of Finance and Chief Financial Officer from 1981 to 1987. On April 6, 2006, Mr. Jungbauer announced his intention to resign from his executive officer position at our company. On June 21, 2006, Mr. Jungbauer's roles transitioned from Vice President, Finance and Chief Financial Officer to principal financial officer and principal accounting officer. Mr. Chacko will assume the roles of principal financial officer and principal accounting officer upon the resignation of Mr. Jungbauer. Further details regarding the anticipated effective date of Mr. Jungbauer's resignation are set forth below under "Executive Compensation—Employment Contracts and Termination of Employment, and Change-in-Control Arrangements."

Dennis E. Steger, Vice President, Regulatory Affairs and Quality Assurance, joined MedicalCV in September 2001 as Vice President, Quality Assurance. From August 1998 to August 2001, Mr. Steger was Director Design Quality Assurance for Medtronic Perfusion Systems, where he was responsible for controlling the development and transfer of new/modified products from research and development to manufacturing. He also held the position of Director Regulatory Affairs/Quality Assurance & Clinical for AVECOR Cardiovascular, Inc. from July 1991 to August 1998, where he was responsible for quality systems, technical support, risk analysis, documentation, and regulatory affairs. He has also held senior level management positions with Johnson & Johnson Cardiovascular, Extracorporeal Medical Specialties and Tompkins Rubber Company.

Gary O. Tegan, Vice President, Marketing, joined MedicalCV in April 2006. Most recently, Mr. Tegan served as the Vice President of Sales & Marketing for PneumRx, Inc. from September 2005 through April 2006, where he developed and implemented the company's sales and marketing strategy for its initial product launch. From June 2004 to September 2005, he served as Vice President of Marketing at Curon Medical, Inc., a radiofrequency energy based company focused on the treatment of gastrointestinal disorders. Prior to that, Mr. Tegan was the Director of Marketing for Coalescent Surgical, Inc. from June 2001 to June 2004, where he helped develop its anastomotic device business using technology-based marketing techniques. Previously, Mr. Tegan held a series of senior sales and marketing positions at United States Surgical and Starion Instruments.

ITEM 2 DESCRIPTION OF PROPERTY

We lease a 55,000 square foot production and administrative facility located in Inver Grove Heights, a suburb of Saint Paul, Minnesota. Our facility has approximately 8,000 square feet of general office space and more than 41,000 square feet of manufacturing space. Our facility is subject to inspection by the FDA and foreign regulatory agencies as part of their product marketing clearance and surveillance programs. In April 2003, we sold and leased back this facility in a refinancing transaction with PKM Properties, LLC ("PKM"), an entity controlled by Paul K. Miller, one of our directors and one of the largest beneficial owners of our securities. We simultaneously leased back our facility pursuant to a ten-year lease, with options to renew and an option to repurchase the facility. We continue to utilize the facility as we did prior to the financing transaction. See "Management's Discussion and Analysis or Plan of Operation" and the notes to our financial statements for the fiscal year ended April 30, 2006, for more information regarding such lease.

ITEM 3 LEGAL PROCEEDINGS

On March 9, 2006, J Giordano Securities LLC (d/b/a J Giordano Securities Group) ("JGSG") filed suit against our company in U.S. District Court, District of Connecticut. JGSG claims that it is entitled to damages due to an alleged breach of the engagement agreement, as amended, between us and JGSG. In particular, JGSG claims that the exercise of outstanding warrants for the purchase of common stock by certain JGSG-identified investors and our purchase of outstanding shares of 5% Series A Redeemable Convertible Preferred Stock from certain JGSG-identified investors in December 2005 and January 2006 entitle JGSG to damages no less than $1,431,769. In particular, JGSG seeks (a) $279,191 in cash commissions, (b) warrants for the purchase of 85,905 shares at $3.25 per share, (c) lost profits of $751,669 on the argument that JGSG would have exercised the foregoing warrant and sold 85,905 shares on December 30, 2005, at a price of $12.00 per share, and (d) the $400,909 in cash commissions we paid C.E. Unterberg, Towbin, LLC. JGSG also seeks reimbursement for reasonable expenses, interest, costs and attorneys' fees. In addition, JGSG notified us by letter dated May 26, 2006 that, pursuant to the agreement, it may claim compensation arising out of alleged rights to serve as a co-managing underwriter or member of the underwriting group of a proposed public offering set forth in the registration statement on Form SB-2 we filed with the Securities and Exchange Commission on May 19, 2006. We believe that this lawsuit is without merit and intend to vigorously defend ourselves against the lawsuit and any additional claims brought by JGSG.

ITEM 4 SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

PART II

ITEM 5. MARKET FOR COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND SMALL BUSINESS ISSUER PURCHASES OF EQUITY SECURITIES

Previously, units of our securities, consisting of common stock and Class A Warrants, traded on the OTC Bulletin Board, until the expiration of the Class A Warrant component of such units on November 20, 2004. Due to lack of market makers, our common stock did not trade between November 19, 2004 and December 20, 2004. Our common stock resumed trading on the OTC Bulletin Board under the symbol "MDCV" on December 21, 2004. Our common stock currently trades on the OTC Bulletin Board under the symbol "MCVI."

The following table sets forth the high and low bid prices as reported by the OTC Bulletin Board for our units and common stock, as applicable, for the periods indicated. Such quotations reflect inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions.

Period	High	Low
Fiscal Year 2005		
First Quarter	$20.50	$13.00
Second Quarter	$25.00	$ 7.50
Third Quarter	$15.10	$ 5.00
Fourth Quarter	$12.50	$ 5.70
Fiscal Year 2006		
First Quarter	$11.90	$ 6.50
Second Quarter	$10.00	$ 6.00
Third Quarter	$12.30	$ 5.30
Fourth Quarter	$13.60	$ 7.00

As of June 26, 2006, we had 241 shareholders of record and approximately 648 beneficial owners.

We have never declared or paid cash dividends on our common stock. We currently intend to retain future earnings, if any, to operate and expand our business, and we do not anticipate paying cash dividends on our common stock in the foreseeable future. Any payment of cash dividends in the future will be at the discretion of our board of directors and will depend upon our results of operations, earnings, capital requirements, contractual restrictions and other factors deemed relevant by our board.

See "Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters" in Item 11 for information regarding securities authorized for issuance under our equity compensation plans.

Sales of Unregistered Securities during the Fourth Quarter of Fiscal Year 2006

On March 22, 2006, Tower Finance, Ltd. ("Tower") exercised a portion of its warrant to purchase 37,214 units on a net exercise basis, resulting in the issuance of (a) 11,270 shares of our common stock and (b) a warrant to purchase 11,270 shares of our common stock, at an exercise price of $18.375 per share, which expires on April 30, 2009. Following this partial exercise, Tower retained a unit warrant to purchase 14,989 units, at an exercise price of $4.70 per unit, which also expires on April 30, 2009. Each unit consists of one share of common stock and one warrant to purchase one share of common stock at an exercise price of $18.375 per share.

On April 19, 2006, Tower exercised its warrant to purchase 14,989 units on a net exercise basis, resulting in the issuance of (a) 8,738 shares of our common stock and (b) a warrant to purchase 8,738 shares of our common stock, at an exercise price of $18.375 per share, which expires on April 30, 2009.

The foregoing issuances were made in reliance upon the exemption provided in Section 4(2) of the Securities Act. Certificates representing such securities contain restrictive legends preventing sale, transfer or other disposition, unless registered under the Securities Act. Except as set forth above, no discount or commission was paid in connection with the foregoing issuances.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our historical financial statements and related notes appearing elsewhere in this document. This discussion contains forward-looking statements that involve significant risks and uncertainties. As a result of many factors, such as those set forth in our Cautionary Statement and elsewhere in this document, our actual results may differ materially from those anticipated in these forward-looking statements. Also, see our Cautionary Statement for a discussion of the material risks and uncertainties applicable to our business.

Overview

Our ATRILAZE system utilizes laser energy in cardiac tissue ablation procedures in open-heart surgery. We acquired the initial technology in August 2003 and we have developed several generations of products beyond the initial technology purchase. We received FDA 510(k) clearances for the first generation product in November 2004 and the second generation product in October 2005. In addition, we received a third 510(k) clearance in April 2006 which covered an additional laser wavelength.

The ATRILAZE system with its laser technology platform is currently being utilized to ablate cardiac tissue concomitantly, or in conjunction, with open-heart surgical procedures. Our strategy is to leverage our laser technology to develop a stand-alone, minimally invasive treatment for atrial fibrillation, or AF. We define a minimally invasive treatment as being one in which the procedure is performed on a beating heart in a closed-chest setting. We submitted an application for FDA 510(k) clearance of our minimally invasive system in May 2006 and expect to introduce this system for commercial use in the second half of 2006.

We have begun supplying our current product, the ATRILAZE system, a hand-held wand, to select centers for surgical ablation in concomitant open-heart procedures to increase surgeon exposure to our products. We do not expect significant revenue until we introduce our ATRILAZE minimally invasive system.

Our company was incorporated in Minnesota on March 30, 1992, under the name CV Dynamics, Inc. In April 1992, we acquired all of the tangible and intangible assets of Omnicor, Inc. Omnicor resulted from the corporate and financial restructuring of a predecessor company called Medical Incorporated, which was organized in 1971 to develop and market the Lillehei-Kaster heart valve, licensed from the University of Minnesota.

Until November 2004, we developed and marketed mechanical heart valves known as the Omnicarbon® 3000 and 4000 heart valves. In November 2004, after an exhaustive evaluation of the heart valve business, we discontinued all heart valve related production. In April 2005, we announced that our efforts to find a buyer for the heart valve business had been unsuccessful and that we would stop selling heart valves and were exiting the heart valve business. At that time, we also determined to direct all of our resources to the development and introduction of products targeting the treatment of AF.

Reverse Split

On May 31, 2006, we effected a reverse stock split pursuant to which every ten shares of our common stock and every ten shares of our preferred stock were combined into one share of common stock and one share of preferred stock, respectively, without any change in the par value of the shares. Our authorized capital stock was reduced in like manner. No fractional shares were issued as a result of the reverse split, and any fractional share interests will be paid in cash. The reverse split was approved by our board of directors without shareholder approval in accordance with the requirements of Minnesota law. Historical share data presented herein gives retroactive effect to this reverse stock split.

Critical Accounting Policies

The preparation of our financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We believe our estimates and assumptions are reasonable; however, actual results and the timing of the recognition of such amounts could differ from those estimates. We have identified the following critical accounting policies and estimates utilized by management in the preparation of our financial statements: revenue recognition, inventory obsolescence, accounting for income taxes, and accounting for stock-based compensation. Actual amounts could differ significantly from management's estimates.

Revenue Recognition. We recognize revenue using guidance from SEC Staff Accounting Bulletin No. 104 "Revenue Recognition in Financial Statements." Revenue from the sale of our products is recognized provided that we have received a written order, the price is fixed, title has transferred, collection of the resulting receivable is probable and there are no remaining obligations. We did not generate any revenues related to our ATRILAZE system through the fiscal year ended April 30, 2006. All revenues for fiscal year 2006 and prior pertain only to our discontinued heart valve business and are reported as part of discontinued operations.

Inventory Obsolescence. In determining the appropriate carrying value of our inventories, management considers a number of factors, including the aging of our inventory, recent sales trends, industry market conditions and economic conditions. Although adjustments to the carrying value of our inventories reflect our best estimates, the estimates require a large degree of judgment. At April 30, 2005, the carrying value of our heart valve inventories reflected the cost of only the heart valves that we subsequently sold in May 2005. These inventories are reported as a component of our current assets of discontinued operations. All other inventories of the discontinued heart valve business have been reduced to a carrying value of zero.

Deferred Income Tax Assets. In assessing the realizability of our deferred tax assets, management considers whether it is more likely than not that our deferred income tax assets will be realized. The ultimate realization of deferred income tax assets is dependent on the generation of future taxable income, which must occur prior to the expiration of our net operating loss and credit carryforwards, which comprise the majority of the deferred tax assets. As of April 30, 2006, we had established a valuation allowance of $13,565,631 to fully offset our deferred tax assets due to uncertainty about generating sufficient future taxable income necessary to realize these deferred tax assets, particularly in light of our history of significant operating losses. In addition, future utilization of available net operating loss carryforwards may be limited under Internal Revenue Code Section 382 as a result of changes in ownership.

Stock-Based Compensation. We account for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and its interpretations whereby the difference between the exercise price and the fair value on the date of grant is recognized as compensation expense. Under the intrinsic value method of accounting, no compensation expense is recognized in our statement of operations when the exercise price of our employee/director stock option grants equals or is greater than the market price of the underlying common stock at the date of grant, and the measurement date of the option grant is certain. The measurement date is certain when the date of grant is fixed and determinable. Compensation cost for employee stock options is measured as the excess, if any, of the quoted market price of our stock at the date of grant over the amount that the employee is required to pay for the stock. Options issued to non-employees/non-directors are accounted for as required by Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation."

Recent Accounting Developments

In December 2004, the FASB issued SFAS No. 123R, "Share-Based Payment—an amendment of SFAS No. 123," which requires companies to recognize in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees. SFAS No. 123R is effective for companies filing under SEC Regulation S-B as of the beginning of the first interim or annual reporting period of the first fiscal year that begins after December 15, 2005, which for us will be the first quarter of our fiscal year ending April 30, 2007. We will use the modified prospective application method. Under the modified prospective application method, awards that are granted, modified or settled after the date of adoption will be measured and accounted for in accordance with SFAS No. 123R. Compensation costs for awards granted prior to, but not vested, as of the date SFAS No. 123R is adopted would be based on grant date attributes similar to those originally used to value those awards for the proforma purposes under SFAS No. 123. We are in the process of evaluating the impact of the adoption of SFAS No. 123R.

In March 2005, the SEC released SAB No. 107, "Share-Based Payments." The interpretations in SAB No. 107 express views of the SEC staff regarding the interaction between SFAS No. 123R and certain SEC rules and regulations, and provide the staff's views regarding the valuation of share-based payment arrangements for public companies. In particular, SAB No. 107 provides guidance related to share-based payment transactions with non-employees, valuation methods (included assumptions such as expected volatility and expected term), the classification of compensation expense, non-GAAP financial measures, first-time adoption of SFAS No. 123R in an interim period, capitalization of compensation costs related to share-based payment arrangements, accounting for income tax effects of share-based payment arrangements upon adoption of SFAS No. 123R, modification of employee share options prior to adoption of SFAS No. 123R and disclosures in Management's Discussion and Analysis subsequent to the adoption of SFAS No. 123R. SAB No. 107 requires stock-based compensation to be classified in the same expense lines as cash compensation is reported for the same employees. We will apply the interpretations of SAB No. 107 in conjunction with our adoption of SFAS No. 123R.

Results of Operations for the Fiscal Years Ended April 30, 2006 and 2005

Sales and Marketing, Continuing Operations. Sales and marketing expenses for the fiscal year ended April 30, 2006 were $525,384 compared to $317,386 in the prior fiscal year. Sales and marketing expenses for both periods were comprised of expenses related to the marketing of our ATRILAZE system. The major components in the increase in sales and marketing expense were an increase in salaries and related costs of $108,256 and an increase in travel and related costs of $46,088.

General and Administrative, Continuing Operations. General and administrative expenses for the fiscal year ended April 30, 2006, were $3,459,916 compared to $4,012,506 for the fiscal year ended April 30, 2005. The major components of the decrease in general and administrative expense were a reduction in consulting fees of $1,027,470, offset in part by increases in personnel cost of $136,424 and professional fees of $266,256.

Research and Development Services, Continuing Operations. Research and development services include expenses we previously referred to as research and development expenses and engineering and regulatory expenses. Expenses related to research and development services were $3,471,241 for the fiscal year ended April 30, 2006 compared to $1,581,016 in the prior fiscal year. The increase in research and development services expense was primarily attributable to increased consulting and advisory board fees and expenses of $899,812, increased personnel costs of $405,783, increased material costs of $159,132, a milestone payment of $125,000, and increased travel expenses of $97,109.

Other Income (Expense). Net other income was $16,770,731 for the fiscal year ended April 30, 2006 compared to net other expense of $11,310,583 for the fiscal year ended April 30, 2005. During the fiscal year ended April 30, 2006, we amended the terms related to the exercise price and expiration date of the

putable warrants we issued in April 2005. The changes resulted in the recording of other income in the amount of $6,744,930 in the fiscal year ended April 30, 2006. In addition, due to the decrease in our stock price between April 30, 2005 and the date the putable warrants were exercised, we recorded the reduction to the fair value of the putable warrants of $9,804,527 in other income in the statement of operations during the fiscal year ended April 30, 2006. The fair value of these warrants upon the closing of our preferred stock sale on April 1, 2005 was $22,271,047. Because the fair value of these warrants at April 1, 2005 exceeded the proceeds received in the redeemable convertible preferred stock and warrant issuances, the excess of the fair value of the warrants over the proceeds received of $4,266,047 was recognized as other expense upon closing in fiscal year 2005. In addition, during the period between closing and April 30, 2005, the fair value of the warrants increased by $5,721,562 which amount was included in other expense in the statement of operations for the fiscal year ended April 30, 2005. See "Liquidity and Capital Resources" below for a more detailed discussion of our accounting for these warrants. Interest expense totaled $177,401 in the fiscal year ended April 30, 2006, compared to $1,352,183 in the prior fiscal year. The decrease in interest expense was due to the decreased amount of borrowings outstanding. Interest income totaled $384,773 for the fiscal year ended April 30, 2006 compared to $22,994 in the prior fiscal year. The increase was due to a greater amount of cash available in fiscal year 2006.

Income (Loss) from Continuing Operations. For fiscal year 2006, our income from continuing operations totaled $9,314,190. For fiscal year 2005, our loss from continuing operations totaled $17,221,491. The increase in income from continuing operations resulted from the other income discussed above.

Discontinued Operations. Discontinued operations relate to the heart valve business. The loss from discontinued operations of $81,800 for the fiscal year ended April 30, 2006 resulted from costs and expenses of $557,780 being partially offset by sales of $338,333 and a gain on disposition of assets of $137,647. The loss of $1,873,381 in the fiscal year ended April 30, 2005 related to costs and expenses of $4,178,278, being, partially offset by sales of $2,304,897.

Dividends on Preferred Stock. During the fiscal year ended April 30, 2006, we offered to repurchase certain outstanding shares of redeemable convertible preferred stock pursuant to our preferred stock acquisition plan. Our acquisition of the redeemable convertible preferred stock in consideration of the issuance of 3,077 shares of common stock per share of redeemable convertible preferred stock resulted in a non-cash dividend on the redeemable convertible preferred stock of $13,579,979. In addition, cash dividends of $588,542 were paid during the fiscal year ended April 30, 2006.

Income Tax Provision. In light of our history of operating losses, we have historically recorded a valuation allowance to fully offset our deferred tax assets. We have continued to provide a full valuation allowance throughout fiscal year 2006 due to the inherent uncertainty about our ability to generate sufficient taxable income to realize these deferred tax assets. We have recorded no tax provision in fiscal years 2006 and 2005 due to net operating losses generated for income tax reporting purposes.

Liquidity and Capital Resources

Cash and cash equivalents were $10,351,570 at April 30, 2006 compared to $10,637,796 at April 30, 2005. The decrease in cash and cash equivalents was due to the following:

Net cash used by operating activities	$(5,859,025)
Net cash used by investing activities	(3,611)
Net cash provided by financing activities	5,576,410
Net decrease	$ (286,226)

Net cash used by operating activities totaled $5,859,025 and $5,538,337 in fiscal years 2006 and 2005, respectively. Net income of $9,232,390 in fiscal year 2006 was offset by net non-cash adjustments of $16,095,655, relating primarily to the decrease in the fair value of putable warrants and gain from the sale of property, plant and equipment. The net change in operating assets and liabilities of $1,004,240 related primarily to the decrease in accounts receivable.

Net cash used by investing activities totaled $3,611 and $195,543 in fiscal years 2006 and 2005, respectively. Purchases of property, plant and equipment of $350,418 and $218,666 in fiscal years 2006 and 2005, respectively, were offset by proceeds from sales of property, plant and equipment of $346,807 and $23,123 in fiscal years 2006 and 2005, respectively.

Net cash provided by financing activities totaled $5,576,410 and $15,711,820 in fiscal years 2006 and 2005, respectively. In fiscal year 2006, the cash provided by financing activities resulted primarily from net proceeds received from the exercise of warrants partially offset by preferred stock cash dividends and principal payments under related party lease obligations. In fiscal year 2005, the cash provided by financing activities resulted from net proceeds from the issuance of redeemable convertible preferred stock and warrants, common stock and warrants and from borrowings on long-term debt partially offset by payments of term debt and related party lease obligations.

Financing Activities

Throughout fiscal years 2006 and 2005, we entered into a number of transactions to provide funds necessary to meet our working capital and capital expenditure needs and to meet other obligations. Details of these activities are set forth below.

- *2004 Private Placement.* During February, April and May, 2004, we conducted a private placement to accredited investors of units, with each unit consisting of one share of common stock and one common stock purchase warrant. In this placement, we sold 273,076 units for aggregate gross proceeds of $4,014,222. During fiscal year 2005, we received gross proceeds from this placement of $2,265,123. The five-year warrants sold with the common stock are exercisable to purchase an aggregate of 273,076 shares of common stock at an exercise price of $16.00 per share. In connection with the placement, we issued our placement agent a five-year warrant to purchase 12,327 units at an exercise price of $18.375 per unit, paid our placement agent cash commissions of $181,210 and paid our placement agent a non-accountable expense allowance of $67,954. In addition, we issued a finder a five-year warrant to purchase 9,518 units at an exercise price of $18.375 per unit, paid a finder's fee of $140,928 and reimbursed a finder for expenses of $4,163. The warrants underlying the unit warrants issued to the placement agent and the finder are exercisable for a period of five-years at an exercise price of $18.375 per share. As a result of anti-dilution adjustments through April 30, 2006, these unit warrants became exercisable in the aggregate for 85,401 units at $4.70 per unit, with each unit consisting of one share of common stock and one warrant exercisable for one share of common stock. In March and April 2006, warrants to purchase 37,214 units were exercised on a net exercise basis. At April 30, 2006, warrants to purchase 48,187 units at $4.70 per unit remained exercisable.

- *Credit Agreements with PKM and Hauser.* On November 17, 2004, we entered into a discretionary credit agreement with PKM Properties, LLC ("PKM"), an entity controlled by Paul K. Miller, one of our directors and one of the largest beneficial owners of our securities, pursuant to which we borrowed $500,000. This discretionary credit agreement had a maturity date of February 28, 2005, that was extended to June 30, 2005. It required the payment of interest at a rate of 10 percent per year. It also contained various representations and loan covenants as are customary in banking and finance transactions. We issued a credit note to PKM to evidence such indebtedness. In connection with this discretionary credit agreement, we entered into an intellectual property security agreement

with PKM, pursuant to which we granted PKM a security interest in all of our intellectual property. We also acknowledged and accepted a third amendment to the first amended and restated subordination and intercreditor agreement by and between PKM and Peter L. Hauser, a beneficial owner of our securities. Pursuant to this agreement, proceeds borrowed under this discretionary credit agreement were deemed "senior debt." Further, PKM, pursuant to a waiver agreement, waived past defaults under the discretionary credit agreements from January 2003 and November 2003. As additional consideration for the discretionary credit agreement we entered into in November 2004, we issued to PKM a warrant with a ten-year term to purchase 3,401 shares of our common stock at $14.70 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 11,363 shares at $4.40 per share. This debt was converted into convertible preferred stock and warrants in April 2005, as described below.

- *Bridge Financing.* On December 31, 2004, we issued $225,000 principal amount of convertible bridge notes due May 31, 2005, to certain accredited investors. On January 13, 2005, we issued $200,000 principal amount of convertible bridge notes due May 31, 2005, to an accredited investor. The notes bore interest at the rate of 10 percent per year and were convertible into securities to be issued in our next equity financing. In April 2005, these notes were converted in connection with the preferred stock financing described below, at 100 percent of the issuance price of such securities. In consideration of converting at 100 percent rather than 80 percent of the issuance price of the preferred stock, the note holders were permitted to retain the warrants issued to them in connection with the convertible bridge financing.

  In connection with the issuance of these notes, we issued five-year warrants to the investors for the purchase of an aggregate of 8,500 shares of common stock. Such warrants are exercisable to purchase common stock at a price per share of $5.00. The allocated fair value of the warrants was $79,030 and was accounted for as a discount on the borrowings. This discount, which was initially presented as a reduction of the carrying value of the debt, was amortized as interest expense through the April 2005 conversion date of the notes.

  In connection with these issuances, we paid Tower, a finder, a cash commission equal to 8 percent of the gross proceeds raised from investors introduced to us by Tower and we agreed to issue a five-year common stock purchase warrant to Tower for the purchase of a number of shares equal to 8 percent of the total possible shares issuable to Tower-introduced investors in this financing at an exercise price of $6.25 per share.

  These bridge notes were converted into preferred stock and warrants in April 2005 at 100 percent of the issuance price of such securities, as described below. Because the convertible bridge notes provided a contingent conversion option to the note holders which resulted in a beneficial conversion price when converted, we recorded an interest charge of $68,000 upon conversion of these notes in April 2005.

- *Sale of Preferred Stock and Warrants.* On April 1, 2005, under the terms of a Securities Purchase Agreement with accredited investors, we issued 1,803 shares of 5% Series A Redeemable Convertible Preferred Stock ("preferred stock") to such investors, five-year warrants for the purchase of 2,705,250 shares of common stock to such investors exercisable at $5.00 per share, and five-year warrants for the purchase in the aggregate of 163,596 shares of common stock to the placement agent and finder exercisable at $5.00 per share. Each share of preferred stock, which was non-voting, had a stated value of $10,000 per share and accrued dividends at a rate of 5% of the stated value annually, was convertible into the number of shares of common stock equal to the $10,000 stated value divided by $5.00, subject to anti-dilution adjustments. We obtained gross cash proceeds of $13,603,000 at the closing (net of $30,000 in legal fees which were withheld by the lead investor). We also converted $4,402,000 of indebtedness into the above-referenced securities. We

incurred cash offering costs of $817,980, including agent commissions, a finder's fee and out-of-pocket expense reimbursements. We also paid legal and administrative expenses of $18,086 incurred by PKM in this transaction.

In certain circumstances, we could have required the preferred shareholders to convert their shares into common stock. In the event of a fundamental transaction, as defined, the preferred shareholders had the right to require us to redeem the preferred shares at their stated value, including any accrued but unpaid dividends. In the event of certain defaults, the preferred shareholders had the right to require us to redeem the preferred shares at 110 percent their stated value, including any accrued but unpaid dividends. As a result of these redemption provisions, the carrying value of these preferred shares was considered to be redeemable and was reported as a "mezzanine" instrument on our balance sheet beginning on April 30, 2005. The aggregate liquidation value of these redeemable preferred shares at April 30, 2005, was $18,109,116. However, the carrying value of this redeemable preferred stock at April 30, 2005, was zero, net of a discount associated with the warrants issued to the shareholders, the placement agent and the finder, as described below. No redeemable convertible preferred stock was outstanding at April 30, 2006.

We were required to register the common shares underlying the preferred stock and the common shares underlying the warrants. If we did not meet certain registration deadlines, the holders of preferred stock were entitled to liquidated damages, as defined. In the event of a fundamental transaction, as defined, the warrants issued to the preferred shareholders, the placement agent and the finder, all provided the warrant holders with the right to put the warrants to us for cash in an amount equal to the fair value of the warrants, as determined using the Black Scholes option pricing model. As a result of this put right, the warrants were reported at their fair value as a liability on our balance sheet and changes in the fair value of the warrant resulted in charges or benefits to our results of operations. The fair value of these warrants upon closing of the preferred stock sale was $22,271,047. Because the fair value of these warrants at April 1, 2005 exceeded the proceeds received in the preferred stock and warrant issuances, the excess of the fair value of the warrants over the proceeds received (including the converted debt) was recognized as other expense of $4,266,047 upon closing. During the period between closing and April 30, 2005, the fair value of these warrants increased to $27,992,609. We reported the $5,721,562 increase in fair value of putable warrants in other expense in the statement of operations for the fiscal year ended April 30, 2005. The fair value of the warrants, after the changes in terms noted below, was $11,443,152 at the date the warrants were exercised or the put option was removed. We reported the $16,549,457 decrease in fair value of putable warrants in other income in the statement of operations for the year ended April 30, 2006.

- *Purchase of Preferred Stock and Exercise of Warrants.* Holders of a majority of the outstanding shares of preferred stock authorized us to proceed with a preferred stock acquisition plan. Pursuant to such plan, on December 21, 2005, we entered into preferred stock acquisition agreements with the holders of an aggregate of 1,499 shares of preferred stock. Under the agreements, we acquired the preferred stock of each such holder in consideration of the issuance 3,077 shares of common stock for each share of preferred stock being acquired. On January 6, 2006, under the same form of preferred stock acquisition agreements, we acquired an additional 271 shares of preferred stock, representing all of the remaining then-outstanding shares of our preferred stock, for the same per share consideration. In the aggregate, we issued 5,447,814 shares of common stock in consideration of the acquisition of 1,770 shares of preferred stock. We originally sold 1,803 shares of preferred stock. The 33 shares of preferred stock not purchased in December 2005 or January 2006 were converted between June 2005 and October 2005 into shares of common stock at a conversion ratio of 2,000 shares of common stock for each share of preferred stock.

Also on December 21, 2005, we and holders of a majority of the outstanding shares of preferred stock and related common stock purchase warrants entered into an amendment to the securities purchase agreement as of April 1, 2005, to revise certain definitions contained therein. Following such amendment, on December 21, 2005, we and each of the holders who originally agreed to sell preferred stock to our company entered into amendments to such holders' warrants issued under the securities purchase agreement. Pursuant to these amendments, we (1) reduced the exercise price on outstanding warrants for the purchase of an aggregate of 2,296,950 shares of common stock held by such persons from $5.00 per share to $3.25 per share, and (2) accelerated the expiration date of such warrants from April 1, 2010, to January 6, 2006. Concurrent with such warrant amendments, investors delivered warrant exercise notices to our company. We authorized one of such warrants, namely the warrant for the purchase of 445,200 shares held by PKM, to be exercised on a net exercise basis (using a market price of $6.60 per share).

On January 6, 2006, under the same form of amended warrant agreements, investors exercised warrants for the purchase of 423,050 shares of common stock. We authorized one of such warrants, namely the warrant for the purchase of 151,200 shares held by Mr. Hauser, to be exercised on a net exercise basis (using a market price of $6.60 per share).

In the aggregate, we issued 2,411,567 shares of common stock in connection with the exercises by investors of investor warrants issued in our April 2005 private placement. We also issued an additional 14,750 shares of common stock in connection with exercises of warrants originally issued to our agent and finder in our April 2005 private placement.

Also on January 6, 2006, pursuant to exercise notices dated January 5, 2006, we issued shares of common stock upon the exercise of certain other warrants. In particular, holders of warrants for the purchase of an aggregate of 107,850 shares of common stock, which were originally issued to our placement agent in our April 2005 financing, were exercised. Of such number, warrants for the purchase of 1,500 shares were exercised for cash and warrants for the purchase of 106,350 shares were exercised on a net exercise basis, resulting in the issuance of 75,974 shares of common stock. Also effective January 6, 2006, we amended the outstanding finder warrant for the purchase of 40,996 shares of common stock to adjust the exercise price to $3.25 per share and eliminate the right to put the warrant to us for cash in an amount equal to the fair value of the warrants in the event of a fundamental transaction.

The net effect of the December 2005 and January 2006 transactions was to increase cash by $6,435,140 (net of expenses of $471,435), decrease the warrant liability associated with the warrants containing a put feature by $18,188,082, increase common stock and additional paid-in capital by $31,458,271, increase non-cash dividends on preferred stock by $13,579,979 because of the change in the number of common shares issued upon acquisition of the preferred stock and increase other income by $6,744,930. The outstanding shares of common stock were increased by 7,951,605 shares.

- *Filing of Registration Statement for Public Offering.* On May 19, 2006, we filed a registration statement on Form SB-2 with the Securities and Exchange Commission related to a proposed public offering of common stock. Recent market conditions have delayed such proposed public offering. We cannot assure you that we will complete such offering on favorable terms, or at all.

Analysis

We anticipate that our sales and marketing, general and administrative and research and development services expenses will continue to constitute a material use of our cash resources. The actual amounts and timing of our expenses will vary significantly depending upon progress on our product development projects and the availability of financing. Given our cash balance of $10,351,570 at April 30, 2006, we

anticipate that we will require additional financing to enable us to build inventory, launch and market our ATRILAZE minimally invasive system and provide working capital to support our operations.

Our capital requirements may vary depending upon the timing and the success of the implementation of our business plan, regulatory, technological and competitive developments, or if:

- Sales of our products are not achieved;
- Operating losses exceed our projections;
- Our manufacturing and development costs or estimates prove to be inaccurate; or
- We determine to acquire, license or develop additional technologies.

We cannot, however, assure you that our efforts to enter the market for treating atrial fibrillation through laser ablation will:

- Be attainable;
- Be profitable;
- Reduce our reliance upon financing transactions; or
- Enable us to continue operations.

Commitments and Contingent Liabilities at April 30, 2006

Product Liability Contingency. In March 2005, we became aware that a patient who had been implanted with our heart valve had died. We have not received any claims related to this matter but believe that any such claim would be covered by our existing liability insurance. Based upon the expectation that insurance would cover the cost of any claims after our payment of the deductible, we do not expect the ultimate resolution of this matter to have a material effect on our business, financial condition, operating results and cash flows.

Related Party Lease Obligation. On April 4, 2003, we sold our corporate headquarters, manufacturing facility and surrounding land in Inver Grove Heights, Minnesota, to PKM. In connection with the transaction, we received total consideration of $3.84 million consisting of (1) $1.0 million in cash, (2) PKM's assumption of our $2.5 million outstanding indebtedness to Associated Bank which eliminated our indebtedness to Associated Bank, and (3) PKM's assumption of our promissory note with Dakota Electric Association and land special assessments payable to Dakota County aggregating $336,105.

We simultaneously leased back our facility pursuant to a ten-year lease, with options to renew and an option to repurchase the facility. We continue to utilize the facility as we did prior to the financing transaction.

Severance Contingencies. At April 30, 2006, employment agreements with seven executive officers contained a provision for lump sum payments of up to twelve months severance if the employment of the officer is terminated without cause by us or for good reason by the officer as defined in the contracts.

On April 6, 2006, we entered into an amendment to the executive employment agreement with John H. Jungbauer, our principal financial officer and principal accounting officer, to reflect the mutual decision reached concerning his departure from our company. Pursuant to the amendment, Mr. Jungbauer's employment will terminate on the date we advise him that we have engaged a new chief financial officer and/or principal accounting officer. The actual termination date will be no earlier than July 31, 2006. We also have the right, at our option, to extend Mr. Jungbauer's employment (as a non-officer) for a transition period. Such transition period will not, without Mr. Jungbauer's consent, continue beyond December 31, 2006. Mr. Jungbauer's compensation and benefits will continue to be paid under the

employment agreement at their current rates through the termination date and any transition period. Under terms of the employment agreement, Mr. Jungbauer has the right to terminate his employment upon 60 days' prior notice and is entitled to a severance payment equal to six months of base compensation. Under the employment agreement, Mr. Jungbauer will receive a severance payment of $100,000 on his termination date. To facilitate a smooth transition, we have also agreed to make an additional severance payment to Mr. Jungbauer. Under the amendment, Mr. Jungbauer will receive an additional severance payment of $100,000 on January 2, 2007. In addition to these severance payments, we have agreed to pay or reimburse Mr. Jungbauer for medical (COBRA) benefits for the periods covered by the severance payments. A liability of $131,793 for the severance payments, related payroll taxes, and medical benefits is included in accrued expenses on our balance sheet at April 30, 2006 and the expense is included in general and administrative expenses in the statement of operations for the fiscal year then ended. Mr. Jungbauer holds stock options for the purchase of 144,012 shares of our common stock. Mr. Jungbauer's stock option agreements provide that he has three months following termination of employment to exercise the vested portions thereof. Options to purchase 44,065 shares of our common stock will be vested on July 1, 2006. Pursuant to the amendment, we agreed to amend Mr. Jungbauer's stock option agreements to provide that his options, to the extent vested on the termination date, will be exercisable for a period of twelve months following the termination of Mr. Jungbauer's employment. In July 2006, we agreed to retroactively rescind the provision in the amendment that provided Mr. Jungbauer twelve months following termination of employment to exercise the vested portions thereof and revert to the original terms of the stock option agreements that provide Mr. Jungbauer three months following termination of employment to exercise the vested portions thereof.

Technology Purchase Agreement. In August 2003, we entered into a technology purchase agreement with LightWave Ablation Systems, Inc. ("LightWave") and its principals, one of whom became a current employee of our company, relating to the acquisition of LightWave's interests in technology consisting of a catheter/probe containing elements of optical fiber, coolant passages and other features for the purpose of delivering laser energy to the epicardial surface of the heart for treatment of atrial fibrillation. We paid LightWave an initial standstill payment consisting of 1,500 shares of our common stock, $10,000 upon closing and an additional $30,000 to LightWave in installments in 2004 and 2005. In addition, at closing, during fiscal year 2004, we issued to LightWave a warrant for the purchase of 2,500 shares of common stock at $14.60 per share and, during fiscal year 2005, a warrant for the purchase of 2,500 shares of common stock at $14.60 per share upon receiving FDA 510(k) clearance. In addition, we are obligated to issue a warrant for the purchase of 2,500 shares of common stock upon receipt of a U.S. utility patent covering the product and a warrant for the purchase of 2,500 shares of common stock upon the first commercial sale of our product.

A milestone payment of $125,000 was made to LightWave in January 2006. We will be obligated to pay an additional $385,000 within 45 days following our achievement of $1,500,000 of cumulative gross sales of disposable products.

In addition, following the first commercial sale, we have agreed to pay LightWave payments equal to 6 percent of net sales of the LightWave product in countries in which we obtain patent protection and 4 percent of net sales of the LightWave product in territories in which there is no patent protection. Commencing with the second year following our first commercial sale, we have agreed to pay minimum annual payments as follows:

Year Following Commercialization	Minimum Annual Payment
2	$ 50,000
3	$ 75,000
4	$100,000
5	$200,000
6	$300,000
7	$350,000
8	$350,000
9	$400,000
10	$500,000

We are obligated to make payments for a period of ten years following the first commercial sale. Our technology purchase agreement with LightWave contains other customary conditions, including mutual indemnification obligations. LightWave and two of its principals have agreed to certain noncompetition obligations, nondisclosure obligations, and certain obligations to assign new developments or inventions relating to the acquired technology to our company. We have agreed to use our reasonable commercial efforts to commercialize the technology within three years following the acquisition of the technology from LightWave. If we fail in any year to pay minimum annual payments, we may be obligated to grant LightWave a nonexclusive right to use the technology acquired from LightWave, or pay LightWave the difference between payments actually made and minimum payments due for a given year.

The following table summarizes our contractual obligations as of April 30, 2006, excluding product liability contingencies, severance contingencies, and payments that are contingent upon achievement of future development and sales milestones, as described above:

	Payments Due By Period			
Summary of Contractual Obligations	TOTAL	Less than One Year	Two to Three Years	Four or More Years
Related Party Lease Obligation(1)	$2,914,034	$432,344	$877,468	$1,604,222
Accrued Severance	131,793	131,793	—	—
Operating Lease	22,580	5,530	11,060	5,990
Total Contractual Obligations	$3,068,407	$569,667	$888,528	$1,610,212

(1) Includes interest

Qualitative and Quantitative Disclosures about Market Risk

We have discontinued sales of heart valves and are focusing all of our resources on the development and introduction of our ATRILAZE system. Sales in fiscal year 2007 are not expected to be material, and we expect that any sales will be in the United States denominated in U.S. dollars. Our interest income and expenses are sensitive to changes in the general level of U.S. interest rates, particularly since our investments are in short-term instruments. At April 30, 2006, we held a majority of our cash in a money market account. Based on the current nature and levels of our investments we believe that we currently have no material market risk exposure.

Our general investing policy is to limit market and credit risk and the risk of principal loss. All liquid investments with maturities of three months or less are considered to be cash equivalents.

Cautionary Statement

Investing in our common stock involves a high degree of risk. You should consider carefully the risks described below and the other information in this document, including our financial statements and the related notes included elsewhere in this document, before deciding to invest in our common stock. If any of the following risks actually occur, they may materially harm our business and our financial condition and results of operations. In this event, the market price of our common stock could decline, and you could lose part or all of your investment.

The development and commercialization of our ATRILAZE minimally invasive system, which has not yet been cleared by the FDA, is critical for our success. In May 2006, we filed an application with the FDA to obtain FDA 510(k) clearance for our ATRILAZE minimally invasive system. We cannot assure you that we will receive such clearance in a timely manner, if at all. Failure to receive clearance would have a material adverse effect on our business, financial condition, operating results and cash flows. Even if we do receive FDA 510(k) clearance, we will not initially be able to market the system as an effective means of treating AF until we can demonstrate its clinical efficacy to the FDA.

If we do receive FDA 510(k) clearance on our ATRILAZE minimally invasive system, we intend to initiate a human clinical study in fiscal year 2008. This study will be designed to pursue expanded labeling for the specific indication of AF. We cannot assure you that the system will prove to be a safe and effective treatment option or that the FDA will expand the labeling for the specific indication of AF. If the labeling is not expanded, it would have a material adverse effect on our business, financial condition, operating results and cash flows.

Even if our ATRILAZE minimally invasive system receives FDA 510(k) clearance, we can give no assurance the system will be equal to or superior to other systems for the ablation of cardiac tissue. Although laser energy has been used widely in various cardiac procedures, the use is relatively novel in minimally invasive procedures to ablate cardiac tissue and potentially treat AF. While our ATRILAZE minimally invasive system has demonstrated success in ablating cardiac tissue in animals, we have not yet conducted studies in a human clinical setting. Accordingly, there can be no assurance that this system will be clinically effective. In addition, our competitors have developed alternative surgical treatments to ablate cardiac tissue and potentially treat AF. Furthermore, our competitors may be in the process of creating similar or superior treatments or procedures to our ATRILAZE minimally invasive system of which we are not aware. If our ATRILAZE minimally invasive system does not prove to be equal to or superior to other systems for the ablation of cardiac tissue, it would have a material adverse effect on our business, financial condition, operating results and cash flows.

Even if we obtain regulatory clearance, we cannot assure you that our ATRILAZE minimally invasive system will gain physician acceptance. A limited number of cardiovascular surgeons and cardiologists can influence medical device selection and purchase decisions for a large portion of the target cardiovascular surgery patient population. Even if we obtain FDA 510(k) clearance for our ATRILAZE minimally invasive system, we cannot assure you that it will gain any significant degree of physician acceptance, or that users will accept our minimally invasive system as preferable to alternative products or methods of treatment of AF. Physician acceptance of this system depends upon a number of additional factors, many of which are beyond our control, including:

- Our success in extending our labeling to the treatment of AF;
- The perceived safety and effectiveness of the system;
- Education and training of physicians of the system;
- The prevalence and severity of any side effects;
- The procedure time associated with the use of the system;

- Potential advantages over alternative treatments;
- The strength of marketing and distribution support; and
- Third party coverage of reimbursement.

If our minimally invasive system does not achieve an adequate level of acceptance by physicians, patients or healthcare payers, we may not generate significant revenue and we may not become profitable.

If we are unable to manage our expected growth, our future revenue and operating results may be adversely affected. If we receive FDA clearance for our ATRILAZE minimally invasive system, we will need to rapidly expand our sales and marketing operations and grow our research and development, product development and administrative operations. This expansion is expected to place a significant strain on our management and operational and financial resources. Our current and planned personnel, systems, procedures and controls may not be adequate to support our anticipated growth. To manage our growth, to commercialize our ATRILAZE minimally invasive system and to fund clinical studies, we will be required to improve existing and implement new operational and financial systems, procedures and controls and expand, train and manage our growing employee base. If we are unable to manage our growth effectively, our business, financial condition, operating results and cash flows could be harmed.

Our efforts to develop and commercialize new products beyond our ATRILAZE system and accessory products are at an early stage and are subject to a high risk of failure. A key element of our strategy is to develop and commercialize new products for the treatment of AF as extensions of, or in addition to, our ATRILAZE system. We are seeking to do so through our internal research programs and we may explore strategic collaborations for the development of new products utilizing our core technology. Research programs to develop and commercialize new products require substantial technical, financial and human resources, whether or not any products are ultimately developed. If we fail to develop and commercialize new products, including our ATRILAZE minimally invasive system, our business will suffer.

We may need to fund ongoing clinical studies throughout the lifecycle of each of our products, providing statistically significant scientific data to regulatory agencies and cost effectiveness data to third party healthcare payers. The FDA, foreign regulatory agencies and third party health care payers may require scientific clinical outcomes data and cost effectiveness data. We will need to provide this data throughout our products' lifecycles. Payers and governmental agencies may change the frequency and breadth of clinical research required, potentially significantly increasing our costs. Without adequate positive outcomes data that demonstrate advantages from the use of our ATRILAZE minimally invasive system, we may not achieve any significant market penetration. We cannot assure you that our outcomes data will be adequate to meet present or future medical device utility requirements. If our outcomes data does not meet such requirements, we may be unable to sell our products or obtain third party reimbursement for the costs of our products.

Substantial government regulation abroad may restrict our ability to sell our ATRILAZE minimally invasive system or other products. If we choose to market our products in foreign countries, they must also comply with laws and regulations of foreign countries in which we market such products. In general, the extent and complexity of medical device regulation is increasing worldwide. This trend may continue, and the cost and time required to obtain marketing clearance in any given country may increase as a result. We cannot assure you that our products will obtain any necessary foreign clearances on a timely basis, or at all.

Our products face competition from those of well established companies with greater financial and marketing resources, as well as alternative therapies or treatment options. Our industry is highly competitive, subject to change, and significantly affected by new product introductions and other activities of industry participants. Many of our competitors have significantly greater financial and human resources than we do and have established reputations with our target customers, as well as worldwide distribution

channels that are more established and developed than ours. Our primary competitors include AtriCure, Inc., Boston Scientific Corp., CryoCath Technologies, Inc., Edwards Lifesciences Corp., ESTECH, Inc., Medtronic, Inc. and St. Jude Medical, Inc. As of May 2006, no company had received FDA approval or clearance to market an ablation system for use as a treatment of AF in the United States. However, our competitors provide products that have been adopted by physicians for the off-label treatment of AF.

We and many of our competitors have developed surgical ablation devices that have been used to treat AF concomitant with an open-heart surgical procedure. We and our competitors utilize different technologies as energy sources for ablation devices, including cryothermy, radiofrequency, microwave, high-intensity focused ultrasound and laser. Each of these companies is also currently working with its core technology to develop devices that can be used as a stand-alone, minimally invasive AF treatment.

Some of our competitors, including Boston Scientific Corp., Cardima, Inc., CryoCath Technologies, Inc., CryoCor, Inc., Johnson and Johnson, Inc., Medtronic, Inc., and St. Jude Medical, Inc., offer catheter-based treatments. These companies sell products that are used by physicians to treat the population of patients that have AF, but are not candidates for open-heart surgery, which is the same group of patients that we believe would most benefit from stand-alone, minimally invasive AF treatments using our minimally invasive system. Some of these catheter-based treatments already have FDA clearance or approval for cardiac use, including the treatment of certain arrhythmias, although none has approval for the treatment of AF.

Because of the large number of competitors and treatment options in the AF market, we cannot assure you that even if we introduce our ATRILAZE minimally invasive system that we will be able to compete effectively.

We have a history of losses and no assurance of future profitability. We have incurred losses in each of the last nine fiscal years. We had a net loss to common shareholders of $4,936,131 for the fiscal year ended April 30, 2006 and a net loss to common shareholders of $19,094,872 for the fiscal year ended April 30, 2005. We expect to continue to incur substantial losses through fiscal year 2007 and into fiscal year 2008 as we continue development of new products. As of April 30, 2006, we had an accumulated deficit of $47,343,088. We will incur additional losses until we are able to successfully introduce new products and generate substantial revenues. Due to our recent entry into the cardiac tissue ablation market, we do not expect to generate material revenue until fiscal year 2008, at the earliest. Even if we begin to recognize revenues from our ATRILAZE minimally invasive system, it may be several years, if ever, before we achieve profitability and positive cash flow. If we do achieve profitability, we cannot assure you that we would be able to sustain or increase profitability on a quarterly or annual basis in the future. In addition, the report of our independent registered public accounting firm for each of fiscal years 2006 and 2005 includes an explanatory paragraph expressing doubt about our ability to continue as a going concern.

We will require additional financing in the future, which may be difficult to obtain. We anticipate that we will require additional financing to enable us to launch and market our ATRILAZE minimally invasive system and provide working capital to support our operations. Our failure to obtain necessary financing by January 2007, or doing so on unfavorable terms, could adversely affect our product development program and marketing efforts. Our future capital requirements will depend on a number of factors, many of which are beyond our control, including:

- The cost of development or enhancement of existing or new products, including outsourced design and engineering services, and product prototyping;
- The timing of, and the costs involved in, obtaining regulatory approvals;
- The cost of enhancing and protecting our intellectual property portfolio;

- The cost of internal and outsourced manufacturing services;
- The cost of commercialization, including product demonstration, promotion and marketing;
- The need to upgrade corporate systems and hardware;
- The cost of building inventory to support sales;
- The costs involved in any patent infringement actions that we initiate or that are brought against us by third parties;
- Our ability to establish and maintain collaborative arrangements;
- Our advancement of other product candidates into development;
- The cost of maintaining MedicalCV as a public company; and
- Potential acquisition or licensing of other products or technologies.

Additional financing may not be available to us when we need it or it may not be available to us on favorable terms. If we are unable to obtain adequate financing on a timely basis, we may be required to significantly curtail or cease product development. We could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies, product candidates or products which we would otherwise pursue on our own. If we raise additional funds by issuing equity securities, our then-existing shareholders will experience ownership and/or share price dilution and the terms of any new equity securities may have preferences over our common stock.

We may be unable to establish and protect our proprietary rights which are critical to our success in developing products for cardiac tissue ablation and the potential treatment of AF. We have no patents issued to us covering our soft tissue ablation products. We have filed 14 U.S. non-provisional patent applications, one provisional U.S. patent application, one international patent application and one European patent application, relating to products we have designed for use in treating AF. We expect to seek patent protection for additional products that we may develop in the future. Our success will depend, in part, on our ability to protect our products and to manufacture and sell them without infringing the rights of third parties. The validity and breadth of claims covered in medical technology patents involve complex legal and factual questions and, therefore, are highly uncertain. In addition, the laws of many countries may not afford protection for our proprietary rights to the same extent as U.S. laws. We cannot assure you that:

- Any pending patent applications or any future patent applications will result in the issuance of patents;
- The scope of any patent protection will be effective to exclude competitors or to provide competitive advantages to us;
- We will be able to commercially exploit any issued patents before they expire;
- Any of our patents will be held valid if subsequently challenged;
- Others will not claim rights in, or ownership of, the patents and other proprietary rights we hold;
- Our products and processes will not infringe, or be alleged to infringe, the proprietary rights of others; or
- We will be able to protect meaningful rights in proprietary technology over which we do not hold patents.

Furthermore, we cannot assure you that others have not developed or will not develop products that may duplicate our products or manufacturing processes, or that others will not design around our patents. Other parties may independently develop or otherwise acquire substantially equivalent techniques, gain access to our proprietary technology or disclose such technology. In addition, whether or not we obtain additional patents, others may hold or receive patents covering components of products we independently develop in the future.

We may be subject to claims that we infringe the intellectual property rights of third parties, which could adversely affect the sale of our products and our financial condition. The medical device industry has been characterized by extensive litigation regarding patents and other intellectual property rights. Litigation, which would likely result in substantial cost to us, may be necessary to enforce any patents issued or licensed to us and/or to determine the scope and validity of others' proprietary rights. Our competitors hold issued patents which may result in claims of infringement against us or other patent litigation. We also may have to participate in interference proceedings declared by the United States Patent and Trademark Office, which could result in substantial cost to determine the priority of inventions.

We are aware of patents issued to our competitors and are aware that these competitors have patent applications pending. These patents and applications could become the basis for infringement claims against us. In April 2005, we received a letter from Edwards Lifesciences, LLC ("Edwards") concerning our ATRILAZE system, which is the subject of some of our patent applications. Edwards did not claim that our products infringe any of its patents. Edwards' letter called to our attention six of its patents and requested us to comment on how our products differ from the claimed methods and apparatus of the six specified Edwards patents. Edwards did not claim in its letter that our products infringe its patents. We reviewed the specified Edwards' patents and discussed them with our patent counsel, and believe that our cardiac ablation systems do not infringe any of these patents. In response to a further inquiry from Edwards on May 25, 2006, we responded through patent counsel outlining our position on at least one of the Edwards' patents. While Edwards did not claim in its letter that our products infringe its patents, it is likely that in the future, Edwards or others will continue to inquire regarding our products and patents and possibly make intellectual property claims relating to our tissue ablation devices. Legal proceedings brought against us alleging that our products infringe existing patents, whether with or without merit, could be time-consuming for our management and employees, result in costly litigation, cause product shipment delays, require us to pay damages or settlement amounts, or require us to:

- Cease manufacturing and selling the product in question, which could seriously harm our business;
- Enter into royalty-bearing licensing agreements; or
- Design commercially acceptable non-infringing alternative products.

We cannot assure you that we would be able to obtain licensing agreements, if required, on terms acceptable to us or at all, or that we would be able to develop commercially acceptable non-infringing alternative products. Our failure to do so could have a material adverse effect upon our business, financial condition, operating results and cash flows.

We depend upon single and limited source third-party suppliers, making us vulnerable to supply problems and price fluctuations, which could harm our business. We expect to rely on single and limited source third-party vendors for the manufacture of many of the components used in our ATRILAZE minimally invasive system. For example, we expect to rely on one vendor to manufacture our ATRILAZE laser and one vendor to manufacture our ATRILAZE controller. In addition, in some cases there are relatively few alternative sources of supply for certain other components that are critical to our ATRILAZE minimally invasive system.

Our reliance on these outside manufacturers and suppliers also subjects us to risks that could harm our business, including:

- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- we may have difficulty locating and qualifying alternative suppliers;
- switching components may require product redesign;
- our suppliers manufacture products for a range of customers, and fluctuations in demand for the products those suppliers manufacture for others may affect their ability to deliver components to us in a timely manner; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

Any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive products, and could therefore have a material adverse effect on our business, financial condition, operating results and cash flows.

If patients allege that the use of our cardiovascular devices injured them, we may face substantial product liability claims. Substantial product liability litigation exists within the medical device industry. Our products are used in cardiovascular surgery, and their failure may result in patient injury or death. We have had product liability claims asserted against us in the past, which were resolved under our insurance coverage without significant financial cost to us. We cannot assure you, however, that future product liability claims will not exceed the limits of our insurance coverage or that such insurance will continue to be available to us on commercially reasonable terms, or at all. Consequently, a product liability claim or other claim with respect to uninsured liabilities, or in excess of insured liabilities, could have a material adverse effect on our business, financial condition, operating results and cash flows. In addition, adverse publicity resulting from product liability litigation may materially adversely affect us regardless of whether the claims are valid or whether we are liable. Furthermore, these claims would likely divert our financial and management resources that would otherwise be used to benefit the future performance of our operations.

We sold more than 50,000 mechanical heart valves between 1992 and 2005. We assume that a majority of the patients who received our heart valves are still alive. If any of these patients were to have a problem with a heart valve, they could assert claims for damages against us. In April 2005, we placed our product liability insurance with a new insurance carrier. Our new policy provides us with potential coverage for claims of up to $5,000,000 per occurrence and in the aggregate per policy year. Concurrently, we purchased a three-year extended reporting coverage endorsement from our former carrier which was unwilling to renew our coverage on the previous terms. The extended reporting period coverage, which expires in 2008, will allow us to seek coverage under the prior policy for products claims arising from occurrences which took place during such policy period but which were not asserted against us during the previous policy period.

In March 2005, we became aware that a patient who had been implanted with our heart valve had died. We have not received any claims related to this matter but believe that any such claim would be covered by our existing liability insurance. Based upon the expectation that insurance would cover the cost of any claims after our payment of the deductible, we do not expect the ultimate resolution of this matter to have a material effect on our business, financial condition, operating results and cash flows.

Key employees could leave our company at any time, thereby adversely affecting our product development and profitability. We depend heavily on the technical knowledge and industry expertise of our management team. The development and execution of our business plan depends upon these individuals. The departure of key people could materially and adversely affect our business, financial condition, operating results and cash flows.

We may be unable to recruit, motivate and retain qualified employees. Our success depends in part upon our ability to attract, motivate and retain a sufficient number of qualified employees, including those who concentrate in research and development, sales, marketing and manufacturing, to keep pace with our product development schedules. Even though we have not experienced shortages of qualified people to date, qualified individuals needed to fill these positions could be in short supply in our market. Our inability to recruit, motivate and retain such individuals may delay the planned launch of new products, or result in high employee turnover; either of which could have a material adverse effect on our business, financial condition, operating results and cash flows. Additionally, competition for qualified employees could require us to pay higher wages and provide additional benefits to attract sufficient employees.

Once medical devices are cleared for sale, regulatory authorities may still limit the use of such products, prevent the sale or manufacture of such products or require a recall or withdrawal of such products from the marketplace. Following initial clearance from regulatory authorities, we continue to be subject to extensive regulatory requirements. Government authorities can withdraw marketing clearance due to our failure to comply with regulatory standards or due to the occurrence of unforeseen problems following initial clearance. Ongoing regulatory requirements are wide-ranging and govern, among other things:

- Product manufacturing;
- Supplier substitution;
- Product changes;
- Process modifications;
- Medical device reporting;
- Product sales and distribution; and
- Annual inspections to retain CE mark for sale of products in the European Union.

The FDA and various government agencies inspect our facilities from time to time to determine whether we are in compliance with applicable laws and regulations. If we fail to comply or maintain compliance with medical device laws or regulations, regulatory authorities may fine us and bar us from selling our products. If the FDA or comparable foreign authorities believes we are not in compliance with such laws or regulations, it can:

- Seize our products;
- Require a recall;
- Withdraw previously granted market clearances;
- Implement procedures to stop future violations; and/or
- Seek civil and criminal penalties against us.

In addition, suppliers of components of, and products used to manufacture, our products must also comply with the FDA and foreign regulatory requirements, which often require significant resources and subject us and our suppliers to potential regulatory inspections and stoppages. If our suppliers do not

achieve and maintain required regulatory approval, our commercialization efforts could be delayed, which would impair our business, financial condition, operating results and cash flows.

We may be subject to fines, penalties or injunctions if we are determined to be promoting our products for unapproved, "off-label," or new uses, or making false, misleading or unsubstantiated claims, which would harm our operating results and reduce the value of your investment. Our promotional materials and training methods for physicians must be in compliance with FDA and other applicable regulations. FDA regulations prohibit us from promoting or advertising our products for uses not within the scope of our clearances and from making unsupported safety or effectiveness claims. These determinations can be subjective and the FDA may disagree with our promotional claims. If the FDA determines that our promotional materials or training constitutes promotion of an unapproved use, or makes false or misleading claims or claims not supported by adequate scientific data, the agency could subject us to serious enforcement sanctions and/or limit the promotional claims that we are permitted to make for our products. The FDA typically does not permit promotional claims for a device based upon physician reports and other anecdotal data. There can be no assurance, therefore, that the FDA would agree that any independent peer-reviewed studies are scientifically adequate to support the claims we make for our products. The FDA also may limit or prohibit claims based on comparison of our products with other surgical cardiac tissue ablation technologies and devices in the absence of a scientifically valid head-to-head clinical trial or other adequate supporting data. Any legal limitations on the promotional claims we may make for our products could adversely affect our sales.

As a medical device manufacturer, we are subject to federal and state laws prohibiting "kickbacks" and false or fraudulent claims which, if violated, could subject us to substantial penalties. A federal law commonly known as the Medicare/Medicaid anti-kickback law, and several similar state laws, prohibit payments that are intended to induce physicians or others either to refer patients or to acquire or arrange for or recommend the acquisition of healthcare products or services. These laws limit the kinds of financial arrangements, including sales programs, we are allowed to have with physicians, surgery centers, hospitals or other potential purchasers of our products. Other federal and state laws generally prohibit individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other third-party payers that are false or fraudulent, or for items or services that were not provided as claimed. Anti-kickback and false claims laws prescribe potentially substantial civil and criminal penalties for noncompliance. A challenge to or investigation into our practices under these laws could cause adverse publicity, be costly to respond to, and harm our business, financial condition, operating results and cash flows. Even an unsuccessful challenge or investigation into our practices could cause adverse publicity and be costly to respond to, and thus could harm our business, financial condition, operating results and cash flows.

Compliance with environmental laws and regulations may be expensive. Failure to comply with environmental laws and regulations could subject us to significant liability. Our manufacturing operations and research and development activities involve the use of biological materials and hazardous substances and are subject to a variety of federal, state and local environmental laws and regulations relating to the storage, use, discharge, disposal, remediation of, and human exposure to, hazardous substances. Our research and development and manufacturing operations may produce biological waste materials, such as animal tissues, and certain chemical waste. These operations are permitted by regulatory authorities, and the resultant waste materials are disposed of in material compliance with environmental laws and regulations. Compliance with these laws and regulations may be expensive and non-compliance could result in substantial liabilities. In addition, we cannot completely eliminate the risk of accidental contamination or injury to third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed any applicable insurance coverage we may have. In addition, our manufacturing operations may result in the release, discharge, emission or disposal of hazardous substances that could cause us to incur substantial liabilities, including costs for investigation and remediation.

The uncertainty of third party reimbursements and possible healthcare reforms may adversely affect us. Our ability to market products successfully in the U.S. depends in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health insurers, health maintenance organizations and other third party payers. Payers may challenge the need for, and prices of, medical products and services. Third party payers may deny reimbursement for procedures that they deem experimental or for devices used in ways other than as cleared by the FDA or stated in their indications for use. With respect to our products, some payers could deny coverage until the medical profession generally accepts devices and new procedures. The inability of hospitals and other providers to obtain reimbursement from third party payers for our products would have a material adverse impact on our business, financial condition, operating results and cash flows. Healthcare reform may also impact sales of new products. In the U.S. reforms may include:

- Mandated basic health care benefits;
- Controls on health care spending through limiting the growth of private health insurance premiums and Medicare and Medicaid spending; and
- Fundamental changes to the health care delivery system.

We anticipate that the U.S. Congress and state legislatures will continue to review and assess alternative health care delivery systems and payment methodologies, and that public debate of these issues will likely continue in the future. Due to uncertainties regarding the ultimate features of reform initiatives and their enactment and implementation, we cannot predict which, if any, of such reform proposals will be adopted, when they may be adopted or what impact they may have on our ability to market our products. Laws resulting from such reform initiatives could adversely impact our business, financial condition, operating results and cash flows.

If we are unable to successfully address the material weakness in our internal controls, our ability to report our financial results on a timely and accurate basis may be adversely affected. As of April 30, 2006 and 2005, we did not maintain effective controls over the preparation, review, presentation and disclosure of our statement of operations. Specifically, we incorrectly reported certain expenses as part of continuing operations rather than as part of discontinued operations in accordance with U.S. generally accepted accounting principles. This control deficiency resulted in the restatement of our financial statements for the fiscal year ended April 30, 2005 and the three and six-month periods ended October 31, 2004. Accordingly, management determined that this control deficiency constitutes a material weakness in our internal control over financial reporting.

A material weakness is a control deficiency or a combination of control deficiencies that results in more than a remote likelihood that a material misstatement of the annual or interim consolidated financial statements will not be prevented or detected. We have taken steps to remediate the material weakness that include a thorough review of the classification requirements of each component line item and the individual elements that comprise each line item of the statement of operations, in accordance with generally accepted accounting principles. Although we have taken these steps, we cannot assure you that this or other control deficiencies will not result in a misstatement in the future.

We have developed a plan to address this material weakness that includes adding additional professional accounting personnel. We engaged a senior financial consultant in March 2006 as an interim controller to provide an immediate expansion in our technical finance and accounting resources. In April 2006, we hired a full-time controller with national public accounting firm experience. We will continue to assess the adequacy and appropriateness of our financial staff and adjust accordingly as changes in our business warrant. Management believes that our plan to address this material weakness, when fully implemented, will remediate it. Although we are not certain when the material weakness will be

remediated, we will need a period of time over which to demonstrate that these controls are functioning appropriately to conclude that we have adequately remediated it.

We cannot be certain that additional material weaknesses in our internal control over financial reporting will not be discovered in the future. Any failure to remediate the unremediated material weakness described above or any future material weaknesses or to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results, cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements.

We may be exposed to potential risks relating to our internal controls over financial reporting and our ability to have those controls attested to by our independent registered public accounting firm. As directed by Section 404 of the Sarbanes-Oxley Act, the SEC adopted rules requiring public companies to include a report of management on internal control over financial reporting in their annual reports, including Annual Reports on Form 10-KSB, which we file. In addition, the independent registered public accounting firm auditing a public company's financial statements must attest to and report on management's assessment of the effectiveness of the company's internal control over financial reporting as well as the operating effectiveness of the company's internal controls over financial reporting. We expect to be subject to these requirements for the fiscal year ending April 30, 2008.

While we expect to expend significant resources in developing the necessary documentation and testing procedures required by Section 404 of the Sarbanes-Oxley Act, there is a risk that we will not comply with all of the requirements imposed thereby. At present, there is no precedent available with which to measure compliance adequacy. Accordingly, there can be no assurance that we will not receive an adverse report on our assessment of our internal controls over financial reporting and/or the operating effectiveness of our internal controls over financial reporting from our independent registered public accounting firm.

In the event we fail to remediate the material weakness described above, we identify significant deficiencies or other material weaknesses in our internal controls over financial reporting that we cannot remediate in a timely manner or we receive an adverse report from our independent registered public accounting firm with respect to our internal controls over financial reporting, investors and others may lose confidence in the reliability of our financial statements and our ability to obtain equity or debt financing could be adversely affected.

In addition to the above, in the event that our independent registered public accounting firm is unable to rely on our internal controls over financial reporting in connection with their audit of our financial statements, and in the further event that they are unable to devise alternative procedures in order to satisfy themselves as to the material accuracy of our financial statements and related disclosures, it is possible that we could receive a qualified or adverse audit opinion on those financial statements. In that event, the market for our common stock could be adversely affected. In addition, investors and others may lose confidence in the reliability of our financial statements and our ability to obtain equity or debt financing could be adversely affected.

We will be required to record compensation expense related to employee compensation awards in our financial statements beginning in our fiscal year 2007, which could harm our future reported operating results and cause unexpected fluctuations in our expenses. Our ability to attract and retain our management team, research, development, clinical, medical device sales personnel and others depends to some extent on our continued ability to issue stock options or other forms of equity compensation awards. Among other option issuances we have made, in April 2005 we issued options to key members of our management team for the purchase of an aggregate of 666,565 shares of common stock. These options will vest over a four-year period commencing April 1, 2006 (to the extent of 25 percent on such date and 6.25 percent quarterly thereafter). We have granted and expect to grant additional stock options to current and future management personnel and other key employees to provide additional incentives to join or

remain with us. The Financial Accounting Standards Board has issued Statement of Financial Accounting Standards ("SFAS") No. 123R, "Share-Based Payment." We are required to adopt the provisions of this standard effective May 1, 2006. We will adopt this standard using the modified prospective method. We expect adoption to result in an increase in our operating expenses. SFAS No. 123R eliminates the ability to account for share-based compensation transactions using Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and requires such transactions be accounted for using a fair-value-based method and the resulting cost to be recognized in the financial statements over the option vesting periods. Recording compensation expense in the statement of operations for employee stock options using the fair value method could have a significant negative effect on our reported financial results, particularly if we grant a significant number of options to our employees in future periods.

We cannot predict the outcome of legal proceedings and an adverse determination could negatively impact our financial results. In March 2006, J Giordano Securities LLC (d/b/a J Giordano Securities Group) ("JGSG") filed suit against our company claiming that it is entitled to damages due to an alleged breach of the engagement agreement, as amended, between us and JGSG. In particular, JGSG claims that the exercise of outstanding warrants for the purchase of common stock by certain JGSG-identified investors and our purchase of outstanding shares of 5% Series A Redeemable Convertible Preferred Stock from certain JGSG-identified investors in December 2005 and January 2006 entitle JGSG to damages no less than $1,431,769. In addition, JGSG notified us by letter dated May 26, 2006 that, pursuant to the agreement, it may claim compensation arising out of alleged rights to serve as a co-managing underwriter or member of the underwriting group of a proposed public offering set forth in the registration statement on Form SB-2 we filed with the Securities and Exchange Commission on May 19, 2006. Although we intend to vigorously defend ourselves against the lawsuit and any additional claims brought by JGSG, an adverse resolution of this claim could negatively impact our financial condition.

Our stock price is volatile; purchasers of our common stock could sustain substantial losses. The stock market in general and the market for small medical device companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price paid for the stock. The price of our common stock will be determined in the marketplace and may be influenced by many factors, including:

- Physician and patient acceptance of our products;
- Developments, disputes or litigation concerning patents or other proprietary rights and our ability to obtain patent protection for our technologies;
- Regulatory restrictions in the United States and foreign countries;
- The ability to manufacture our products to commercial standards;
- Public concern over our products;
- The loss of key personnel;
- Additional future sales of our common stock;
- Comparisons of our financial results with those of companies that are perceived to be similar to us;
- The pricing of our products;
- Changes in the structure of healthcare payment systems;
- Investors' perceptions of us; and
- General economic, industry and market conditions.

A decline in the market price of our common stock could cause you to lose some or all of your investment and may adversely impact our ability to attract and retain employees and raise capital. In addition, shareholders may initiate securities class action lawsuits if the market price of our stock drops significantly, which may cause us to incur substantial costs and could divert the time and attention of our management.

Fluctuations in our operating results may result in decreases in the price of our securities. We expect our operating results to fluctuate significantly because of several factors, including the timing of FDA clearance, government policies regarding payment for our products and the development of new technologies. Consequently, our operating results may fall below the expectations of public market analysts and investors. In that event, the price of our securities would likely decrease.

If there are substantial sales of our common stock by existing shareholders, the price of our common stock may decline. If our existing common shareholders sell substantial amounts of common stock in the public market, or the market perceives that such sales may occur, the market price of our common stock could fall. Existing shareholders may sell 8,563,929 shares in the public market pursuant to SB registration statements filed with the Securities and Exchange Commission. In addition, we anticipate that we will need to raise additional capital in the future to fund operations or for capital expenditures. If we raise additional funds by issuing equity securities, our stock price may decline and our existing shareholders may experience significant dilution. Furthermore, we may enter into financing transactions at prices that represent a substantial discount to market price. A negative reaction by investors and securities analysts to any sale of our equity securities could result in a decline in the trading price of our common stock.

You may have difficulty reselling our common stock. We cannot assure you of an active public market for our common stock. Selling our securities also may be difficult because of the quantity of securities that may be bought and sold, the possibility that transactions may be delayed, and a low level of security analyst and news media coverage. These factors could contribute to lower prices and larger spreads in the bid and ask prices for our securities.

If we fail to maintain the registration statements for the common stock issued upon conversion of preferred stock and the related warrant exercises, we could face substantial monetary charges. In connection with our April 2005 private placement and our December 2005 and January 2006 preferred stock purchases, we entered into registration rights agreements in which we agreed to prepare and file with the SEC by certain filing dates, registration statements to register certain shares of common stock, which registration statements must be maintained effective throughout a period of up to five years. If we fail to file any registration statement by a required filing date, or a registration statement is not declared effective by a specified effectiveness date, or after an effective date, the registration statement ceases to be effective and available to the holders of the securities that were registered for more than an aggregate of 40 trading days in any consecutive 12 month period, then in addition to other rights which such holders may have against us under applicable law, we are obligated to pay as liquidated damages to such holders for each calendar month or portion thereof an amount equal to 1.5 percent of the aggregate amount invested by the investors until we satisfy the requirements of the registration rights agreement. If we are required to pay such liquidated damages or other amounts to these holders, our business, financial condition, operating results and cash flows would be materially adversely affected.

The issuance of additional equity securities in a future financing could trigger the anti-dilution provisions of our outstanding warrants. If we were to issue additional equity securities at a per share price lower than the exercise price of our outstanding warrants, then the exercise price of such warrants would automatically adjust downward on either a weighted-average or full-ratchet basis. While we have no plans to issue securities in a manner that would trigger these anti-dilution provisions, we could elect to do so in the future or be required to do so in order to finance the company. Such adjustments would dilute the holdings of existing common shareholders.

Our affiliated shareholders have significant control over our company, which could reduce your ability to receive a premium for your securities through a change in control. As of June 26, 2006, officers and directors of our company beneficially owned approximately 21.4 percent of our outstanding common stock. As a result, they may be able to control our company and direct our affairs, including the election of directors and approval of significant corporate transactions. This concentration of ownership could also delay, defer or prevent a change in control of our company, and make some transactions more difficult or impossible without their support. These transactions might include proxy contests, tender offers, open market purchase programs or other share purchases that could give our shareholders the opportunity to realize a premium over the then prevailing market price of our securities. As a result, this concentration of ownership could depress the price of our securities.

Our acquisition of preferred stock and related warrant exercises have resulted in a concentration of ownership. In December 2005 and January 2006, investors who purchased preferred stock and warrants in our April 2005 private placement sold back their preferred stock to our company and exercised their related warrants. The common stock issued in connection with such transaction represented over 85 percent of our outstanding common stock at the completion of the transaction. A major portion of such securities were acquired by PKM Properties, LLC ("PKM"), an entity controlled by Paul K. Miller, one of our directors, and, with 18.3 percent beneficial ownership, one of the largest beneficial owners of our securities. Should a few of these investors agree to vote in concert, they would control our company. To our knowledge, these investors have not acted as a group in seeking, negotiating or making their investments in our company and consider themselves independent investors.

Minnesota law and our ability to issue preferred stock could deter a take-over or acquisition of our company. Our articles of incorporation authorize the issuance of shares of preferred stock. Our board of directors, without any action by our shareholders, is authorized to designate and issue preferred stock in such classes or series, as it deems appropriate and establish the rights and privileges of such shares, including liquidation and voting rights. Our ability to designate and issue preferred stock having preferential rights over our common stock could adversely affect the voting power and other rights of holders of common stock. We are also subject to the Minnesota Business Corporation Act, which includes provisions that limit the voting rights of persons acquiring specified percentages of shares of an issuing public corporation in a "control share acquisition" and restrict "business combinations" between issuing public corporations and specified persons acquiring their securities. Our ability to issue preferred stock and the application of the provisions of Minnesota law discussed above could impede or deter another party from making a tender offer or other proposal to acquire our company.

We do not intend to pay cash dividends on our common stock in the foreseeable future. We have not paid dividends on our common stock and do not anticipate paying any cash dividends in the foreseeable future.

Cautionary Note Regarding Forward-Looking Statements

This document contains forward-looking statements, which generally include the plans and objectives of management for future operations, including plans and objectives relating to our future economic performance and our current beliefs regarding revenues we might earn if we are successful in implementing our business strategies.

The forward-looking statements and associated risks may include, relate to or be qualified by other important factors. You can identify forward-looking statements generally by the use of forward-looking terminology such as "believes," "expects," "may," "will," "intends," "plans," "should," "could," "seeks," "pro forma," "anticipates," "estimates," "continues," or other variations of those terms, including their use in the negative, or by discussions of strategies, opportunities, plans or intentions. You may find these

forward-looking statements under the captions "Business" and "Management's Discussion and Analysis or Plan of Operation." These forward-looking statements include, among other things, statements about:

- The rate and degree of market acceptance of our products;
- The timing of and our ability to obtain and maintain regulatory clearances for our products;
- Our sales and marketing strategy;
- Our manufacturing strategy;
- Our ability to develop and market new and enhanced products;
- Our intellectual property portfolio;
- The timing of and ability to obtain reimbursement for procedures utilizing our products;
- Our competitors;
- Our estimates regarding future revenues, expenses and capital requirements; and
- The unpredictability of our quarterly results of operations.

These forward-looking statements necessarily depend upon assumptions and estimates that may prove to be incorrect. Although we believe that the assumptions and estimates reflected in the forward-looking statements are reasonable, we cannot guarantee that we will achieve our plans, intentions or expectations. The forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ in significant ways from any future results expressed or implied by the forward-looking statements.

Any of the factors described above or in our Cautionary Statement could cause our financial results, including our net income (loss) or growth in net income (loss), to differ materially from prior results, which in turn could, among other things, cause the price of our common stock to fluctuate substantially.

ITEM 7 FINANCIAL STATEMENTS

See Index to Financial Statements on Page F-1.

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

As previously reported, on June 9, 2005, PricewaterhouseCoopers LLP ("PwC") informed the audit committee of our board of directors that it would decline to stand for re-election as our independent registered public accounting firm and would cease to serve as our independent registered public accounting firm upon completion of PwC procedures regarding the following: (1) our financial statements as of and for the year ended April 30, 2005 and (2) the Form 10-KSB in which such financial statements would be included.

The reports of PwC on our financial statements as of and for the years ended April 30, 2005 and 2004 contained an explanatory paragraph expressing significant doubt about our ability to continue as a going concern, but did not contain an adverse opinion or disclaimer of opinion, and were not further qualified or modified as to uncertainty, audit scope or accounting principle.

During the years ended April 30, 2005 and 2004 and through June 6, 2006, there have been no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference thereto in its reports on our financial statements for such years.

During the years ended April 30, 2005 and 2004 and through June 6, 2006, there has been one reportable event of the type described in Item 304(a)(1)(iv)(B) of Regulation S-B. The reportable event occurred in March 2004 when PwC informed our audit committee that there was a material weakness in internal controls over financial reporting. Specifically, PwC identified a material weakness in the design and operation of internal controls relating to documenting and reporting international distribution marketing expenditures and related reimbursement. Following this communication from PwC, we implemented procedures and reporting to document and support customer marketing expenses which remedied this material weakness.

On August 8, 2005, we engaged Lurie Besikof Lapidus & Company, LLP ("LBL") as our independent registered public accounting firm commencing with work to be performed in relation to our fiscal quarter ended July 31, 2005 and in connection with the audit of our financial statements for the fiscal year ending April 30, 2006. In the past two years we have had no occasion to consult with LBL on any matters. Our audit committee has appointed LBL as our independent registered public accounting firm for fiscal year 2006.

ITEM 8A CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that are designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our company's disclosure controls and procedures as of the end of the period covered in this Annual Report on Form 10-KSB. Based on this evaluation and because of the material weakness described below, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were not effective as of the end of the period covered in this Annual Report on Form 10-KSB. To address the material weakness described below, we have expanded our disclosure controls and procedures to include additional analysis and other procedures over the preparation of the financial statements included in this report. Accordingly, our management has concluded that the financial statements included in this report fairly present in all material respects our financial position, results of operations and cash flows for the periods presented in conformity with generally accepted accounting principles.

Material Weakness in Internal Control Over Financial Reporting

A material weakness is a control deficiency or a combination of control deficiencies that result in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. Our management has concluded that, as of April 30, 2006 and 2005, we did not maintain effective controls over the preparation, review, presentation and disclosure of our statement of operations. Specifically, our controls did not prevent or detect the incorrect presentation of certain expenses as part of continuing operations rather than as part of discontinued operations, in accordance with generally accepted accounting principles. This control deficiency resulted in the restatement of our financial statements for the three and six month periods ended October 31, 2004 and the year ended April 30, 2005. Additionally, this control deficiency could result in a misstatement of the presentation and disclosure of our statement of operations that would result in a material misstatement in

our annual or interim financial statements that would not be prevented or detected. Accordingly, management determined that this control deficiency constitutes a material weakness in our internal control over financial reporting as of April 30, 2006 and 2005.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting, other than those noted below, that occurred during our quarter ended April 30, 2006 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Plan for Remediation of Material Weakness

We have developed a plan to address the above-referenced material weakness that includes adding additional professional accounting personnel. We engaged a senior financial consultant in March 2006 as an interim controller to provide an immediate expansion in our technical finance and accounting resources. In April 2006, we hired a full-time controller with national public accounting firm experience. We will continue to assess the adequacy and appropriateness of our financial staff and adjust accordingly as changes in our business warrant. Management believes that our plan to address this material weakness, when fully implemented, will remediate it. Although we are not certain when the material weakness will be remediated, we will need a period of time over which to demonstrate that these controls are functioning appropriately to conclude that we have adequately remediated it.

ITEM 8B OTHER INFORMATION

Not applicable.

PART III

ITEM 9 DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS; COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT

The following table provides information with respect to our directors and executive officers as of June 26, 2006. Our directors hold office until our next annual meeting of shareholders and until their successors have been elected and qualified. Each executive officer has been appointed to serve until his successor is duly appointed by the board or his earlier removal or resignation from office. There are no family relationships among our directors and executive officers.

Executive Officers and Directors

Name	Age	Principal Occupation	Position with MedicalCV	Director Since
Susan L. Critzer	50	Retired Chief Executive Officer and Chief Financial Officer of Restore Medical, Inc.	Chairperson of the Board	2002
Marc P. Flores	41	President, Chief Executive Officer and Director of MedicalCV, Inc.	President, Chief Executive Officer and Director	2004
Adam L. Berman	31	Vice President, Research and Development	Vice President, Research and Development	N/A
Eapen Chacko*.....	58	Vice President, Finance and Chief Financial Officer	Vice President, Finance and Chief Financial Officer	N/A
Robert W. Clapp	56	Vice President, Operations	Vice President, Operations	N/A
Larry G. Haimovitch ..	59	President of Haimovitch Medical Technology Consultants	Director	2005
Lawrence L. Horsch...	71	Chairman of Eagle Management & Financial Corp.	Director	2003
James E. Jeter.....	43	Vice President, Sales	Vice President, Sales	N/A
John H. Jungbauer*...	57	Principal Financial Officer and Principal Accounting Officer	Principal Financial Officer and Principal Accounting Officer	N/A
David B. Kaysen.....	56	President and Chief Executive Officer of Uroplasty, Inc.	Director	2002
Paul K. Miller.....	83	Private Investor	Director	1994
J. Robert Paulson, Jr. .	49	President, Chief Executive Officer and Director of Restore Medical, Inc.	Director	2005
Dennis E. Steger.....	59	Vice President, Regulatory Affairs and Quality Assurance	Vice President, Regulatory Affairs and Quality Assurance	N/A
Gary O. Tegan	39	Vice President, Marketing	Vice President, Marketing	N/A

* In May 2006, we entered into a written, at-will employment agreement with Eapen Chacko, who joined our company on June 21, 2006, as Vice President, Finance and Chief Financial Officer. Mr. Chacko is expected to assume the roles of principal financial officer and principal accounting

officer upon Mr. Jungbauer's resignation. Mr. Jungbauer currently serves in the roles of principal financial officer and principal accounting officer.

Susan L. Critzer, Chairperson of the Board since September 2005 and one of our directors since August 2002, has over 25 years of industry experience in general management, operations and product development. Ms. Critzer served as Chief Executive Officer and Chief Financial Officer of Restore Medical, Inc., a company focused on developing and marketing products for the ear, nose and throat field, from June 2002 to April 2005. From January 2001 to June 2002, Ms. Critzer served as Chief Operating Officer of Venturi Development Group, the business incubator focused on seed level medical device opportunities which founded Restore Medical. Prior to joining Venturi, Ms. Critzer served as President and Chief Executive Officer and Acting Chief Financial Officer of Integ Incorporated, a publicly held development stage glucose monitoring company from 1998 until it was acquired by Inverness Medical in early 2001. She joined Integ in 1995 as Vice President, Operations. Before joining Integ, Ms. Critzer served in various management roles at the Davis + Geck Division of American Cyanamid Corp., and the Deseret Medical Division of Becton-Dickinson Corp. Ms. Critzer began her career with General Motors Corporation where she spent thirteen years in a variety of engineering and management positions, including managing a $200 million truck front suspension plant in Detroit. Ms. Critzer serves on the Board of Governors and is a 3M Fellow at the University of St. Thomas School of Engineering in St. Paul, Minnesota.

Marc P. Flores became our President, Chief Executive Officer and one of our directors in August 2004. Mr. Flores served as Vice President of Sales & Marketing of Coalescent Surgical, Inc., a company focused on developing advanced technology for blood vessel anastomoses, from March 2000 to August 2004. Prior to joining Coalescent, Mr. Flores was Western Regional Manager of Sales for CardioThoracic Systems, Inc. from June 1997 to March 2000. Before joining CardioThoracic Systems, he held a variety of management and sales positions with Boston Scientific Corporation, GE Medical Systems and Xerox Corporation.

Adam L. Berman joined MedicalCV in September 2004 as Vice President, Research and Development. Mr. Berman has extensive experience and relationships within the cardiac surgery industry. From July 2001 to August 2004, he was a regional sales manager for Coalescent Surgical, Inc. From August 1998 to June 2001, he was a regional development manager for Computer Motion, a company focused on robotic-assisted, minimally invasive approaches for surgery. Before joining Computer Motion, Mr. Berman held various clinical research positions within the field of cardiac surgery.

Eapen Chacko joined MedicalCV effective June 21, 2006, as Vice President, Finance and Chief Financial Officer. Mr. Chacko will assume the roles of principal financial officer and principal accounting officer upon the resignation of John H. Jungbauer. Mr. Chacko has over 30 years of experience in strategic planning, investor relations, equity research and economics. From September 2000 to May 2005, he was Chief Financial Officer of Possis Medical, Inc., a developer, marketer and manufacturer of medical devices for the endovascular treatment market. Mr. Chacko was Vice President for Investor and Public Relations, Corporate Communication at Possis from September 1999 to August 2000. From 1995 to 1999, he was Director of Investor Relations at Fingerhut Companies, a direct marketer and financial services company. Mr. Chacko is a director of Hawkins, Inc., a company that formulates, blends and distributes bulk and specialty chemicals. Mr. Chacko has been named, along with his former employer Possis Medical, Inc. and another officer of that company, as a defendant in a securities class action case entitled Crowell, et al. v. Possis Medical, Inc. et al., No. 05-CV-01084-JMR-FLN, originally filed on June 3, 2005 in the United States District Court for the District of Minnesota. The consolidated amended class action complaint alleges violations of Section 10(b) and Rule 10b-5 of the Exchange Act against all defendants and claims under Section 20(a) against the officer defendants, all arising out of alleged misstatements and omissions about that company's AngioJet product and clinical trials for that product.

Robert W. Clapp joined MedicalCV in August 2004 as Vice President, Operations. From March 1993 to August 2004, Mr. Clapp was Vice President of Manufacturing, Quality, and Research/Development for EMPI, where he developed and introduced many new products, improved manufacturing efficiencies and lowered manufacturing costs. From February 1987 to March 1993, he was Vice President of Manufacturing for Dacomed Corporation, where he helped introduce five new products into the marketplace in 18 months. Prior to that, Mr. Clapp held engineering and operations positions at Xerxes Corporation, Medtronic, Inc., Control Data Corporation and AMF Paragon Electric.

Larry G. Haimovitch, one of our directors since August 2005, serves as President of Haimovitch Medical Technology Consultants, a San Francisco-based health care consulting firm he formed in 1990. His firm, whose current area of emphasis includes minimally invasive surgical technologies, specializes in the analysis of the medical device industry with emphasis on the current trends and future outlook for emerging medical technology.

Lawrence L. Horsch, who served as our Acting Chief Executive Officer from April 2004 to August 2004 and Chairman of the Board from August 2003 to September 2005, became one of our directors in August 2003. He served as a director of Boston Scientific Corporation from February 1995 to May 2003. He was one of the founding directors of SciMed Life Systems, Inc. and served as Chairman of the Board from 1977 to 1994, and Acting Chief Financial Officer from 1994 to 1995. Since 1990, Mr. Horsch has served as Chairman of Eagle Management & Financial Corp., a management consulting firm. Mr. Horsch has been involved as a director or consultant to numerous early-stage companies in the Twin Cities area and was a member of the University of St. Thomas MBA adjunct faculty from 1979 to 2004. Mr. Horsch currently serves as a director of Leuthold Funds, Inc., a registered investment company.

James E. Jeter joined MedicalCV in November 2005 as Vice President, Sales. Mr. Jeter most recently served as a Central States Region Manager for Medtronic, Inc. from August 2004 to November 2005, where he led a team charged with revenue growth across three product platforms: cardiac revascularization, atrial fibrillation and Coalescent anastomotic devices. From January 2001 to August 2004, Mr. Jeter was a Regional Sales Manager, then a Divisional Sales Manager, with Coalescent Surgical, Inc. tasked with starting and building the anastomotic device business for cardiac and vascular surgeons in the company's Central States Division. From July 1999 to January 2001, Mr. Jeter was a co-managing partner of Innovative Surgical Products. Previously, he held a series of positions, including Director of Sales, Cardiac Division, with the Genzyme Corporation.

John H. Jungbauer joined MedicalCV in February 2004 as Vice President, Finance and Chief Financial Officer. Mr. Jungbauer came to our company with more than 26 years of experience in financial management and long-range planning, international financial/treasury operations, information technology systems. From 1990 to 2002, Mr. Jungbauer was Vice President of Finance and Chief Financial Officer with ATS Medical, Inc. During 1988 and 1989, he was Executive Vice President of Titan Medical, Inc. From 1977 to 1987, he held several financial management positions at St. Jude Medical, Inc., including Vice President of Finance and Chief Financial Officer from 1981 to 1987. On April 6, 2006, Mr. Jungbauer announced his intention to resign from his executive officer position at our company. On June 21, 2006, Mr. Jungbauer's roles transitioned from Vice President, Finance and Chief Financial Officer to principal financial officer and principal accounting officer. Mr. Chacko will assume the roles of principal financial officer and principal accounting officer upon the resignation of Mr. Jungbauer. Further details regarding the anticipated effective date of Mr. Jungbauer's resignation are set forth below under "Executive Compensation—Employment Contracts and Termination of Employment, and Change-in-Control Arrangements."

David B. Kaysen has been one of our directors since August 2002. Mr. Kaysen serves as President, Chief Executive Officer and a director of Uroplasty, Inc., a developer, manufacturer and marketer of products primarily for the treatment of urinary and fecal incontinence and overactive bladder symptoms.

Mr. Kaysen served as President and Chief Executive Officer of Advanced Duplication Services LLC, a privately held duplicator/replicator of CDs and DVDs, from July 2005 until May 2006. From December 2002 through July 2005, Mr. Kaysen served as President, Chief Executive Officer and a director of Diametrics Medical, Inc., a company that develops, manufactures and commercializes blood and tissue analysis systems that provide diagnostic results at the point of patient care. Mr. Kaysen has more than 25 years of executive management and sales and marketing experience in the medical products and services industry, most recently serving 10 years as President, Chief Executive Officer and a director of Rehabilicare Inc. (now Compex Technologies, Inc.), a manufacturer and marketer of home electrotherapy equipment for the physical therapy, rehabilitation, occupational and sports medicine markets. From 1988 to 1989, Mr. Kaysen served as President, Chief Executive Officer and a director of Surgidyne, Inc. (now Sterion, Inc.). Mr. Kaysen has also held senior management positions in sales and marketing at several medical product and services companies, including Redline Healthcare, American Hospital Supply Corporation, Emeritus Corporation and Lectec/NDM Corporation. Mr. Kaysen currently serves as a director of Zevex International, Inc., a publicly held company engaged in the business of designing, manufacturing and distributing medical devices.

Paul K. Miller has been one our directors since August 1994. Mr. Miller served as President of Acton Construction Management Company, a real estate management company, from 1980 to 2004. Mr. Miller has, over the course of his business career, been the President and majority shareholder of various companies with offices in Minnesota and Texas which have been engaged in the construction of municipal wastewater projects throughout the central United States and in the acquisition and management of real estate investments. He is a significant investor and director of a number of development stage companies and has served as a bondholders representative on the creditors' committees of several publicly held companies.

J. Robert Paulson, Jr., who became one of our directors in August 2005, was appointed President, Chief Executive Officer and a director of Restore Medical, Inc., a company focused on developing and marketing products for the ear, nose and throat field, in April 2005. Prior to joining Restore Medical, Mr. Paulson served as Chief Financial Officer and Vice President of Marketing for Endocardial Solutions, Inc. from August 2002 until March 2005. From 2001 to June of 2002, Mr. Paulson was the Sr. Vice President and General Manager of the Auditory Division of Advanced Bionics Corporation, and between 1995 and 2001, Mr. Paulson served in various capacities at Medtronic, Inc., including Vice President and General Manager of the Surgical Navigation Technologies business unit; Vice President of Corporate Strategy and Planning; and Director of Corporate Development. From 1988 to 1995, Mr. Paulson held various marketing, business development and in-house counsel positions at General Mills, Inc., and prior to that practiced law at the Minneapolis firm of Lindquist & Vennum. Mr. Paulson has served on the board of directors of Vascular Solutions, Inc. since May 2005.

Dennis E. Steger, Vice President, Regulatory Affairs and Quality Assurance, joined MedicalCV in September 2001 as Vice President, Quality Assurance. From August 1998 to August 2001, Mr. Steger was Director Design Quality Assurance for Medtronic Perfusion Systems, where he was responsible for controlling the development and transfer of new/modified products from research and development to manufacturing. He also held the position of Director Regulatory Affairs/Quality Assurance & Clinical for AVECOR Cardiovascular, Inc. from July 1991 to August 1998, where he was responsible for quality systems, technical support, risk analysis, documentation, and regulatory affairs. He has also held senior level management positions with Johnson & Johnson Cardiovascular, Extracorporeal Medical Specialties and Tompkins Rubber Company.

Gary O. Tegan, Vice President, Marketing, joined MedicalCV in April 2006. Most recently, Mr. Tegan served as the Vice President of Sales & Marketing for PneumRx, Inc. from September 2005 through April 2006, where he developed and implemented the company's sales and marketing strategy for its initial product launch. From June 2004 to September 2005, he served as Vice President of Marketing at Curon

Medical, Inc., a radiofrequency energy based company focused on the treatment of gastrointestinal disorders. Prior to that, Mr. Tegan was the Director of Marketing for Coalescent Surgical, Inc. from June 2001 to June 2004, where he helped develop its anastomotic device business using technology-based marketing techniques. Previously, Mr. Tegan held a series of senior sales and marketing positions at United States Surgical and Starion Instruments.

Audit Committee Matters

We have a separately designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Susan L. Critzer, David B. Kaysen and J. Robert Paulson, Jr. are the members of our audit committee.

Under Nasdaq Marketplace Rules that would apply if our common stock were listed on Nasdaq, each member of our audit committee would be required to (i) be independent as defined under Nasdaq Marketplace Rule 4200(a)(15); (ii) meet the criteria for independence set forth in Rule 10A-3(b)(1) under the Exchange Act; (iii) not have participated in the preparation of the financial statements of the company or any current subsidiary of the company at any time during the past three years; and (iv) be able to read and understand fundamental financial statements, including a company's balance sheet, income statement, and cash flow statement. Our board of directors has determined that Ms. Critzer and Messrs. Kaysen and Paulson would meet these requirements. In addition, at least one member of our audit committee would be required to have past employment experience in finance or accounting, requisite professional certification in accounting, or other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities. Our board of directors has determined that at least Ms. Critzer would meet this requirement.

Audit Committee Financial Expert

Our board of directors has determined that each of Susan L. Critzer and J. Robert Paulson, Jr. is an "audit committee financial expert" as defined in Item 401(e) of Regulation S-B.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics that is applicable to all of our employees, officers (including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions) and directors. Our Code of Business Conduct and Ethics satisfies the requirements of Item 406(b) of Regulation S-B and the Nasdaq Marketplace Rules that would apply if our common stock were listed on Nasdaq. Our Code of Business Conduct and Ethics is posted on our internet website at www.medcvinc.com and is available free of charge, upon written request to our Chief Financial Officer at MedicalCV, Inc., 9725 South Robert Trail, Inver Grove Heights, MN 55077. We intend to disclose any amendments to or waivers from a provision of our Code of Business Conduct and Ethics that require disclosure on our website at www.medcvinc.com.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our officers, directors and persons who own more than 10 percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Such officers, directors and shareholders are required by the SEC to furnish us with copies of all such reports. To our knowledge, based solely on a review of copies of reports filed with the SEC during the last fiscal year, all applicable Section 16(a) filing requirements were met, except that (1) one report on Form 4 setting forth the December 22, 2005 exercise of outstanding warrants for the purchase of common stock and our purchase of outstanding shares of 5% Series A Redeemable

Convertible Preferred Stock from PKM Properties, LLC, an entity controlled by Paul K. Miller, one of our directors, and one of the largest beneficial owners of our securities, (2) one report on Form 4 setting forth the December 30, 2005 exercise of outstanding warrants for the purchase of common stock and our purchase of outstanding shares of 5% Series A Redeemable Convertible Preferred Stock from Peter L. Hauser, a principal shareholder, (3) one report on Form 3 setting forth the initial ownership on December 28, 2005 of MedCap Partners, LP, one of our principal shareholders, (4) one report on Form 5 setting forth the December 27, 2005, December 28, 2005 and December 29, 2005 exercise of outstanding warrants for the purchase of common stock and our purchase of outstanding shares of 5% Series A Redeemable Convertible Preferred Stock from MedCap Partners, LP, one of our principal shareholders, (5) one report on Form 4 setting forth the March 21, 2006 and March 22, 2006 purchases of common stock by MedCap Partners, LP, one of our principal shareholders, and (6) one report on Form 3 setting forth the initial ownership on January 17, 2006 of the Paul K. Miller Irrevocable Trust of 2005, were not filed on a timely basis. With the exception of the Form 3 for the Paul K. Miller Irrevocable Trust of 2005, all such forms for fiscal year 2006 were filed as of June 26, 2006.

ITEM 10 EXECUTIVE COMPENSATION

The following table sets forth information with respect to compensation paid by us to our highest paid executive officers (the "Named Executive Officers") for the fiscal year ended April 30, 2006.

Summary Compensation Table

		Annual Compensation			Long-Term Compensation Awards	
Name and Principal Position(1)	Fiscal Year	Salary ($)(2)	Bonus ($)	Other Annual Compensation ($)	Securities Underlying Options	All Other Compensation ($)(3)
Marc P. Flores	2006	223,696	66,750(4)	0	28,669	32,834(5)
President and Chief	2005	144,623	25,000	0	363,381	322
Executive Officer						
John H. Jungbauer.....	2006	199,992	0	0	0	132,871(6)
Vice President, Finance	2005	157,597	0	0	144,012	1,188
and Chief Financial	2004	32,789	0	0	0	95
Officer						
Adam L. Berman	2006	175,798	25,000	0	7,167	44,417(7)
Vice President, Research	2005	104,321	0	0	74,506	1,200
and Development						
Robert W. Clapp	2006	175,530	10,000	0	7,167	5,296
Vice President,	2005	107,690	0	0	75,659	1,689
Operations						
Dennis E. Steger.....	2006	150,547	10,000	0	2,867	4,414
Vice President,	2005	121,732	0	0	21,502	3,124
Regulatory Affairs and	2004	119,995	0	0	4,048	3,773
Quality Assurance						

(1) Mr. Flores became our President and Chief Executive Officer in September 2004. Mr. Jungbauer became our Vice President, Finance and Chief Financial Officer in February 2004 and, in April 2006, announced his intention to resign from our company. Mr. Jungbauer currently serves as our principal financial officer and principal accounting officer. Mr. Berman became our Vice President, Research and Development in September 2004. Mr. Clapp became our Vice President, Operations in

August 2004. Mr. Steger became our Vice President, Regulatory Affairs and Quality Assurance in September 2001.

(2) We have entered into employment agreement with each of our Named Executive Officers. Annual base salaries currently in effect under such employment agreements are as follows: Mr. Flores ($238,075), Mr. Jungbauer ($200,000), Mr. Berman ($185,500), Mr. Clapp ($182,000) and Mr. Steger ($156,000).

(3) Unless otherwise noted, these entries represent our payment of term life insurance premiums, long-term disability insurance premiums and 401(k) savings and retirement plan company match contributions in the amounts set forth below:

Name	Fiscal Year	Term Life Insurance Premiums	Long-term Disability Insurance Premiums	401(k) Savings and Retirement Plan Company Match Contributions
Marc P. Flores	2006	349	—	1,027
	2005	322	—	—
John H. Jungbauer	2006	145	1,083	2,769
	2005	279	909	—
	2004	22	73	—
Adam L. Berman	2006	258	—	4,305
	2005	258	—	942
Robert W. Clapp	2006	131	976	4,189
	2005	151	511	1,027
Dennis E. Steger	2006	—	824	3,590
	2005	—	732	2,392
	2004	641	732	2,400

(4) Under his employment agreement, Mr. Flores has an annual bonus potential of up to 30 percent of his annual base salary based upon achievement of certain goals.

(5) In October 2005, we entered into a letter agreement with Mr. Flores that sets forth details regarding our company's agreement to reimburse Mr. Flores for certain expenses in connection with the sale of his Nevada home, relocation expenses and expenses in connection with the establishment of a Minnesota residence. Such agreement is described in "Employment Contracts and Termination of Employment, and Change-in-Control Arrangements" below. Pursuant to such agreement, we paid $16,458 of moving expenses and $15,000 of temporary housing expenses on behalf of Mr. Flores during fiscal year 2006. These amounts are included in "All Other Compensation" above. To the extent that such expense reimbursements are taxable to Mr. Flores, we have agreed to gross up the amounts paid.

Previously, we reimbursed Mr. Flores for travel, meals and lodging associated with his commute from his Incline Village, Nevada residence to our company's headquarters in Inver Grover Heights, Minnesota. A significant portion of Mr. Flores' time was spent traveling on company business and we would have incurrred business travel expenses regardless of the location of Mr. Flores' home. The reimbursements for Mr. Flores' travel, meals and lodging expenses are not included in compensation.

(6) In April 2006, we entered into an amendment to Mr. Jungbauer's employment agreement pursuant to which Mr. Jungbauer will receive severance payments totaling $200,000 and continuation of COBRA. Severance of $125,000 and COBRA of $3,874 was earned and accrued in fiscal year 2006. These amounts are included in "All Other Compensation" above. Pursuant to the amendment, we agreed to amend Mr. Jungbauer's stock option agreements to provide that his options, to the extent vested on

the termination date, will be exercisable for a period of twelve months following the termination of Mr. Jungbauer's employment. In July 2006, we agreed to retroactively rescind the provision in the amendment that provided Mr. Jungbauer twelve months following termination of employment to exercise the vested portions thereof and revert to the original terms of the stock option agreements that provide Mr. Jungbauer three months following termination of employment to exercise the vested portions thereof.

(7) In October 2005, our board of directors authorized the payment of Mr. Berman's relocation expenses. During fiscal year 2006, we paid $39,854 of such expenses for Mr. Berman. This amount is included in "All Other Compensation" above.

The following table sets forth information concerning grants of stock options during the fiscal year ended April 30, 2006 to each Named Executive Officer. We granted no stock appreciation rights during our last fiscal year.

Option Grants in Last Fiscal Year

	Individual Grants			
Name	Number of Securities Underlying Options Granted(1)	Percent of Total Options Granted to Employees in Fiscal Year(2)	Exercise Price ($/share)	Expiration Date
Marc P. Flores	28,669	20.2	12.00	04/03/2013
John H. Jungbauer	0	0	N/A	N/A
Adam L. Berman	7,167	5.0	12.00	04/03/2013
Robert W. Clapp	7,167	5.0	12.00	04/03/2013
Dennis E. Steger	2,867	2.0	12.00	04/03/2013

(1) Each such option vests to the extent of 25% on the first anniversary of the date of grant and 6.25% quarterly thereafter.

(2) Based on an aggregate of 142,216 shares subject to options granted to our employees during the fiscal year ended April 30, 2006.

The following table sets forth information concerning the options exercised by each Named Executive Officer during the fiscal year ended April 30, 2006. It also sets forth information concerning unexercised options held by such persons as of April 30, 2006. No stock appreciation rights were exercised by such persons during the last fiscal year or were outstanding at the end of that year.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year End Option Values

			Number of Securities Underlying Unexercised Options at Fiscal Year End		Value of Unexercised In the Money Options at Fiscal Year End ($)(1)	
Name	Shares Acquired on Exercise	Value Realized ($)	Exercisable	Unexercisable	Exercisable	Unexercisable
Marc P. Flores	0	N/A	90,846	301,204	180,619	541,853
John H. Jungbauer	0	N/A	36,005	108,007	67,733	203,194
Adam L. Berman	0	N/A	18,627	63,046	37,617	112,846
Robert W. Clapp	0	N/A	18,916	63,910	33,867	101,596
Dennis E. Steger	0	N/A	12,624	19,793	11,290	33,865

(1) Represents the closing price of one share of common stock on the last trading day of the fiscal year ended April 30, 2006, minus the per share exercise price of the option to purchase shares of common stock.

Employment Contracts and Termination of Employment, and Change-in-Control Arrangements

In August 2004, we entered into a letter agreement with Marc P. Flores. Under this agreement, Mr. Flores agreed to serve as our President and Chief Executive Officer at an annual salary of $222,500 per year plus a bonus potential of $10,000 per quarter based upon achievement of certain goals. The agreement provided that, subject to development and adoption of such plan by our board of directors and approval of such award by our compensation committee, we would grant Mr. Flores a 20 percent interest in a pool of 80,000 shares of restricted common stock. We also granted Mr. Flores a stock option to purchase 19,347 shares of our common stock at a price of $11.50 per share. Such option vests over four years and expires on August 30, 2014. In addition, we agreed to pay certain relocation expenses for Mr. Flores. Effective April 1, 2005, in lieu of the above-referenced restricted stock award, the compensation committee of our board of directors awarded a non-qualified stock option for the purchase of 344,034 shares of common stock to Mr. Flores. This option was issued outside our employee benefit plans. Such option vests to the extent of 25 percent on the first anniversary of the date of grant and 6.25 percent quarterly thereafter. It is exercisable at $8.90 per share. This option expires on April 1, 2012.

On July 11, 2005, our board of directors approved certain compensation arrangements for two executive officers, Marc P. Flores, our President and Chief Executive Officer, and John H. Jungbauer, then our Vice President, Finance and Chief Financial Officer. We have entered into written, at-will employment agreements pursuant to which we continued the existing employment of these officers at their then current base salary levels, $222,500 for Mr. Flores and $200,000 for Mr. Jungbauer. The employment agreement with Mr. Flores supersedes the above-described letter agreement from August 2004. Under the employment agreement, Mr. Flores now has a bonus potential of up to 30 percent of base salary ($66,750) per year based upon achievement of certain goals. Each employment agreement provides that a severance payment will be made if the employment of the officer is terminated by our company without cause, or by the officer for good reason, including, but not limited to, a reduction of the officer's compensation; a reduction of authority and responsibility; a relocation of place of employment; or a breach of the employment arrangement by our company. The severance payment to Mr. Flores would equal one year of base salary, and the severance payment to Mr. Jungbauer would be six months of base salary; and, if at the end of such six-month period, Mr. Jungbauer was not employed or engaged as an independent contractor, we would pay him up to an additional six months of base salary until he is employed or engaged as an independent contractor. In addition to payments of base salary, we have agreed to pay or reimburse these officers for medical (COBRA) benefits for the periods covered by the severance payments. In addition, the officers have agreed to certain nondisclosure and inventions provisions and certain noncompetition and nonrecruitment provisions during the term of employment and for a period of one year after termination of employment.

On October 24, 2005, we entered into a letter agreement with our President and Chief Executive Officer Marc P. Flores. The agreement set forth details regarding our company's agreement to reimburse Mr. Flores for certain expenses in connection with the sale of his Nevada home, relocation expenses and expenses in connection with the establishment of a Minnesota residence. We entered into this letter agreement because we determined that our outlay for reimbursement of travel and lodging expenses would decline when Mr. Flores completes his move to Minnesota, but Mr. Flores advised us that October was an inopportune time to put his Nevada home on the market. To assist Mr. Flores with the financial burden of maintaining a temporary Twin Cities residence, we have agreed to pay Mr. Flores, for a period of up to one year, a supplemental payment of $2,500 per month (such payments to end November 1, 2006, or upon Mr. Flores' sale of his Nevada residence). We also agreed to reimburse Mr. Flores for the cost of transporting his vehicles and household goods to the temporary Minnesota residence. In addition, if Mr. Flores sells his Nevada home on or before November 1, 2006, we agreed to pay for (1) packing, transportation and delivery of household goods by a national freight carrier, (2) reasonable and customary real estate closing costs of the sale of his Nevada home, and (3) reasonable and customary closing costs for

the purchase of his Minnesota residence. If the foregoing benefits result in additional taxable income to Mr. Flores, we also agreed to gross up the benefits payable to Mr. Flores to cover such taxes. The understanding set forth in the letter agreement supersedes all prior understandings and agreements covering Mr. Flores' relocation. The provisions set forth in the letter agreement will terminate upon Mr. Flores' termination, except to the extent that Mr. Flores has incurred or submitted a reimbursement expense prior to such termination.

In April 2006, the compensation committee of our board of directors increased Mr. Flores' annual base salary to $238,075. Under his employment agreement, Mr. Flores has an annual bonus potential of up to 30 percent of annual base salary based upon achievement of certain goals.

In August 2005, we entered into written, at-will employment agreements with Adam L. Berman, Robert W. Clapp and Dennis E. Steger, each of whom was designated an "executive officer" by our board of directors in September 2005. In November 2005, we entered into a written, at-will employment agreement with James E. Jeter, who was designated an "executive officer" by our board of directors in November 2005. In April 2006, we entered into a written, at-will employment agreement with Gary O. Tegan, who was designated an "executive officer" by our board of directors in May 2006. Pursuant to the employment agreements with Messrs. Berman, Clapp, Steger, Jeter and Tegan, these employees have current annual base salary levels of $175,000 for each of Messrs. Berman, Clapp and Tegan, $150,000 for Mr. Steger and $125,000 for Mr. Jeter. Our executive officers are eligible to receive performance-based cash bonuses. In addition, Mr. Jeter is eligible to receive bonuses, when our business plan objectives are met, capped at 100 percent of his annual base salary. For the first three months of his employment, we agreed to pay Mr. Jeter based on annual compensation of $175,000 per year (base and bonus). In each of February 2006 and May 2006, we agreed to continue paying Mr. Jeter at the same fixed rate for an additional three months. In May 2006, we entered into a written, at-will employment agreement with Eapen Chacko, who joined our company on June 21, 2006, as Vice President, Finance and Chief Financial Officer. Mr. Chacko will receive an annual base salary of $200,000 and is eligible to receive performance-based cash bonuses. Each employment agreement provides that a severance payment will be made if the employment of the employee is terminated by our company without cause, or by the employee for good reason, including, but not limited to, a reduction of the employee's compensation; a reduction of authority and responsibility; a relocation of place of employment; or a breach of the employment agreement by our company. The severance payment would be six months of base salary; and, if at the end of such six-month period, the individual was not employed or engaged as an independent contractor, we would pay him up to an additional six months of base salary until he is employed or engaged as an independent contractor. In addition to payments of base salary, we have agreed to pay or reimburse these individuals for medical (COBRA) benefits for the periods covered by the severance payments. In addition, these employees have agreed to certain nondisclosure and inventions provisions and certain noncompetition and nonrecruitment provisions during the term of employment and for a period of one year after termination of employment.

In October 2005, our board of directors authorized the payment of Mr. Berman's relocation expenses. During fiscal year 2006, we paid $39,854 of such expenses for Mr. Berman.

In April 2006, the compensation committee of our board of directors increased Mr. Berman's annual base salary to $185,500; increased Mr. Clapp's annual base salary to $182,000; and increased Mr. Steger's annual base salary to $156,000.

In connection with the commencement of his employment, we granted Mr. Jeter a ten-year stock option under our Amended and Restated 2001 Equity Incentive Plan to purchase 23,250 shares of common stock at $8.40 per share with vesting of 25 percent on the first anniversary of the date of grant and 6.25 percent quarterly thereafter. In connection with the commencement of his employment, we granted Mr. Tegan a ten-year stock option under our Amended and Restated 2001 Equity Incentive Plan to purchase 25,000 shares of common stock at $10.50 per share with vesting of 25 percent on the first

anniversary of the date of grant and 6.25 percent quarterly thereafter. In connection with the commencement of his employment, we granted Mr. Chacko a ten-year stock option under our Amended and Restated 2001 Equity Incentive Plan to purchase 91,229 shares of common stock at $5.95 per share with vesting of 25 percent on the first anniversary of the date of grant and 6.25 percent quarterly thereafter.

In April 2006, we entered into an amendment to our employment agreement with Mr. Jungbauer to reflect the mutual decision reached concerning Mr. Jungbauer's departure from our company. Pursuant to the amendment, Mr. Jungbauer's employment will terminate on the date we advise him that we have engaged a new chief financial officer and/or principal accounting officer. We agreed, however, that the actual date of termination of Mr. Jungbauer's employment will be no earlier than July 31, 2006. We also have the right, at our option, to extend Mr. Jungbauer's employment (as a non-officer) for a transition period. Such transition period will not, without Mr. Jungbauer's consent, continue beyond December 31, 2006. Mr. Jungbauer's compensation and benefits will continue to be paid under the employment agreement at their current rates through the termination date and any transition period. Except for the severance payments described below, Mr. Jungbauer will no longer be eligible for bonus or other incentive compensation. Under the terms of the employment agreement, Mr. Jungbauer has the right to terminate his employment upon 60 days' prior notice and is entitled to a severance payment equal to six months of base compensation. Under the employment agreement, Mr. Jungbauer will receive a severance payment of $100,000 on his termination date. To facilitate a smooth transition, we have agreed to make an additional severance payment to Mr. Jungbauer. Under the amendment, Mr. Jungbauer will receive an additional severance payment of $100,000 on January 2, 2007. In addition to these severance payments, we have agreed to pay or reimburse Mr. Jungbauer for medical (COBRA) benefits for the periods covered by the severance payments. Mr. Jungbauer holds stock options for the purchase of 144,012 shares of our common stock. His stock option agreements provide that he has three months following termination of employment to exercise the vested portions thereof. Options to purchase 44,065 shares of our common stock will be vested as of July 1, 2006. Pursuant to the amendment, we agreed to amend Mr. Jungbauer's stock option agreements to provide that his options, to the extent vested on the termination date, will be exercisable for a period of twelve months following the termination of Mr. Jungbauer's employment. In July 2006, we agreed to retroactively rescind the provision in the amendment that provided Mr. Jungbauer twelve months following termination of employment to exercise the vested portions thereof and revert to the original terms of the stock option agreements that provide Mr. Jungbauer three months following termination of employment to exercise the vested portions thereof.

Non-Employee Director Compensation

Through November 2003, our non-employee directors were entitled to receive automatic annual stock option grants for the purchase of 700 shares under our 1993 Director Stock Option Plan. Between the expiration of such plan and August 2004, automatic annual stock option grants for the purchase of 700 shares were made to our non-employee directors under our 2001 Equity Incentive Plan.

On March 21, 2005, we granted a stock option for the purchase of 5,000 shares of common stock to each of David B. Kaysen and Susan L. Critzer for their service as non-employee directors. These options were granted outside our shareholder-approved plans, were fully vested at the date of grant, and are exercisable at $10.00 per share. These options expire on March 21, 2015.

On June 8, 2005, our compensation committee adopted cash and equity-based compensatory arrangements for non-employee directors. On August 3, 2005, our compensation committee made certain revisions to the equity-based compensatory arrangements, which revisions are reflected in the following discussion.

Effective May 1, 2005, each non-employee director receives the following cash compensation for a full year of service to our company (paid quarterly):

Position	Annual Retainer
Board Member (other than Board Chairperson)	$ 6,000
Board Chairperson	$12,000
Audit Committee Member (other than Committee Chairperson)	$ 500
Audit Committee Chairperson	$ 2,000
Compensation Committee Member (other than Committee Chairperson)	$ 500
Compensation Committee Chairperson	$ 1,000

Our directors are also reimbursed for certain reasonable expenses incurred in attending board meetings.

In addition, each year, as of the date of the annual meeting of shareholders of our company, commencing with the 2005 annual meeting of the shareholders, each eligible director who has been elected or reelected or who is continuing as a member of the board as of the adjournment of the annual meeting, automatically receives an option award in the amount of 5,000 shares (the "Annual Grant") under our 2005 Director Stock Option Plan. In addition, each eligible director who is elected to the board other than at an annual meeting of shareholders shall automatically receive an option award (the "Initial Award") under such plan. The number of shares to be covered by an Initial Award shall equal the nearest whole number, rounded down, equal to (a) 5,000 shares multiplied by (b) the quotient obtained by dividing (1) the number of whole weeks between the date of such person's election of the board and the scheduled date of the next annual meeting of shareholders and (2) 52 weeks. The date of an Initial Award shall be the date of election of such person to the board. Pursuant to our 2005 Director Stock Option Plan, we granted options for the purchase of 673 shares of common stock to each of Larry G. Haimovitch and J. Robert Paulson, Jr. on August 3, 2005, and options for the purchase of 5,000 shares of common stock to each of Susan L. Critzer, Larry G. Haimovitch, Lawrence L. Horsch, David B. Kaysen, Paul K. Miller and J. Robert Paulson, Jr. on September 22, 2005.

In May 2006, our Board of Directors awarded non-qualified stock options for the purchase of 5,000 shares of common stock to each of Susan L. Critzer, Larry G. Haimovitch, Lawrence L. Horsch, David B. Kaysen, Paul K. Miller and J. Robert Paulson, Jr. The foregoing options were issued to each of our non-employee directors under our Amended and Restated 2001 Equity Incentive Plan. Such options vested immediately. They are exercisable at $10.50 per share. These options expire on May 10, 2016.

Each non-employee director shall also automatically be granted the right to elect to receive additional options in lieu of the amount of the director's cash compensation ("Annual Retainer"), or a portion thereof, for the year following election or reelection to, or continuation on, the board.

The Initial Awards, the Annual Grants and any options issued in lieu of the Annual Retainer have ten-year terms and vest 100 percent on the first anniversary of the date of grant. The vesting of such options accelerates in the event of a change of control of our company.

Directors who are also employees receive no remuneration for services as members of the board or any board committee.

ITEM 11 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

The following table sets forth certain information known to us regarding beneficial ownership of our common stock as of June 26, 2006, by (a) each person who is known to us to own beneficially more than five percent of our common stock, (b) each director, (c) each executive officer, and (d) all executive officers and directors as a group. The percentage of beneficial ownership is based on 9,122,938 shares outstanding as of June 26, 2006. As indicated in the footnotes, shares issuable pursuant to warrants and options are deemed outstanding for computing the percentage of the person holding such warrants or options but are not deemed outstanding for computing the percentage of any other person. Unless otherwise noted, each person identified below has sole voting and investment power with respect to such shares. Except as otherwise noted below, we know of no agreements among our shareholders which relate to voting or investment power with respect to our common stock. Unless otherwise indicated, the address for each listed shareholder is c/o MedicalCV, Inc., 9725 South Robert Trail, Inver Grove Heights, Minnesota 55077.

Name and Address of Beneficial Owner(1)	Amount and Nature of Beneficial Ownership(1)	Percent of Class(1)
MedCap Management and Research LLC 500 Third St., Ste 535 San Francisco, CA 94107-6809	1,856,050(2)	20.3%
Paul K. Miller	1,754,362(3)	18.3%
SF Capital Partners, Ltd. c/o Stark Offshore Man agement, LLC 3600 S Lake Dr. St. Francis, WI 53235-3716	1,373,100(4)	15.1%
Paul K. Miller Irrevocable Trust of 2005 606 24th Avenue South, Suite B12 Minneapolis, MN 55454	1,139,226	12.5%
Whitebox Advisors, LLC. 3033 Excelsior Blvd., Ste 300 Minneapolis, MN 55416	1,126,654(5)	12.3%
MedCap Partners, L.P. 500 Third St., Ste 535 San Francisco, CA 94107-6809	1,101,007(2)	12.1%
Millennium Partners, L.P. c/o Millennium Management, L.L.C. 666 Fifth Ave., 8th Fl New York, NY 10103-0899	903,430(6)	9.9%
MedCap Master Fund, L.P. 500 Third St., Ste 535 San Francisco, CA 94107-6809	755,043(2)	8.3%
Perkins Capital Management, Inc. 730 East Lake Street Wayzata, MN 55391	548,333(7)	5.9%
Peter L. Hauser. 16913 Kings Court Lakeville, Minnesota 55044	535,477(8)	5.8%
Marc P. Flores	115,346(9)	1.2%
Lawrence L. Horsch	52,791(10)	*
John H. Jungbauer	49,065(11)	*
Larry G. Haimovitch	39,735(12)	*
Robert W. Clapp	26,734(13)	*
Adam L. Berman	23,908(14)	*
Susan L. Critzer	15,100(15)	*
Dennis E. Steger	14,967(16)	*
David B. Kaysen	12,100(17)	*
J. Robert Paulson, Jr.	5,000(17)	*
James E. Jeter	1,290	*
Eapen Chacko	0	0
Gary O. Tegan	0	0
All current directors and executive officers as a group (14 persons)	2,110,398(18)	21.4%

* Less than one percent.

(1) Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to securities. Securities "beneficially owned" by a person may include securities owned by or for, among others, the spouse, children, or certain other relatives of such person as well as other securities as to which the person has or shares voting or investment power or has the option or right to acquire within 60 days of June 26, 2006. Shares beneficially owned reflect the one-for-ten reverse stock split of our common stock and preferred stock effective May 31, 2006.

(2) Based solely upon the Schedule 13G filed with the SEC on April 7, 2006. As set forth in the Schedule 13G, as supplemented by the Form 4 filed with the SEC on May 2, 2006, Medcap Management & Research LLC ("MMR") as general partner and investment manager of MedCap Partners L.P. and MedCap Master Fund L.P. and C. Fred Toney as managing member of MMR may be deemed to beneficially own the shares owned by MedCap Partners and MedCap Master Fund in that they may be deemed to have the power to direct the voting or disposition of the shares. Neither the filing of the Schedule 13G nor any of its contents is deemed to constitute an admission that either MMR or Mr. Toney is, for any purpose, the beneficial owner of any securities to which the Schedule 13G relates, and MMR and Mr. Toney disclaim beneficial ownership as to the securities reported in the Schedule 13G, except to the extent of their respective pecuniary interests therein.

(3) Represents (a) 146,758 shares, (b) 12,000 shares owned by Gracon Contracting Co., an entity over which Mr. Miller exercises control, (c) 7,800 shares purchasable upon the exercise of options, (d) 448,128 shares purchasable upon the exercise of warrants held by PKM Properties, LLC, an entity over which Mr. Miller exercises control, (e) 1,139,226 shares held by the Paul K. Miller Irrevocable Trust of 2005, of which Mr. Miller is the sole beneficiary, and (f) 450 shares owned by Mr. Miller's spouse.

(4) Based solely upon the Schedule 13G filed with the SEC on April 8, 2005. As set forth in the Schedule 13G, Michael A. Roth and Brian J. Stark are the Managing Members of Stark Offshore Management, LLC ("Stark Offshore"), which acts as investment manager and has sole power to direct the management of SF Capital Partners Ltd. Through Stark Offshore, Messrs. Roth and Stark possess voting and dispositive power over all of the shares to which the Schedule 13G relates. Messrs. Roth and Stark disclaim beneficial ownership of the shares.

(5) Represents (a) 345,985 shares held by Whitebox Hedged High Yield Partners, L.P. ("WHHYP"), (b) 320,922 shares held by Whitebox Intermarket Partners, L.P. ("WIP"), (c) 201,724 shares held by Pandora Select Partners ("PSP"), (d) 185,837 shares held by Whitebox Convertible Arbitrage Partners, L.P. ("WCAP"), (e) 56,590 shares held by GPC LIX, LLC, and (f) 15,596 shares held by Guggenheim Portfolio Company XXXI, LLC. Whitebox Advisors, LLC ("WA") is the investment advisor for GPC LIX, LLC and Guggenheim Portfolio Company XXXI, LLC. WA, the managing member of each of (i) Whitebox Hedged High Yield Advisors, LLC ("WHHYA"), (ii) Whitebox Intermarket Advisors, LLC ("WIA"), (iii) Pandora Select Advisors, LLC ("PSA") and (iv) Whitebox Convertible Arbitrage Advisors, LLC ("WCAA"), has the power to direct the affairs of each of WHHYA, WIA, PSA and WCAA. WHHYA, WIA, PSA and WCAA manage accounts for the benefit of its respective clients WHHYP, WIP, PSP and WCAP. As a result of these relationships, WA may be deemed to have indirect beneficial ownership of the shares of common stock beneficially owned by each of WHHYP, WIP, PSP, WCAP, GPC LIX, LLC and Guggenheim Portfolio Company XXXI, LLC.

(6) The managing partner of Millennium Partners, L.P., a Cayman Islands exempted limited partnership ("Millennium Partners"), is Millennium Management, L.L.C., a Delaware limited liability company ("Millennium Management"), and consequently may be deemed to have voting control and investment discretion over securities owned by Millennium Partners. Israel A. Englander is the managing member of Millennium Management. As a result, Mr. Englander may be deemed to be the beneficial owner of any shares deemed to be beneficially owned by Millennium Management. The foregoing should not be construed in and of itself as an admission by either of Millennium Management or Mr. Englander as to beneficial ownership of the shares owned by Millennium Partners. Millennium Partners is a limited partner of Millenco, L.P., a Delaware limited partnership and a registered broker-dealer, and is affiliated with two other broker-dealer entities.

(7) Includes 98,550 shares purchasable upon the exercise of warrants.

(8) Represents (a) 386,907 shares, (b) 16,740 shares held by Mr. Hauser's IRA, and (c) 131,830 shares purchasable upon the exercise of warrants.

(9) Represents (a) 3,000 shares and (b) 112,346 shares purchasable upon the exercise of options.

(10) Represents (a) 11,571 shares, (b) 3,000 shares purchasable upon the exercise of warrants, and (c) 38,220 shares purchasable upon the exercise of options.

(11) Represents (a) 2,500 shares, (b) 2,500 shares purchasable upon the exercise of warrants, and (c) 44,065 shares purchasable upon the exercise of options.

(12) Represents (a) 34,735 shares held by The Haimovitch 2000 Separate Property Revocable Trust and (b) 5,000 shares purchasable upon the exercise of options.

(13) Represents (a) 1,000 shares and (b) 25,734 shares purchasable upon the exercise of options.

(14) Represents (a) 1,250 shares and (b) 22,658 shares purchasable upon the exercise of options.

(15) Represents (a) 3,000 shares and (b) 12,100 shares purchasable upon the exercise of options.

(16) Represents (a) 1,000 shares and (b) 13,967 shares purchasable upon the exercise of options.

(17) Represents shares purchasable upon the exercise of options.

(18) Represents (a) 1,357,780 shares, (b) 453,628 shares purchasable upon the exercise of warrants, and (c) 298,990 shares purchasable upon the exercise of options.

Equity Compensation Plan Information

The following table provides information as of the end of the most recently completed fiscal year with respect to compensation plans under which our equity securities are authorized for issuance.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	257,192	$11.69	497,883(1)
Equity compensation plans not approved by security holders	1,482,983(2)	$ 7.57	—
Total	1,740,175	$ 8.17	497,883

(1) Represents 6,359 shares remaining available for future issuance under our 1997 Stock Option Plan, 422,870 shares remaining available for future issuance under our Amended and Restated 2001 Equity Incentive Plan, and 68,654 shares remaining available for future issuance under our 2005 Director Stock Option Plan.

(2) Represents (a) 59,600 shares of common stock underlying a ten-year warrant exercisable at $3.50 per share issued to Paul K. Miller in connection with the January 2003 Discretionary Credit Agreement with PKM, which warrant expires on January 17, 2013, (b) 60,763 shares of common stock underlying a ten-year warrant exercisable at $3.60 per share issued to Paul K. Miller in connection with a sale-leaseback transaction entered into on April 4, 2003, which warrant expires on April 4, 2013, (c) 5,000 shares of common stock underlying a seven-year warrant exercisable at $29.50 per share issued to Segmed Inc. in connection with a purchase of technology, which warrants expire on August 7, 2009, (d) 15,000 shares of common stock underlying a five-year warrant exercisable at $67.50 per share issued to Equity Securities Investments, Inc. in connection with its services as underwriter of our initial public offering, which warrant expires on November 20, 2006, (e) 73,958 shares of common stock underlying a ten-year warrant exercisable at $3.60 per share issued to Peter L. Hauser in connection with a July 2003 financing, which warrant expires on July 1, 2013, (f) 73,957 shares of common stock underlying a ten-year warrant exercisable at $3.60 per share issued to PKM in connection with the May 2003 Discretionary Credit Agreement, which warrant expires to the extent of 62,256 shares on July 1, 2013 and 11,701 shares on August 20, 2013, (g) 5,000 shares of common stock underlying seven-year warrants exercisable at $14.60 per share issued to LightWave Ablation Systems, Inc. in connection with a purchase of technology, which warrants expire to the extent of 2,500 shares on August 27, 2010 and 2,500 shares on December 1, 2011, (h) 28,888 shares of common stock underlying a ten-year warrant exercisable at $4.50 per share issued to PKM in connection with the November 2003 Credit Agreement, which warrant expires on November 13, 2013, (i) 30,230 shares of common stock underlying a ten-year warrant exercisable at $4.30 per share issued to Draft Co. in consideration of a loan agreement with Draft Co., which warrant expires on November 24, 2013, (j) 140,822 shares of common stock underlying a ten-year warrant exercisable at $4.70 per share issued to PKM in connection with a November 2003 extension of the maturity date of an existing discretionary credit agreement, which warrant expires on February 3, 2014, (k) 57,872 shares of common stock underlying a ten-year warrant exercisable at $4.70 per share issued to Peter L. Hauser in connection with the extension of the maturity date of the $1.0 million financing provided by Mr. Hauser, which warrant expires February 3, 2014, (l) 11,363 shares of common stock underlying a

ten-year warrant exercisable at $4.40 per share issued to PKM in connection with the October 2004 Discretionary Credit Agreement, which warrant expires on November 17, 2014, (m) 10,000 shares of common stock underlying a ten-year stock option exercisable at $7.00 per share granted to Lawrence L. Horsch in August 2003, which option expires on August 19, 2013, (n) 2,500 shares of common stock underlying a five-year stock option exercisable at $13.00 per share granted to Blair P. Mowery in August 2004, which option expires on August 26, 2009, (o) 5,000 shares of common stock underlying a ten-year stock option exercisable at $10.00 per share granted to each of Susan L. Critzer and David B. Kaysen in March 2005, which options expires on March 21, 2015, (p) 623,561 shares of common stock underlying seven-year stock options exercisable at $8.90 per share granted outside our stock option plans to members of management, which options expire on April 1, 2015, (q) 48,187 units underlying a five-year warrant exercisable at $4.70 per unit issued to Feltl & Company in connection with its services as our agent in our 2004 private placement, each unit consisting of one share of common stock and a warrant to purchase a share of our common stock at $18.375 per share, which warrant expires on May 21, 2009, (r) 110,291 shares of common stock underlying a ten-year warrant exercisable at $3.40 per share originally issued to PKM in consideration of a February 2005 Credit Agreement, which warrant expires on March 3, 2015, (s) 40,996 shares of common stock underlying a five-year warrant exercisable at $3.25 per share issued to Tower Finance Ltd. in connection with its services as a finder in our 2005 private placement, which warrant expires on April 1, 2010, (t) 6,800 shares of common stock underlying a five-year warrant exercisable at $6.25 per share issued to Tower Finance Ltd. in connection with its services as a finder in our January 2005 bridge financing, which warrant expires on January 13, 2010, and (u) an aggregate of 20,008 shares of common stock underlying warrants exercisable at $18.375 per share issued to Tower Finance Ltd., which warrants expire on April 30, 2009.

ITEM 12 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Agreements with Lawrence L. Horsch

Effective August 19, 2003, we entered into a letter agreement with Lawrence L. Horsch, who became one of our directors in August 2003, who served as Chairman of the Board from August 2003 to September 2005, and who served as our Acting Chief Executive Officer from April 2004 to August 2004. Pursuant to this agreement, Mr. Horsch agreed to provide 32 hours of service per month as Chairman for a retainer of $60,000 per year. Pursuant to the agreement, Mr. Horsch agreed to purchase 8,571 shares of common stock from our company at a price of $7.00 per share. As additional consideration, we issued a ten-year option to Mr. Horsch for the purchase of 10,000 shares of common stock exercisable at $7.00 per share. This option vests in full upon the fourth anniversary of the date of grant. However, this vesting was accelerated to the extent of two-thirds of the shares purchasable under the option because of certain advances in product development and achievement of certain stock performance. Mr. Horsch has orally agreed to relinquish options for the purchase of 3,333 shares of common stock because one milestone under the applicable option agreement, which would have accelerated the vesting of such option to the extent of 3,333 shares of common stock had it been achieved, was not achieved. Our board of directors ceased paying the $60,000 per year retainer effective March 31, 2005.

On April 16, 2004, we entered into an arrangement with Mr. Horsch to compensate him for the extra hours he worked beyond the 32 hours per month agreed upon in the August 19, 2003 letter agreement. Pursuant to this arrangement, Mr. Horsch has been granted (1) a ten-year option to purchase 4,464 shares of common stock at $16.80 per share, (2) a ten-year option to purchase 14,985 shares of common stock at $16.70 per share, and (3) a ten-year option to purchase 6,205 shares of common stock at $20.00 per share. The number of shares of common stock purchasable pursuant to such options is the value of the hours (at $150 per hour) divided by 0.3 with the result divided by the exercise price. These options represent payment for the additional hours of service rendered to our company from February 19, 2004, to December 31, 2004.

Mr. Horsch resigned from the position of Chairman of the Board at the commencement of the 2005 annual meeting of shareholders, but remains a director of our company.

Arrangements and Transactions with PKM Properties, LLC

Credit Agreements. To meet critical working capital shortages in recent fiscal years, we established the following credit agreements with PKM Properties, LLC ("PKM"), an entity controlled by Paul K. Miller, one of our directors, and one of the largest beneficial owners of our securities. While outstanding, the amounts borrowed from PKM were collateralized by substantially all of our assets.

Date	Nature of Financing	Interest Rate	Amount Borrowed	Disposition
January 2003	Discretionary Credit Agreement	10.0%	$943,666	Converted
May 2003	Discretionary Credit Agreement	10.0%	$935,000(1)	Converted
November 2003	Credit Agreement	10.0%	$500,000	Converted
April 2004	Short-Term Note	10.0%	$140,250(1)	Repaid
October 2004	Discretionary Credit Agreement	10.0%	$500,000	Converted
February 2005	Credit Agreement	10.0%	$500,000	Repaid

(1) Represents amount borrowed less a placement fee of 6.5 percent of such amount.

During the fiscal year ended April 30, 2005, we made interest payments to PKM of $164,104.

We entered into debt conversion agreements as of April 1, 2005, with certain debt holders for the conversion of an aggregate of $4,402,000 of debt into equity securities. Pursuant to one such agreement, PKM converted $2,968,678 of outstanding indebtedness into 297 shares of 5% Series A Redeemable Convertible Preferred Stock at a stated value of $10,000 per share. Each share of preferred stock was convertible into the number of shares of common stock equal to the stated value divided by $5.00, subject to anti-dilution adjustments. The terms of the preferred stock included dividend, protective, liquidation and conversion rights. In December 2005, we purchased such preferred stock from PKM in consideration of the issuance of 913,253 shares of common stock. For further information, please review "Management's Discussion and Analysis or Plan of Operation—Liquidity and Capital Resources." The preferred stock sold to PKM was issued along with a warrant to purchase 445,200 shares of common stock. The warrant had a term of five years and was originally exercisable at $5.00 per share, subject to anti-dilution adjustments. In December 2005, PKM exercised such warrant on a net exercise basis, using an exercise price of $3.25 per share and a market price of $6.60 per share, resulting in the issuance of 225,972 shares of common stock. For further information, please review "Management's Discussion and Analysis or Plan of Operation—Liquidity and Capital Resources." In April 2004, we repaid in full the April 2004 Short-Term Note. In April 2005, we repaid in full the February 2005 Credit Agreement. As a result, we fully repaid our indebtedness to PKM.

As additional consideration for the foregoing credit agreements, we issued the following warrants to PKM with terms and conditions that included weighted-average anti-dilution rights and certain rights to require registration of the common stock underlying the warrants under federal and state securities laws. The exercise prices and the number of shares purchasable under such warrants have adjusted pursuant to the anti-dilution provisions thereof. Such adjusted numbers are also presented below. There were no warrants issued to PKM in connection with the April 2004 Short-Term Note.

Date	Term	Original Number of Shares	Original Exercise Price	Adjusted Number of Shares	Adjusted Exercise Price
January 2003	Ten-Year	35,000	$ 5.96	59,600	$3.50
May 2003	Ten-Year	38,034	$ 7.00	73,957	$3.60
November 2003	Ten-Year	7,738	$16.80	28,888	$4.50
November 2003 (extension)	Ten-Year	33,093	$20.00	140,822	$4.70
October 2004	Ten-Year	3,401	$14.70	11,363	$4.40
February 2005	Ten-Year	49,459	$ 5.00	72,734(1)	$3.40

(1) Represents the adjusted number of shares purchasable by PKM under such warrant following PKM's reallocation of warrants for the purchase of 37,557 shares to third parties.

In addition to the foregoing warrants, we made the following payments to PKM in connection with the credit agreements:

- Placement fee of 6.5 percent of the amount borrowed under the May 2003 Discretionary Credit Agreement
- $56,404 in fees and expenses incurred on behalf of PKM in connection with the May 2003 Discretionary Credit Agreement
- Placement fee of 6.5 percent of the amount borrowed under the April 2004 Short-Term Note
- $32,113 in fees and expenses incurred on behalf of PKM in connection with the October 2004 Discretionary Credit Agreement
- $19,143 in legal and administrative expenses incurred by PKM in connection with the February 2005 Credit Agreement
- $18,086 in fees and expenses incurred on behalf of PKM in connection with the Debt Conversion Agreement

Financing Transaction and Lease. On April 4, 2003, we sold our real estate, including real property and office-warehouse-manufacturing facility, together with certain personal property related thereto, to PKM. The purchase price for the property was $3.84 million, paid with (1) $1.0 million in cash (subject to certain reductions, prorations and credits), (2) PKM's assumption of a mortgage note against the property in the amount of $2.5 million in favor of Associated Bank Minnesota, dated November 23, 1999, and (3) PKM's assumption of our promissory note with Dakota Electric Association and land special assessments payable to Dakota County aggregating $336,105. As additional consideration, we issued to PKM a ten-year warrant for the purchase of 35,000 shares of our common stock at an exercise price of $6.25 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 60,763 shares at $3.60 per share.

Concurrent with the sale of the property, we entered into a ten-year lease for the property with a base annual rent of $360,000 for the first and second year; $370,800 per year for the third, fourth and fifth year, and $389,340 for the remaining years of the lease subject to an increase for additional interest payable by PKM on its long-term permanent financing of the property, which may increase base monthly rents by up

to one-twelfth of the additional annual interest payable by PKM. Assuming we are not in default under the terms of the lease, we have two options to extend the lease for five-year periods upon expiration of the initial ten-year term at a market rate. We also pay under the lease operating costs and real estate taxes.

Under certain conditions, we also have an option to purchase the building at the end of the initial ten-year term at the fair value at that time. The purpose of the transaction was to retire our bank debt and provide us with additional required working capital.

On June 29, 2005, we entered into a lease termination agreement with PKM. In order to induce PKM, the landlord of our corporate headquarters, to attempt to sell or lease the property to a third party and to terminate the lease with our company, we agreed, among other things, to reimburse PKM for all costs and expenses relating to the lease or the sale of the property, and to termination of the lease on not less than 120 days' notice. We also agreed that, if we request the landlord to accept less than its minimum required net sale proceeds, we would pay a lease termination fee equal to the difference between the landlord's minimum net sale proceeds and the actual net sale proceeds. We also agreed to pay a lease termination fee if the landlord re-leases the property on economic terms and conditions less desirable than those of the existing lease.

During the fiscal years ended April 30, 2006 and 2005, we made lease payments to PKM of $496,136 and $451,015, respectively.

Transactions with Other Five Percent Owners

In July 2003, we entered into a loan agreement and borrowed $1.0 million from Peter L. Hauser, an existing shareholder, pursuant to a subordinated note with an interest rate of 10 percent per year. While outstanding, the amount borrowed from Mr. Hauser was collateralized by substantially all of our assets. We issued to Mr. Hauser a ten-year warrant for the purchase of 38,035 shares of our common stock on terms comparable to the warrants issued to PKM in connection with the May 2003 Discretionary Credit Agreement. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 73,958 shares at $3.60 per share. In February 2004, the maturity date of this loan was extended to June 30, 2005. In connection with the extension, we issued a warrant with a ten-year term to purchase up to 13,600 shares of our common stock at an exercise price of $20.00 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 57,872 shares at $4.70 per share.

We entered into debt conversion agreements as of April 1, 2005, with certain existing debt holders for the conversion of an aggregate of $4,402,000 of debt into equity securities. Pursuant to one such agreement, Mr. Hauser converted $1,008,611 of outstanding indebtedness into 100 shares of 5% Series A Redeemable Convertible Preferred Stock at a stated value of $10,000 per share. Each share of preferred stock was convertible into the number of shares of common stock equal to the stated value divided by $5.00, subject to anti-dilution adjustments. The terms of the preferred stock included dividend, protective, liquidation and conversion rights. In December 2005 and January 2006, we repurchased all of our outstanding preferred stock, including shares held by Mr. Hauser and shares held by SF Capital Partners Ltd., MedCap Partners, L.P., Millennium Partners, L.P. and MedCap Master Fund, L.P., other beneficial owners of more than five percent of our common stock. For further information, please review "Management's Discussion and Analysis or Plan of Operation—Liquidity and Capital Resources." The preferred stock sold to these investors was issued along with warrants to purchase a number of shares of common stock equal to 75% of the number of shares originally issuable upon conversion of their preferred stock. These warrants had a term of five years and were originally exercisable at $5.00 per share, subject to anti-dilution adjustments. In December 2005 and January 2006, all of the common stock purchase warrants issued with the preferred stock, including those held by the above-referenced shareholders, were exercised at $3.25 per share. Mr. Hauser exercised his warrant on a net exercise basis, using an exercise price of

$3.25 per share and a market price of $6.60 per share. For further information, please review "Management's Discussion and Analysis or Plan of Operation—Liquidity and Capital Resources."

Employment Agreements

We have employment agreements with Marc P. Flores, our President, Chief Executive Officer and one of our directors, John H. Jungbauer, our principal financial officer and principal accounting officer, Adam L. Berman, our Vice President, Research and Development, Robert W. Clapp, our Vice President, Operations, Dennis E. Steger, our Vice President, Regulatory Affairs and Quality Assurance, James E. Jeter, our Vice President, Sales, Gary O. Tegan, our Vice President, Marketing, and Eapen Chacko, who joined our company as Vice President, Finance and Chief Financial Officer. You should review "Executive Compensation—Employment Contracts and Termination of Employment, and Change-in-Control Arrangements" for more information about such agreements.

Director Options

In March 2005, we granted a stock option for the purchase of 5,000 shares of common stock to David B. Kaysen and we granted a stock option for the purchase of 5,000 shares of common stock to Susan L. Critzer. Mr. Kaysen and Ms. Critzer are two of our non-employee directors. These options were granted outside our shareholder-approved plans, they were 100 percent vested at the date of grant, and they are exercisable at $10.00 per share. These options expire on March 21, 2015.

Pursuant to our 2005 Director Stock Option Plan, we granted options for the purchase of 673 shares of common stock, exercisable at $8.00 per share, to each of Larry G. Haimovitch and J. Robert Paulson, Jr. on August 3, 2005, and options for the purchase of 5,000 shares of common stock, exercisable at $7.40 per share, to each of Susan L. Critzer, Larry G. Haimovitch, Lawrence L. Horsch, David B. Kaysen, Paul K. Miller and J. Robert Paulson, Jr. on September 22, 2005. These awards have ten-year terms and vest 100 percent on the first anniversary of the date of grant. The vesting of such options accelerates in the event of a change of control of our company.

In May 2006, we awarded non-qualified stock options for the purchase of 5,000 shares of common stock to each of Susan L. Critzer, Larry G. Haimovitch, Lawrence L. Horsch, David B. Kaysen, Paul K. Miller and J. Robert Paulson, Jr. The foregoing options were issued to each of our non-employee directors under our Amended and Restated 2001 Equity Incentive Plan. Such options vested immediately. They are exercisable at $10.50 per share. These options expire on May 10, 2016.

Management Options

Effective April 1, 2005, we awarded (1) a non-qualified stock option for the purchase of 344,034 shares of common stock to Marc P. Flores, our President and Chief Executive Officer, (2) a non-qualified stock option for the purchase of 129,013 shares of common stock to John H. Jungbauer, our principal financial officer and principal accounting officer, (3) a non-qualified stock option for the purchase of 64,506 shares of common stock to Adam L. Berman, our Vice President, Research and Development, (4) a non-qualified stock option for the purchase of 64,506 shares of common stock to Robert W. Clapp, our Vice President, Operations, (5) a non-qualified stock option for the purchase of 21,502 shares of common stock to Dennis E. Steger, our Vice President, Regulatory Affairs and Quality Assurance, and (6) a non-qualified stock option for the purchase of 43,004 shares of common stock to a former employee. The foregoing options were issued outside our employee benefit plans. Such options vest to the extent of 25 percent on the first anniversary of the date of grant and 6.25 percent quarterly thereafter. They are exercisable at $8.90 per share. These options expire on April 1, 2012.

In April 2006, we awarded (1) a non-qualified stock option for the purchase of 28,669 shares of common stock to Mr. Flores, (2) a non-qualified stock option for the purchase of 7,167 shares of common

stock to Adam L. Berman, our Vice President, Research and Development, (3) a non-qualified stock option for the purchase of 7,167 shares of common stock to Robert W. Clapp, our Vice President, Operations, and (4) a non-qualified stock option for the purchase of 2,867 shares of common stock to Dennis E. Steger, our Vice President, Regulatory Affairs and Quality Assurance. The foregoing options were issued under our Amended and Restated 2001 Equity Incentive Plan. Such options vest to the extent of 25 percent on the first anniversary of the date of grant and 6.25 percent quarterly thereafter. They are exercisable at $12.00 per share and expire on April 3, 2013.

We have also awarded options to James E. Jeter, our Vice President, Sales, Gary O. Tegan, our Vice President, Marketing, and Eapen Chacko, our Vice President, Finance and Chief Financial Officer. You should review "Executive Compensation—Employment Contracts and Termination of Employment, and Change-in-Control Arrangements" for more information about such options.

Related Party Distributor

Prior to our exit from the heart valve business, we sold heart valves through a distribution network of 37 exclusive distributors, including Mercé v. Electromedicina, S.L. The Managing and General Director of Mercé v. Electromedicina, Salvador Mercé Cervelló, is one of our former board members. During the fiscal year ended April 30, 2005, such distributor made net purchases of product from our company equal to approximately 42.4 percent of our net sales, respectively. Our accounts receivable with this distributor accounted for approximately 54.4 percent of our accounts receivable at April 30, 2005. Obligations to us from this distributor are unsecured. During the quarter ended January 31, 2005, in an effort to raise $250,000 in cash to continue operations, we sold 400 heart valves at a fifty-five percent discount to Mercé v. Electromedicina.

General

The transactions set forth herein were approved by a majority of our independent, disinterested directors who had access, at our expense, to our legal counsel or independent legal counsel. We believe that all such transactions were made on terms no less favorable to us than we could have obtained from unaffiliated third parties. In the future, all material affiliated transactions will be approved by a majority of our independent, disinterested directors who will have access, at our expense, to our legal counsel or independent legal counsel and will be on terms no less favorable to us than we could obtain from unaffiliated third parties.

ITEM 13 EXHIBITS

See "Index to Exhibits."

ITEM 14 PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit and Non-Audit Fees

The following table presents fees for audit and other services provided by PwC in fiscal year 2005 and LBL in fiscal year 2006. Fees for audit and other services provided by PwC in fiscal year 2006 as a non-principal accountant of $156,184 are excluded from the following table.

	Year Ended	
	April 30, 2005	April 30, 2006
Audit fees(1)	$145,395	$170,509
Audit-related fees(2)	14,062	16,940
Tax fees(3)	0	4,200
All other fees	0	0
Total Fees	$159,457	$191,649

(1) Audit fees consist of fees for services provided in connection with the audit of our financial statements, reviews of our quarterly financial statements, and services that are normally provided in connection with statutory and regulatory filings.

(2) Audit-related fees consist of assurance and related services that include, but are not limited to, consultation concerning financial accounting and reporting standards.

(3) Tax fees consist of fees for services provided in connection with the preparation of tax returns.

Pre-Approval Policies and Procedures

All services provided by our independent auditors are subject to pre-approval by the audit committee of our board of directors. The audit committee has authorized each of its members to approve services by our independent auditors in the event there is a need for such approval prior to the next full audit committee meeting. Any interim approval given by an audit committee member must be reported to the audit committee no later than its next scheduled meeting. Before granting any approval, the audit committee (or a committee member if applicable) gives due consideration to whether approval of the proposed service will have a detrimental impact on our auditor's independence. The audit committee pre-approved all services provided by PwC in the fiscal year ended April 30, 2005, and all services provided by LBL in the fiscal year ended April 30, 2006.

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Inver Grove Heights, State of Minnesota, on July 20, 2006.

MEDICALCV, INC.

By /s/ MARC P. FLORES
Marc P. Flores, *President, Chief Executive Officer and Director (Principal Executive Officer)*

KNOW ALL BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Marc P. Flores and Eapen Chacko as his or her true and lawful attorney-in-fact and agent, with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant, and in the capacities and on the date indicated.

Signature	Title	Date
/s/ MARC P. FLORES Marc P. Flores	President, Chief Executive Officer and Director (Principal Executive Officer)	July 20, 2006
/s/ JOHN H. JUNGBAUER John H. Jungbauer	Principal Financial Officer and Principal Accounting Officer	July 20, 2006
/s/ SUSAN L. CRITZER Susan L. Critzer	Chairperson of the Board	July 20, 2006
/s/ LARRY G. HAIMOVITCH Larry G. Haimovitch	Director	July 20, 2006
/s/ LAWRENCE L. HORSCH Lawrence L. Horsch	Director	July 20, 2006
/s/ DAVID B. KAYSEN David B. Kaysen	Director	July 20, 2006
/s/ PAUL K. MILLER Paul K. Miller	Director	July 20, 2006
/s/ J. ROBERT PAULSON, JR. J. Robert Paulson, Jr.	Director	July 20, 2006

INDEX TO FINANCIAL STATEMENTS

MedicalCV, Inc.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
MedicalCV, Inc.
Inver Grove Heights, Minnesota

We have audited the accompanying balance sheet of MedicalCV, Inc. as of April 30, 2006, and the related statements of operations, shareholders' equity (deficit) and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our 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 the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of MedicalCV, Inc. as of April 30, 2006, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has incurred operating losses and negative cash flows from operations in recent years and will require additional funds to finance its working capital and capital expenditure needs. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding these matters are also discussed in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ LURIE BESIKOF LAPIDUS & COMPANY, LLP

Minneapolis, Minnesota
June 27, 2006

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of MedicalCV, Inc.:

In our opinion, the accompanying balance sheet and the related statements of operations, shareholders' equity (deficit) and cash flows present fairly, in all material respects, the financial position of MedicalCV, Inc. at April 30, 2005, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As discussed in Note 15 to the financial statements included in the Company's Form 10-KSB for the year ended April 30, 2005, the Company has restated its financial statements for the year ended April 30, 2005.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has sustained losses and negative cash flows from operations in recent years and will require additional funds to finance its working capital and capital expenditure needs. These factors 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 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP
Minneapolis, Minnesota
July 8, 2005, except as to Notes 3, 12 and 15 (not presented herein) for which the date is March 10, 2006 and Note 15 for which the date is June 5, 2006

MEDICALCV, INC.

BALANCE SHEETS

	April 30, 2006	April 30, 2005
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 10,351,570	$ 10,637,796
Prepaid expenses and other assets	242,975	199,978
Current assets of discontinued operations	89,782	875,648
TOTAL CURRENT ASSETS	10,684,327	11,713,422
PROPERTY, PLANT AND EQUIPMENT, net	740,010	827,791
DEFERRED FINANCING COSTS, net	50,942	58,226
OTHER LONG-TERM ASSETS	23,400	30,798
NON-CURRENT ASSETS OF DISCONTINUED OPERATIONS	87,323	367,799
TOTAL ASSETS	$ 11,586,002	$ 12,998,036
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND SHAREHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES		
Accounts payable	$ 605,313	$ 399,588
Current portion of related party lease obligation	322,586	311,155
Accrued expenses	377,507	179,095
Current liabilities of discontinued operations	—	202,595
TOTAL CURRENT LIABILITIES	1,305,406	1,092,433
FAIR VALUE OF PUTABLE WARRANTS	—	27,992,609
RELATED PARTY LEASE OBLIGATION, less current portion	2,542,233	2,824,977
TOTAL LIABILITIES	3,847,639	31,910,019
COMMITMENTS AND CONTINGENCIES		
5% SERIES A REDEEMABLE CONVERTIBLE PREFERRED STOCK; $.01 par value; stated value $10,000 per share; 1,900 shares authorized; 0 and 1,803 shares issued and outstanding; aggregate liquidation value $18,109,116 at April 30, 2005	—	—
SHAREHOLDERS' EQUITY (DEFICIT)		
Preferred stock; $.01 par value; 998,100 and 498,100 shares authorized; no shares issued and outstanding	—	—
Common stock; $.01 par value; 24,000,000 and 9,500,000 shares authorized; 9,122,946 and 1,084,958 shares issued and outstanding	91,229	10,850
Additional paid-in capital	55,088,734	23,484,124
Deferred stock-based compensation	(98,512)	—
Accumulated deficit	(47,343,088)	(42,406,957)
TOTAL SHAREHOLDERS' EQUITY (DEFICIT)	7,738,363	(18,911,983)
TOTAL LIABILITIES, CONVERTIBLE PREFERRED STOCK AND SHAREHOLDERS' EQUITY (DEFICIT)	$ 11,586,002	$ 12,998,036

See notes to financial statements.

MEDICALCV, INC.

STATEMENTS OF OPERATIONS

	Year Ended April 30, 2006	2005
OPERATING EXPENSES, CONTINUING OPERATIONS		
Sales and marketing	$ 525,384	$ 317,386
General and administrative	3,459,916	4,012,506
Research and development services	3,471,241	1,581,016
Total operating expenses	7,456,541	5,910,908
LOSS FROM OPERATIONS	(7,456,541)	(5,910,908)
OTHER INCOME (EXPENSE)		
Interest income	384,773	22,994
Interest expense	(177,401)	(1,352,183)
Other income (expense) (primarily changes in fair value of putable warrants)	16,563,359	(9,981,394)
Total other income (expense)	16,770,731	(11,310,583)
INCOME (LOSS) FROM CONTINUING OPERATIONS	9,314,190	(17,221,491)
LOSS FROM DISCONTINUED OPERATIONS	(81,800)	(1,873,381)
NET INCOME (LOSS)	$ 9,232,390	$(19,094,872)
BASIC AND DILUTED LOSS TO COMMON SHAREHOLDERS		
Net income (loss)	$ 9,232,390	$(19,094,872)
Inducement to acquire redeemable convertible preferred stock	(13,579,979)	—
Redeemable convertible preferred stock cash dividends	(588,542)	—
NET LOSS TO COMMON SHAREHOLDERS	$ (4,936,131)	$(19,094,872)
NET LOSS PER COMMON SHARE—CONTINUING OPERATIONS, AFTER PREFERRED DIVIDENDS		
Basic	$ (1.28)	$ (16.16)
Diluted	(3.75)	(16.16)
NET LOSS PER COMMON SHARE—DISCONTINUED OPERATIONS		
Basic	(0.02)	(1.76)
Diluted	(0.01)	(1.76)
NET LOSS PER COMMON SHARE		
Basic	(1.30)	(17.92)
Diluted	(3.76)	(17.92)
WEIGHTED-AVERAGE COMMON SHARES OUTSTANDING		
Basic	3,806,112	1,065,349
Diluted	5,711,893	1,065,349

See notes to financial statements.

MEDICALCV, INC.

STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)

	Common Stock		Additional Paid-In	Deferred Stock-Based	Accumulated	
	Shares	Amount	Capital	Compensation	Deficit	Total
BALANCE AT APRIL 30, 2004	918,993	$ 9,190	$20,250,842	$ (1,933)	$(23,312,085)	$ (3,053,986)
Net loss	—	—	—	—	(19,094,872)	(19,094,872)
Issuance of common stock and warrants, net of offering costs	154,090	1,541	1,999,067	—	—	2,000,608
Warrants issued in connection with:						
Short term financing	—	—	711,337	—	—	711,337
Convertible debt	—	—	58,253	—	—	58,253
Technology purchase	—	—	18,373	—	—	18,373
Beneficial conversion feature associated with convertible debt	—	—	68,000	—	—	68,000
Common stock issued for services	11,250	113	127,962	—	—	128,075
Stock compensation expense	—	—	247,796	—	—	247,796
Stock options exercised	625	6	2,494	—	—	2,500
Amortization of stock-based compensation	—	—	—	1,933	—	1,933
BALANCE AT APRIL 30, 2005	1,084,958	10,850	23,484,124	—	(42,406,957)	(18,911,983)
Net income	—	—	—	—	9,232,390	9,232,390
Warrants exercised, net of costs:						
Putable warrants	2,503,791	25,038	17,477,736	—	—	17,502,774
Other—cashless	20,008	200	(200)	—	—	—
Acquisition of redeemable convertible preferred stock	5,447,814	54,478	13,525,501	—	—	13,579,979
Conversion of redeemable convertible preferred stock	66,000	660	(660)	—	—	—
Inducement to acquire redeemable convertible preferred stock	—	—	—	—	(13,579,979)	(13,579,979)
Preferred stock cash dividends	—	—	—	—	(588,542)	(588,542)
Warrant valuation after removal of put option	—	—	375,518	—	—	375,518
Stock options exercised	375	3	1,122	—	—	1,125
Stock options issued for technical advisory services	—	—	124,802	(124,802)	—	—
Modification of stock options in connection with severance	—	—	100,791	(100,791)	—	—
Amortization of stock-based compensation	—	—	—	127,081	—	127,081
BALANCE AT APRIL 30, 2006	9,122,946	$91,229	$55,088,734	$ (98,512)	$(47,343,088)	$ 7,738,363

See notes to financial statements.

MEDICALCV, INC.
STATEMENTS OF CASH FLOWS

	Year Ended April 30, 2006	2005
OPERATING ACTIVITIES		
Net income (loss)	$ 9,232,390	$ (19,094,872)
Adjustments to reconcile net income (loss) to net cash used by operating activities:		
(Decrease) increase in fair value of putable warrants	(16,549,457)	9,987,609
Depreciation and amortization	286,919	315,225
Impairment of fixed assets	154,341	—
Provision for doubtful accounts	23,935	220,281
Gain from the sale of property, plant and equipment	(138,474)	—
Provision for inventory obsolescence	—	2,573,656
Common stock issued for services	—	128,075
Stock-based compensation expense	127,081	249,729
Interest and other expense related to issued warrants and amortization of loan origination costs	—	851,882
Warrant expense related to purchase of technology	—	18,373
Changes in operating assets and liabilities:		
Accounts receivable	533,356	717,829
Inventories	228,665	(283,622)
Prepaid expenses and other assets	40,677	(271,928)
Accounts payable	13,430	(906,964)
Accrued expenses	188,112	(43,610)
Net cash used by operating activities	(5,859,025)	(5,538,337)
INVESTING ACTIVITIES		
Purchases of property, plant and equipment	(350,418)	(218,666)
Proceeds from the sales of property, plant and equipment	346,807	23,123
Net cash used by investing activities	(3,611)	(195,543)
FINANCING ACTIVITIES		
Borrowings on long-term debt	—	1,425,000
Principal payments of term debt	—	(1,000,000)
Principal payments under related party lease obligations	(271,313)	(319,288)
Proceeds from exercise of warrants, net of costs	6,435,140	—
Proceeds from issuance of redeemable convertible preferred stock and warrants	—	13,603,000
Proceeds from issuance of common stock and warrants, net of offering costs	—	2,000,608
Proceeds from exercise of stock options	1,125	2,500
Preferred stock cash dividends	(588,542)	—
Net cash provided by financing activities	5,576,410	15,711,820
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(286,226)	9,977,940
CASH AND CASH EQUIVALENTS		
Beginning of year	10,637,796	659,856
End of year	$ 10,351,570	$ 10,637,796
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION		
Cash paid for interest	$ 177,401	$ 457,342
Non-cash financing activities:		
Inducement to acquire redeemable convertible preferred stock	13,579,979	—
Fair value of putable warrants at date of exercise and removal of put option	11,443,152	—
Stock options issued for technical advisory services	124,802	—
Modification of stock options in connection with severance	100,791	—
Cashless exercise of other warrants	200	—
Related party and other debt converted to redeemable convertible preferred stock	—	4,368,333
Accrued interest converted to redeemable convertible preferred stock	—	33,667

See notes to financial statements.

1. Basis of Presentation and Significant Accounting Policies

Nature of Business

The core technology of MedicalCV, Inc. (the "Company") is the ATRILAZE system which utilizes laser energy in cardiac tissue ablation procedures. The Company acquired the initial technology in August 2003 and has developed several generations of products beyond the initial technology purchase. The Company received FDA 510(k) clearances for the first generation product in November 2004 and the second generation product in October 2005. In addition, the Company received a third 510(k) clearance in April 2006 which covered an additional laser wavelength. The Company's strategy is to leverage its laser technology to develop a stand-alone, minimally invasive treatment for atrial fibrillation.

Previously, the Company's primary focus was on heart valve disease and the Company was engaged in the manufacture and marketing of cardiovascular surgery devices. In April 2005, the Company elected to discontinue the sale of mechanical heart valves which had been the Company's primary product and its sole source of revenues (see Note 3).

Fiscal Year

References in this report to a particular fiscal year are to the year ended April 30 of that calendar year. The Company's interim periods end on the last day of the month.

Revenue Recognition

The Company recognizes revenue using guidance from SEC Staff Accounting Bulletin (SAB) No. 104 "Revenue Recognition in Financial Statements." Revenue from the sale of its products is recognized provided that the Company has received a written order, the price is fixed, title has transferred, collection of the resulting receivable is probable and there are no remaining obligations. The Company did not generate any revenues related to its ATRILAZE system during the fiscal year ended April 30, 2006. All revenues for fiscal years 2006 and prior were related to the heart valve business and are reported as part of discontinued operations.

Use of Estimates

The preparation of these financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that impact the reported amounts and disclosures in the financial statements and accompanying notes. Actual results could differ from those estimates. Significant management estimates relate to the valuation allowance on deferred tax assets and the estimated fair value of the putable warrants.

Cash and Cash Equivalents

Cash and cash equivalents consist of highly liquid investments that are readily convertible into cash. The Company considers securities purchased with maturities of three months or less to be cash equivalents.

Fair Value of Financial Instruments

The carrying amounts of financial instruments consist primarily of cash and cash equivalents, trade accounts receivable, accounts payable, accrued expenses, putable warrants and related party lease obligations which approximate their fair values.

Inventories

At April 30, 2005, inventories were reported as current assets of discontinued operations and consisted of various mechanical heart valves that were stated at the lower of cost or market, with cost determined utilizing standard costs, which approximated the first-in, first-out method of inventory valuation.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the related assets. The building is depreciated over a 30-year life. Machinery and equipment, furniture and fixtures, and computers are depreciated and amortized over their two-year to five-year lives. At April 30, 2005, equipment held for sale was carried at the lower of its cost or estimated market value. The Company ceased depreciation of equipment held for sale upon determination that such equipment will no longer be used in operations. Maintenance and repairs are charged to current operations when incurred. The cost and related accumulated depreciation or amortization of assets disposed of are removed from the related accounts and any resulting gains or losses are included in the statement of operations.

Long-Lived Assets

All long-lived assets are reviewed when events or changes in circumstances indicate that the carrying amounts of such assets may not be recoverable. This evaluation is performed at least annually. An impairment loss is recognized when estimated undiscounted cash flows to be generated by those assets are less than the carrying value of the assets. When an impairment loss is recognized, the carrying amount is reduced to its estimated fair value, based on appraisals or other reasonable methods to estimate value.

Research and Development

Research and development costs are expensed as incurred.

Stock-Based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion (APB) No. 25, "Accounting for Stock Issued to Employees," and its interpretations whereby the difference between the exercise price and the fair value on the date of grant is recognized as compensation expense. Under the intrinsic value method of accounting, no compensation expense is recognized in the Company's statement of operations when the exercise price of the Company's employee/director stock option grants equals or is greater than the market price of the underlying common stock at the date of grant, and the measurement date of the option grant is certain. The measurement date is certain when the date of grant is fixed and determinable. Compensation cost for employee stock options is measured as the excess, if any, of the quoted market price of the Company's stock at the date of grant over the amount that the employee is required to pay for the stock. Compensation expense of $87,353 was recorded in fiscal year 2006 as the exercise date through which certain options granted in fiscal year 2005 was extended in fiscal year 2006 and the market price of the Company's stock at that time exceeded the exercise price of the stock options. Options issued to

non-employees/non-directors are accounted for as required by Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation."

SFAS No. 123 established a fair value method of accounting for stock-based compensation plans. Companies that elected to account for stock-based compensation plans in accordance with APB No. 25 are required to disclose the pro forma net loss that would have resulted from the use of the fair value method as follows:

	Year Ended April 30,	
	2006	2005
Net loss to common shareholders:		
As reported	$(4,936,131)	$(19,094,872)
Pro forma stock-based employee compensation cost	(1,280,323)	(554,463)
Pro forma	$(6,216,454)	$(19,649,335)
Basic net loss per common share:		
As reported	$ (1.30)	$ (17.92)
Pro forma	(1.63)	(18.44)
Diluted net loss per common share:		
As reported	(3.76)	(17.92)
Pro forma	(3.99)	(18.44)

Income Taxes

Deferred income tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income tax assets and liabilities are determined based on differences between the financial statement and tax bases of assets and liabilities using currently enacted tax rates in effect for the years in which the differences are expected to reverse. Deferred tax assets are evaluated and a valuation allowance is established if it is more likely than not that all or a portion of the tax asset will not be utilized.

Credit Risk

The Company maintains cash and cash equivalents in bank accounts which may exceed federally insured limits. The Company has not experienced any losses on such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Net Loss Per Common Share

Basic net loss per common share was computed by dividing the net loss to common shareholders by the weighted-average common shares outstanding during the year. Diluted net loss per common share reflects the potential dilution that could occur if holders of warrants and options that are not anti-dilutive convert their holdings into common stock. Diluted net loss per common share does not differ from the basic net loss per common share in the year ended April 30, 2005 since the potentially dilutive shares are anti-dilutive. Certain warrants outstanding during the year ended April 30, 2006 were potentially dilutive and considered to be common stock equivalents because they can be settled in common stock. The net loss to common shareholders for that year was increased by the decrease in fair value of putable warrants and the weighted average number of shares used for the basic net loss per share computation was increased by the shares issuable under the warrants as follows:

Net loss to common shareholders for basic net loss per common share	$ (4,936,131)
Effect of dilutive securities—decrease in fair value of putable warrants	(16,549,457)
Net loss to common shareholders for diluted net loss per common share	$(21,485,588)

Weighted-average shares outstanding for basic net loss per common share.....	3,806,112
Effect of dilutive securities—shares issuable under warrant agreements.....	1,905,781
Weighted-average shares outstanding for diluted net loss per common share...	5,711,893

Options and warrants to purchase 1,887,880 and 749,290 shares of common stock were excluded from the computation for the years ended April 30, 2006 and 2005, respectively, because they were anti-dilutive.

Recent Issued Accounting Pronouncements

In December 2004, the FASB issued SFAS No. 123R, "Share-Based Payment—an amendment of SFAS No. 123," which requires companies to recognize in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees. SFAS No. 123R is effective for companies filing under Securities and Exchange Commission (SEC) Regulation SB as of the beginning of the first interim or annual reporting period of the company's first fiscal year that begins after December 15, 2005, which for the Company will be the first quarter of its year ending April 30, 2007. The Company will use the modified prospective application method. Under the modified prospective application method, awards that are granted, modified or settled after the date of adoption will be measured and accounted for in accordance with SFAS No. 123R. Compensation costs for awards granted prior to, but not vested, as of the date SFAS No. 123R is adopted will be based on grant date attributes similar to those originally used to value those awards for the pro forma purposes under SFAS No. 123. The Company is in the process of evaluating the impact of the adoption of SFAS No. 123R.

In March 2005, the SEC released SAB No. 107, "Share-Based Payments." The interpretations in SAB No. 107 express views of the SEC staff regarding the interaction between SFAS No. 123R and certain SEC rules and regulations, and provide the staff's views regarding the valuation of share-based payment arrangements for public companies. In particular, SAB No. 107 provides guidance related to share-based payment transactions with non-employees, valuation methods (included assumptions such as expected volatility and expected term), the classification of compensation expense, non-GAAP financial measures, first-time adoption of SFAS No. 123R in an interim period, capitalization of compensation costs related to share-based payment arrangements, accounting for income tax effects of share-based payment arrangements upon adoption of SFAS No. 123R, modification of employee share options prior to adoption of SFAS No. 123R and disclosures in Management's Discussion and Analysis subsequent to the adoption of SFAS No. 123R. SAB No. 107 requires stock-based compensation to be classified in the same expense lines as cash compensation is reported for the same employees. The Company will apply the interpretations of SAB No. 107 in conjunction of its adoption of SFAS No. 123R.

2. Going Concern

The Company's financial statements for the years ended April 30, 2006 and 2005 have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities and commitments in the normal course of business. The Company has sustained operating losses and negative cash flows from operations in recent years and expects these conditions to continue for the foreseeable future. At April 30, 2006 and 2005, the Company had an accumulated deficit of $47,343,088 and $42,406,957, respectively. The level of cash required for operations during fiscal year 2007 is difficult to predict, and management anticipates that development of its new products will require additional capital. These matters raise substantial doubt about the Company's ability to continue as a going concern. Management intends to seek additional debt or equity financing as it continues development of new products. However, the Company may not be able to obtain such financing on acceptable terms or at all. If the Company is unable to obtain such additional financing, it will be required to significantly revise its business plans and drastically reduce operating expenditures such that it may not be able to develop or enhance its products, gain market share in the United States of America or respond to competitive

pressures or unanticipated requirements, which could seriously harm its business, financial position and results of operations. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

3. Discontinued Operations

On November 17, 2004, the Company's board of directors authorized management to cease production of heart valves but to continue marketing the valves while exploring the merits of possible strategic alternatives for the heart valve business, including, but not limited to, a joint venture with another party or the sale of the business. Following exploration of a number of alternatives, management concluded during April 2005 that an orderly winding up of the valve business was the Company's best alternative. On April 6, 2005, the Company's Board authorized management to discontinue sales of heart valves effective April 30, 2005, and to seek a buyer for the related production equipment.

As a result of the Company's discontinuance of the heart valve business, the Company made a determination during the fourth quarter of fiscal year 2005 that the remaining assets of the heart valve operations should be considered "held for sale" pursuant to SFAS No. 144, "Accounting for Impairment or Disposal of Long-Lived Assets." Pursuant to SFAS No. 144, the Company ceased depreciation of property and equipment held for sale and evaluated whether any of the long-lived assets of the discontinued heart valve business were impaired. Based upon the estimated selling prices of these assets, management concluded that the carrying value of these assets was not impaired. As of April 30, 2005, the carrying value of the remaining net assets of the heart valve business was reported as assets of discontinued operations on the Company's balance sheet. In connection with this decision to discontinue the sale of heart valves, the Company reduced the carrying value of certain excess inventories, resulting in a provision recorded during the fourth quarter of fiscal year 2005 of $1,306,215. This provision was included in the fiscal year 2005 loss from discontinued operations.

Valve business revenue and loss before income taxes included in discontinued operations are as follows:

	Year Ended April 30,	
	2006	2005
Revenues	$338,333	$ 2,304,897
Loss Before Income Taxes	$ (81,800)	$(1,873,381)

The carrying amounts and major classes of the assets and liabilities, which are presented as assets and liabilities of discontinued operations on the accompanying balance sheet, are as follows:

	April 30, 2006	April 30, 2005
ASSETS		
Accounts receivable, net of allowance of $0 and $196,521	$ —	$ 557,291
Inventories	—	228,665
Prepaid expenses	89,782	89,692
Total current assets of discontinued operations	$ 89,782	$ 875,648
Property, plant and equipment, net	$ —	$ 188,145
Other long-term assets	87,323	179,654
Total non-current assets of discontinued operations	$ 87,323	$ 367,799
LIABILITIES		
Accounts payable	$ —	$ 192,295
Accrued expenses	—	10,300
Total current liabilities of discontinued operations	$ —	$ 202,595
Net assets of discontinued operations	$177,105	$1,040,852

4. Property, Plant and Equipment

Property, plant and equipment, excluding property and equipment of discontinued operations, consisted of the following at April 30:

	2006	2005
Land	$ 182,000	$ 182,000
Building	1,251,601	1,251,601
Machinery and equipment	476,931	287,571
Furniture and fixtures	12,743	12,743
Computers and related	242,208	106,484
	2,165,483	1,840,399
Accumulated depreciation and amortization	(1,425,473)	(1,012,608)
	$ 740,010	$ 827,791

5. Debt from Related Parties, Note Payable and Convertible Bridge Notes

Debt from Related Parties

In January 2003, the Company established a discretionary line of credit with PKM Properties, LLC (PKM), an entity controlled by Paul K. Miller. Mr. Miller is one of the Company's directors and one of the largest beneficial owners of the Company's securities. This line of credit was initially scheduled to mature on April 17, 2003. On April 15, 2003, the maturity date was extended to September 17, 2003. In October 2003, the Company further amended the line of credit to extend the maturity date to May 27, 2004, and to increase the interest rate to 10 percent per year. Additionally, on February 3, 2004, the maturity date of the line of credit was extended to June 30, 2005. The Company issued PKM a second mortgage on the Company's real estate and a security interest in all remaining assets of the Company. In connection with the original line of credit, the Company issued a ten-year warrant to PKM to purchase 35,000 shares of the Company's common stock at an exercise price of $5.96 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 59,600 shares at $3.50 per share. The debt of $943,333 borrowed under this line of credit was converted to redeemable convertible preferred stock on April 1, 2005 (see Note 9).

On July 8, 2003, the Company entered into a $1.0 million term debt agreement with PKM. Pursuant to the agreement, the Company borrowed $1.0 million during fiscal year 2004. The debt, which was collateralized by substantially all of the Company's assets, bore interest at 10 percent per year, with an original maturity date of May 27, 2004. In connection with the borrowings during fiscal year 2004, the Company issued warrants to PKM with a ten-year term for the purchase of 38,034 shares of the Company's common stock at an exercise price of $7.00 per share. As a result of anti-dilution adjustments through April 30, 2006, these warrants are exercisable for an aggregate of 73,957 shares at $3.60 per share. In connection with this financing, the Company agreed to extend the term of 70,000 previously issued warrants from five years to ten years. The Company incurred direct and incremental costs of $65,000 in completing the debt arrangement, which were included in deferred financing costs and were amortized as interest expense over the original eleven-month term of the debt. On February 3, 2004, the maturity date of the term debt was extended to June 30, 2005. In connection with the extension, the Company issued a warrant to PKM with a ten-year term for the purchase of 33,093 shares of the Company's common stock at an exercise price of $20.00 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 140,822 shares at $4.70 per share. The $1.0 million borrowed under this agreement was converted to redeemable convertible preferred stock on April 1, 2005 (see Note 9).

In November 2003, the Company amended the one-year $1.0 million term debt agreement with PKM, initiated on July 8, 2003, to provide for an additional $500,000 of borrowings with the same terms as the July 8, 2003 financing and extended the term of the loan to June 30, 2005. The Company issued, as additional consideration, a warrant with a ten-year term for the purchase of 7,738 shares of Company's common stock at an exercise price of $16.80 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 28,888 shares at $4.50 per share. The debt of $500,000 borrowed under this agreement was converted to redeemable convertible preferred stock on April 1, 2005 (see Note 9).

On July 8, 2003, the Company entered into a $1.0 million term debt agreement with Peter L. Hauser, a principal shareholder. The Company borrowed $1.0 million under this bridge financing during fiscal year 2004. The debt, which was collateralized by substantially all of the Company's assets pursuant to an intercreditor agreement with PKM, bore interest at 10 percent per year and had a maturity date of June 30, 2004. In connection with the term debt, the Company also issued a warrant with a ten-year term to purchase 38,035 shares of the Company's common stock at an exercise price of $7.00 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 73,958 shares at $3.60 per share. The Company incurred direct and incremental costs of $71,772 in completing the debt arrangement, which were included in deferred financing costs and were amortized as interest expense over the original twelve-month term of the debt. On February 3, 2004, the maturity date of the term debt was extended to June 30, 2005. In connection with the extension, the Company issued a warrant to Mr. Hauser with a ten-year term for the purchase of 13,600 shares of the Company's common stock at an exercise price of $20.00 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 57,872 shares at $4.70 per share. This debt of $1.0 million was converted to redeemable convertible preferred stock on April 1, 2005 (see Note 9).

On November 17, 2004, the Company entered into a Discretionary Credit Agreement with PKM, covering advances by PKM of up to $500,000. The Discretionary Credit Agreement had a maturity date of February 28, 2005, that was subsequently extended to June 30, 2005. The credit agreement required the payment of interest at 10 percent per year, and it also contained various representations and loan covenants as are customary in banking and finance transactions. The Company issued a credit note to PKM to evidence such indebtedness. In connection with the Discretionary Credit Agreement, the Company entered into an intellectual property security agreement with PKM pursuant to which PKM was granted a security interest in all of the Company's intellectual property. The Company and its creditors agreed to an amendment to the first amended and restated subordination and inter-creditor agreement by

and between PKM and Mr. Hauser. Pursuant to this agreement, proceeds borrowed under the Discretionary Credit Agreement were deemed "senior debt." Further, PKM, pursuant to a waiver agreement, waived past defaults under the January 2003 Discretionary Credit Agreement and the November 2003 Credit Agreement. These defaults involved the late payments of interest and failure to send periodic financial statements. As additional consideration for the Discretionary Credit Agreement, the Company issued to PKM a warrant with a ten-year term to purchase 3,401 shares of the Company's common stock at an exercise price of $14.70 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 11,363 shares at $4.40 per share. The allocated fair value of the newly issued warrant was $42,986 and was accounted for as a discount on the borrowings. This discount, which was presented as a reduction of the carrying value of the debt on the balance sheet was amortized as interest expense over the original four-month term of the debt.

On March 3, 2005, the Company entered into a February 2005 Credit Agreement (the "Agreement") with PKM. The Agreement provided for a $500,000 discretionary credit facility under which PKM made loans available to the Company up to $500,000 and bearing interest at 10 percent per year. Principal and interest were due on the amounts borrowed no later than June 16, 2005. This debt and the other amounts the Company had borrowed from PKM were collateralized by substantially all of the Company's assets. A February 2005 Discretionary Credit Note reflected this indebtedness. In consideration of the foregoing financing, the Company issued to PKM a ten-year warrant for the purchase of 75,000 shares of the Company's common stock with an exercise price of $5.00 per share. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 110,291 shares at $3.40 per share. The allocated fair value of the warrant was $589,321 and was accounted for as a discount on the borrowings. This discount, which was presented as a reduction of the carrying value of the debt on the balance sheet, was fully amortized as interest expense during fiscal year 2005. The Company repaid this note in April 2005.

Note Payable

In November 2003, the Company entered into a loan agreement and borrowed $500,000 from Draft Co. ("Draft"), pursuant to a note that matured on June 30, 2004, which bore interest at an annual rate of 10 percent. Pursuant to an amended intercreditor agreement among PKM, Mr. Hauser, and Draft, the loan was collateralized by substantially all of the Company's assets. The Company issued Draft warrants to purchase up to 9,090 shares of common stock at an exercise price of $14.30 per share with other terms comparable to the warrants issued to PKM as described above. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 30,230 shares at $4.30 per share. The allocated fair value of the warrants was $100,056 and was accounted for as a discount on the borrowings under the term debt. This discount, which was presented as a reduction of the carrying value of the debt on the balance sheet, was amortized as interest expense over the seven-month term of the debt. In addition, the Company incurred direct and incremental costs of $31,850 in completing the debt arrangement, which were included in deferred financing costs and were amortized as interest expenses over the term of the debt. The Company repaid this note in June 2004.

The Company determined the fair value of all warrants described above using the Black Scholes option pricing model. The model takes into consideration weighted average assumptions related to the following: risk-free interest rate; expected life years; expected volatility; and expected dividend rate.

Convertible Bridge Notes

In December 2004 and January 2005, the Company issued convertible bridge notes totaling $425,000. The notes, which were due on May 31, 2005, bore interest at 10 percent per year and were convertible into securities to be issued in the Company's next equity financing, if any. Within 10 days of the consummation of the Company's next equity financing each note holder was required to elect one of the following two alternatives: (1) convert the entire unpaid principal and all accrued but unpaid interest under the note into equity securities sold by the Company in its next equity financing ("Next Shares") at a price per share equal to 80 percent of the issuance price of the Next Shares, and retain the warrants issued in connection with the convertible bridge notes, or (2) surrender the note and the warrants issued in connection with the bridge notes to the Company in exchange for the issuance of a number of Next Shares and any accompanying warrants issuable in connection with the Next Shares, equal to the amount of such securities that could be purchased using the entire unpaid principal and all accrued but unpaid interest under the note.

In April 2005, these notes were converted in connection with the redeemable convertible preferred stock financing at 100 percent of the issuance price of such securities (see Note 9). In consideration of converting at 100 percent rather than 80 percent of the issuance price of the redeemable convertible preferred stock, the note holders were permitted to retain the warrants issued to them in connection with the convertible bridge financing. Because the convertible bridge notes provided a contingent conversion option to the note holders which resulted in a beneficial conversion price when converted, the Company recorded an interest charge of $68,000 upon conversion of these notes in April 2005.

In connection with issuance of the convertible bridge notes, the Company issued to the note holders warrants to purchase up to an aggregate of 8,500 shares of common stock. The warrants, which have a five-year term, are exercisable at a price per share equal to the per share or per unit price of equity securities sold in the Company's next offering. However, such exercise price could not exceed $14.90 per share. The warrants contain anti-dilution provisions, but there was no anti-dilution as of April 30, 2006. The allocated fair value of the newly issued warrants was $79,030 and was accounted for as a discount on the borrowings. This discount, which was initially presented as a reduction of the carrying value of the debt, was amortized as interest expense through the April 2005 conversion date of the notes.

6. Related Party Lease Obligation

On April 4, 2003, the Company sold its corporate headquarters and manufacturing facility and surrounding land in Inver Grove Heights, Minnesota, to PKM (see Note 5 regarding the Company's relationship with PKM).

In connection with the transaction, the Company received total consideration of $3.84 million consisting of: (1) $1.0 million in cash; (2) PKM's assumption of the Company's $2.5 million outstanding indebtedness to Associated Bank, and (3) PKM's assumption of the Company's promissory note with Dakota Electric Association and land special assessments payable to Dakota County aggregating $336,105. Also in connection with the transaction, the Company issued to PKM a ten-year warrant for the purchase of 35,000 shares of the Company's common stock at an exercise price of $6.25 per share. The warrant had an allocated fair value of $89,602 as determined by the Black Scholes option pricing model. As a result of anti-dilution adjustments through April 30, 2006, this warrant is exercisable for 60,763 shares at $3.60 per share.

Simultaneous with the sale of the facility, the Company entered into a lease with PKM to lease back the facility and a portion of the land. The lease has a ten-year initial term with options for the Company to extend the lease up to ten additional years. Under certain conditions, the Company also has an option to purchase the building at the end of the initial ten-year term at the fair value at that time.

Due to the Company's continued involvement with the property including the ability to buy back the property at a future date, the transaction is accounted for as a financing of the property sold and leased back. Accordingly, the land and building continue to be presented as part of the Company's property, plant and equipment balance and had a net book value of $572,551 (gross value of $1,433,601 net of accumulated depreciation of $861,050) at April 30, 2006 (see Note 4). The related party lease obligation of $2,864,819 represents the remaining minimum amounts due to PKM for the initial ten year term discounted at 4 percent and additional payments to be paid to PKM for the Dakota Electric Association and Dakota County obligations assumed by PKM.

Scheduled maturities of the related party lease obligation are as follows:

Year Ending April 30,	Amount
2007	$ 322,586
2008	334,633
2009	366,042
2010	352,991
2011	355,251
Thereafter	1,133,316
	$2,864,819

7. Commitments

Operating Lease

The Company has an operating lease for a certain piece of office equipment, which expires in fiscal year 2011. At the end of the initial lease term, the Company has the option to purchase the equipment at the fair market value, renew the lease, or return the equipment.

Rental expense, excluding executory costs and insurance, under the operating lease was $5,069 in fiscal year 2006. The future minimum lease payments are $5,530 in fiscal years 2007-2010, and $460 in fiscal year 2011.

Employment Agreements

During fiscal year 2006, the Company entered into employment agreements with seven executive officers. The agreements give the officers and the Company the right to terminate the contract with or without cause with sixty (60) days' written notice. The agreements also contain a provision for lump sum payments of up to twelve months severance if the employment of the officer is terminated without cause by the Company or for good reason by the officer as defined in the agreements. The agreements also contain various other provisions.

On April 6, 2006, the Company entered into an amendment to the executive employment agreement (the "Amendment") with John H. Jungbauer to reflect the mutual decision reached concerning his departure from the Company. Pursuant to the Amendment, Mr. Jungbauer's employment will terminate on the date the Company advises him that it has engaged a new chief financial officer and/or principal accounting officer. The actual termination date will be no earlier than July 31, 2006. The Company also has the right, at its option, to extend Mr. Jungbauer's employment (as a non-officer) for a transition period. Such transition period will not, without Mr. Jungbauer's consent, continue beyond December 31, 2006. Mr. Jungbauer's compensation and benefits will continue to be paid under the employment agreement at their current rates through the termination date and any transition period. Under terms of the employment agreement, Mr. Jungbauer has the right to terminate his employment upon 60 days' prior notice and is entitled to a severance payment equal to six months of base compensation. Under the employment agreement, Mr. Jungbauer will receive a severance payment of $100,000 on his termination date. To

facilitate a smooth transition, the Company has also agreed to make an additional severance payment to Mr. Jungbauer. Under the Amendment, Mr. Jungbauer will receive an additional severance payment of $100,000 on January 2, 2007. In addition to these severance payments, the Company has agreed to pay or reimburse Mr. Jungbauer for medical (COBRA) benefits for the periods covered by the severance payments. A liability of $131,793 for the severance payments, related payroll taxes, and medical benefits is included in accrued expenses on the balance sheet at April 30, 2006 and the expense is included in general and administrative expenses in the statement of operations for the fiscal year then ended. Mr. Jungbauer holds stock options for the purchase of 144,012 shares of the Company's common stock. Mr. Jungbauer's stock option agreements provide that he has three months following termination of employment to exercise the vested portions thereof. Options to purchase 44,065 shares of the Company's common stock will be vested on July 1, 2006. Pursuant to the Amendment, the Company agreed to amend Mr. Jungbauer's stock option agreements to provide that his options, to the extent vested on the termination date, will be exercisable for a period of twelve months following the termination of Mr. Jungbauer's employment.

Severance charges	$131,793
Balance as of April 30, 2006	$131,793

Atrial Fibrillation Technology Purchase Agreement

In August 2003, the Company entered into a technology purchase agreement with LightWave Ablation Systems, Inc. ("LightWave") and its principals, one of whom became an employee of the Company, relating to the acquisition of LightWave's interests in technology consisting of a catheter/probe containing elements of optical fiber, coolant passages and other features for the purpose of delivering laser energy to the epicardial surface of the heart for treatment of atrial fibrillation. The Company paid LightWave an initial standstill payment consisting of 1,500 shares of the Company's common stock, $10,000 upon closing and an additional $30,000 to LightWave in installments in 2004 and 2005. An additional $125,000 was paid to LightWave in January 2006. The Company will be obligated to pay an additional $385,000 within 45 days following the Company's achievement of $1,500,000 of cumulative gross sales of disposable products. In addition, at closing, during fiscal year 2004, the Company issued LightWave a warrant for the purchase of 2,500 shares of common stock at $14.60 per share and, during fiscal year 2005, a warrant for the purchase of 2,500 shares of common stock at $14.60 per share upon receiving FDA 510(k) clearance. In addition, the Company is obligated to issue a warrant for the purchase of 2,500 shares of common stock upon a receipt of a U.S. utility patent covering the product and a warrant for the purchase of 2,500 shares of common stock upon the first commercial sale of the product.

Following the first commercial sale, the Company has agreed to make payments to LightWave for ten years equal to 6 percent of net sales of the LightWave product in countries in which the Company obtains patent protection and 4 percent of net sales of the LightWave product in territories in which there is no patent protection. Commencing with the second year following the Company's first commercial sale, the Company agreed to make minimum annual payments as follows:

Year Following Commercialization	Minimum Annual Payments
2	$ 50,000
3	75,000
4	100,000
5	200,000
6	300,000
7	350,000
8	350,000
9	400,000
10	500,000

LightWave and two of its principals agreed to certain noncompetition obligations, nondisclosure obligations, and certain obligations to assign new developments or inventions relating to the acquired technology to the Company. The Company agreed to use its reasonable commercial efforts to commercialize the technology within three years following the acquisition of the technology from LightWave.

If the Company fails in any year to make the minimum annual payments, the Company may be obligated to grant LightWave a nonexclusive right to use the technology acquired from LightWave, or pay LightWave the difference between payments actually made and minimum payments due for a given year.

8. Income Taxes

The Company provided no income tax expense for the year ended April 30, 2006, because the taxes provided on the income before income taxes was more than offset by permanent tax differences, primarily relating to the decrease in fair value of putable warrants.

Income tax computed at the U.S. federal statutory rate reconciled to the effective tax rate is as follows:

	Year Ended April 30, 2006	Year Ended April 30, 2005
Taxes at statutory tax rate	36%	(36)%
(Decrease) increase in fair value of putable warrants	(65)%	22%
Other	1%	0%
Effect of net operating loss carryforwards	28%	14%
	0%	0%

The components of deferred income taxes at April 30, 2006 and 2005 are as follows:

	2006	2005
Federal net operating loss carryforwards	$ 12,565,737	$ 9,955,309
Research and experimentation credit carryforwards	466,533	466,533
State net operating loss carryforwards	612,807	498,170
Other carryforwards	11,767	11,937
Property, plant and equipment	(142,457)	(263,771)
Accrued expenses and other	51,244	(7,409)
Inventories	—	47,418
Allowance for uncollectible accounts	—	70,748
Net deferred tax assets	13,565,631	10,778,935
Valuation allowance	(13,565,631)	(10,778,935)
Net deferred tax asset	$ —	$ —

The Company established valuation allowances to fully offset tax assets due to uncertainty about the Company's ability to generate the future taxable income necessary to realize these deferred tax assets, particularly in light of the Company's history of significant operating losses. In addition, future utilization of available net operating loss carryforwards may be limited under Internal Revenue Code Section 382 as a result of changes in ownership that have or may result from the issuance of common stock, convertible preferred stock or common stock options and warrants.

The Company's federal net operating loss carryforwards of approximately $35,000,000 and state net operating loss carryforwards of approximately $9,500,000 expire in various fiscal years from 2012 through 2026. Available research and experimentation credit carryforwards at April 30, 2006, represent federal and state amounts with expiration dates in fiscal years 2011 through 2021.

9. Shareholders' Equity (Deficit)

Common Stock

The holder of each Class A Warrant issued in November 2001 as part of the Company's initial public offering was entitled to purchase, at any time until November 20, 2004, one share of common stock at an exercise price of $65.00 per share, subject to anti-dilution adjustments. The Company could redeem the Class A Warrants for $0.10 per warrant at any time, upon ten business days' written notice, if the closing price of the Company's common stock or units exceeded $85.00, subject to customary anti-dilution adjustments, for any ten consecutive trading days before such notice. The Company did not redeem any of these warrants prior to their expiration in November 2004.

During the fourth quarter of fiscal year 2004 and the first quarter of fiscal year 2005, the Company closed on the private sale of 273,076 units for $14.70 per unit. Each unit consisted of one share of common stock and one five-year warrant to purchase a common share for $16.00 per share. Proceeds from the offering, net of offering costs of $455,190, were $3,559,032 (proceeds were $2,000,608 in fiscal year 2005). In addition to cash commissions included in the offering costs, the Company issued to the private placement agent and finder five-year warrants to purchase an aggregate of 21,845 units at $18.375 per unit. As a result of anti-dilution adjustments these warrants became exercisable for 85,401 units at $4.70 per unit. In March and April 2006, warrants to purchase 37,214 units were exercised on a net exercise basis, resulting in the issuance of (1) 20,008 shares of the Company's common stock and (2) warrants to purchase 20,008 shares of the Company's common stock, at an exercise price of $18.375 per share, which expire on April 30, 2009. At April 30, 2006, warrants to purchase 48,187 units at $4.70 per unit remained exercisable.

During the fiscal year ended April 30, 2005, the Company issued 11,250 shares of common stock to consultants for services. The fair value of these shares was expensed and is included in operating expenses for the fiscal year ended April 30, 2005.

Redeemable Convertible Preferred Stock and Warrants

On April 1, 2005, under the terms of a Securities Purchase Agreement with accredited investors, the Company issued 1,803 shares of 5% Series A Redeemable Convertible Preferred Stock ("preferred stock") to such investors, five-year warrants for the purchase of 2,705,250 shares of common stock to such investors exercisable at $5.00 per share, and five-year warrants for the purchase in the aggregate of 163,596 shares of common stock to the placement agent and finder exercisable at $5.00 per share. Each share of preferred stock, which was non-voting, had a stated value of $10,000 per share and accrued cumulative dividends at a rate of 5% of the stated value annually, was convertible into the number of shares of common stock equal to the $10,000 stated value divided by $5.00, subject to anti-dilution adjustments. As a result, at April 30, 2005, the 1,803 preferred shares could be converted into 3,607,000 shares of common stock, subject to anti-dilution adjustments. The Company obtained gross cash proceeds of $13,603,000 at the closing (net of $30,000 in legal fees which were withheld by the lead investor). The Company also converted $4,402,000 of indebtedness into the above referenced securities. The Company incurred cash offering costs of $817,980, including agent commissions, a finder's fee and out-of-pocket expense reimbursements. The Company also paid legal and administrative expenses of $18,086 incurred by PKM in this transaction.

In certain circumstances, the Company had the option to require the holders of preferred stock to convert their shares into common stock. In the event of a fundamental transaction, as defined, the preferred shareholders had the right to require the Company to redeem the preferred shares at their stated value, including any accrued but unpaid dividends. In the event of certain defaults, the preferred shareholders had the right to require the Company to redeem the preferred shares at 110% of their stated value, including any accrued but unpaid dividends. As a result of these redemption provisions, the carrying value of these preferred shares was considered to be redeemable and was reported as a "mezzanine" instrument on the Company's balance sheet. However, the carrying value of this preferred stock at April 30, 2005 was zero, net of a discount associated with the warrants issued to the shareholders, the placement agent and the finder, as described below.

The Company was required to register the common shares underlying the preferred stock and the common shares underlying the warrants. If the Company did not meet certain registration deadlines, the holders of preferred stock were entitled to liquidated damages, as defined. In the event of a fundamental transaction, as defined, the warrants issued to the preferred shareholders, the placement agent and the finder, all provided the warrant holders with the right to put the warrants to the Company for cash in an amount equal to the fair value of the warrants, as determined using the Black Scholes option pricing model. As a result of this put right, the warrants were reported at their fair value as a liability on the Company's balance sheet and changes in the fair value of the warrant resulted in charges or benefits to the Company's results of operations. The fair value of these warrants upon closing the preferred stock sale was $22,271,047. Because the fair value of these warrants at April 1, 2005 exceeded the proceeds received in the preferred stock and warrant issuances, the excess of the fair value of the warrants over the proceeds received (including the converted debt) was recognized as other expense of $4,266,047 upon closing. During the period between closing and April 30, 2005, the fair value of these warrants increased to $27,992,609. The Company reported the $5,721,562 increase in fair value of putable warrants in other expense in the statement of operations for the fiscal year ended April 30, 2005. The fair value of the warrants, after the changes in terms noted below, was $11,443,152 at the date the warrants were exercised or the put option removed. The Company reported the $16,549,457 decrease in fair value of putable warrants in other income in the statement of operations for the fiscal year ended April 30, 2006.

The Company measured the fair value of the putable warrants using the Black Scholes option pricing model. The Company believed this was the appropriate valuation model because the redemption terms of the warrants provided for the holders to put them to the Company at their fair value as measured using the Black Scholes model. The assumptions used to value the warrants when they were issued on April 1, 2005 and when they were valued at the end of the Company's 2005 fiscal year (April 30, 2005) and at date of exercise were as follows:

	April 1, 2005 and April 30, 2005	Date of Exercise
Expected life	5 years	0 years
Volatility	116%	132%
Risk free interest rate	4.24%	4.38%
Dividend yield rate	0%	0%

Holders of a majority of the outstanding shares of the preferred stock authorized the Company to proceed with a preferred stock acquisition plan. Pursuant to such plan, on December 21, 2005, the Company entered into preferred stock acquisition agreements with the holders of an aggregate of 1,499 shares of preferred stock. Under the agreements, the Company acquired the preferred stock of each such holder in consideration of the issuance 3,077 shares of common stock for each share of preferred stock being acquired. On January 6, 2006, under the same form of preferred stock acquisition agreements, the Company acquired an additional 271 shares of preferred stock, representing all of the remaining then-outstanding shares of the Company's preferred stock, for the same per share consideration. In the aggregate, the Company issued 5,447,814 shares of common stock in consideration of the acquisition of 1,770 shares of preferred stock. The Company originally sold 1,803 shares of preferred stock. The 33 shares of preferred stock not purchased in December 2005 or January 2006 were converted between June 2005 and October 2005 into shares of common stock at a conversion ratio of 2,000 shares of common stock for each share of preferred stock.

Also on December 21, 2005, the Company and holders of a majority of the outstanding shares of preferred stock and related common stock purchase warrants entered into an amendment to the securities purchase agreement as of April 1, 2005, to revise certain definitions. Following such amendment, on December 21, 2005, the Company and each of the holders who originally agreed to sell preferred stock to the Company entered into amendments to such holders' warrants issued under the securities purchase agreement. Pursuant to these amendments, the Company (1) reduced the exercise price on outstanding warrants for the purchase of an aggregate of 2,296,950 shares of common stock held by such persons from $5.00 per share to $3.25 per share, and (2) accelerated the expiration date of such warrants from April 1, 2010, to January 6, 2006. Concurrent with such warrant amendments, investors delivered warrant exercise notices to the Company. The Company authorized one of such warrants, namely the warrant for the purchase of 445,200 shares held by PKM to be exercised on a net exercise basis (using a market price of $6.60 per share).

On January 6, 2006, under the same form of amended warrant agreements, investors exercised warrants for the purchase of 423,050 shares of common stock. The Company authorized one of such warrants, namely the warrant for the purchase of 151,200 shares held by Mr. Hauser, to be exercised on a net exercise basis (using a market price of $6.60 per share).

In the aggregate, the Company issued 2,411,567 shares of common stock in connection with the exercises by investors of investor warrants issued in the Company's April 2005 private placement. The Company also issued an additional 14,750 shares of common stock in connection with exercises of warrants originally issued to its agent and finder in its April 2005 private placement.

Also on January 6, 2006, pursuant to exercise notices dated January 5, 2006, the Company issued shares of common stock upon the exercise of certain other warrants. In particular, holders of warrants for the purchase of an aggregate of 107,850 shares of common stock, which were originally issued to the Company's placement agent in its April 2005 financing, were exercised. Of such number, warrants for the purchase of 1,500 shares were exercised for cash and warrants for the purchase of 106,350 shares were exercised on a net exercise basis, resulting in the issuance of 75,974 shares of common stock. Also effective January 6, 2006, the Company amended the outstanding finder warrant for the purchase of 40,996 shares of common stock to adjust the exercise price to $3.25 per share and eliminate the right to put the warrant to the Company for cash in an amount equal to the fair value of the warrants in the event of a fundamental transaction.

The net effect of the December 2005 and January 2006 transactions, including the changes in the terms of the preferred stock and warrants referred to above, was to increase cash by $6,435,140 (net of expenses of $471,435), decrease the warrant liability associated with the warrants containing a put feature by $18,188,082, increase common stock and additional paid-in capital by $31,458,271, increase non-cash dividends on preferred stock, because of the change in the number of common shares issued upon acquisition of the preferred stock, by $13,579,979 and increase other income by $6,744,930. The outstanding shares of common stock were increased by 7,951,605 shares.

Stock Options

In September 2005, the shareholders adopted the Amended and Restated 2001 Equity Incentive Plan which, among other provisions, increased the number of shares available for grant of awards under the plan to 600,000 shares and the 2005 Director Stock Option Plan under which a total of 100,000 shares of common stock have been reserved for issuance. The Company's shareholders have authorized the issuance of stock options, including the above options, for the aggregate purchase of 756,075 shares of common stock under various other plans covering certain employees, members of the board of directors and certain independent contractors approved by the board of directors. Options are typically granted at prices not less than fair market value at the date of grant. Options generally become exercisable between immediately to four years after grant date and have a maximum term of ten years. At April 30, 2006, 497,883 shares were available for grant under the Company's stock option plans.

The following is a summary of stock option activity with respect to the Company's various plans as well as option grants made outside the Company's plans (described below), and includes option activity for employees, directors and non-employees:

	Options	Weighted Average Exercise Price Per Share
Outstanding, April 30, 2004	125,172	$26.44
Granted	768,804	9.60
Exercised	(625)	4.00
Cancelled/Expired	(68,885)	36.15
Outstanding, April 30, 2005	824,466	10.10
Granted	162,216	8.97
Exercised	(375)	3.00
Cancelled/Expired	(83,054)	12.28
Outstanding, April 30, 2006	903,253	9.70

On April 1, 2005, the Company awarded (1) a non-qualified stock option for the purchase of 344,034 shares of common stock to the Company's President and Chief Executive Officer, (2) a non-qualified stock

option for the purchase of 129,013 shares of common stock to the Company's Vice President, Finance and Chief Financial Officer, (3) a non-qualified stock option for the purchase of 64,506 shares of common stock to the Company's Vice President, Research and Development, (4) a non-qualified stock option for the purchase of 64,506 shares of common stock to the Company's Vice President, Operations, (5) a non-qualified stock option for the purchase of 21,502 shares of common stock to the Company's Vice President, Regulatory Affairs and Quality Assurance; and (6) a non-qualified stock option for the purchase of 43,004 shares of common stock to a former employee (which options expired in June 2005). The foregoing options were issued outside the Company's stock option plans.

In December 2005, the Company amended the vesting provisions of such options as follows: (1) 25% on the first anniversary of the date of grant and (2) 6.25% on each subsequent quarterly anniversary. As a result of the amendments, such options will still vest in full on the fourth anniversary of the date of grant, but incremental vesting after the first anniversary of the date of grant will be on a quarterly, rather than annual basis. The options are exercisable at $8.90 per share, which was the closing price of the Company's common stock on the OTC Bulletin Board on April 1, 2005. These options expire on April 1, 2012.

On March 21, 2005, the Company granted stock options for the aggregate purchase of 10,000 shares of common stock to two of the Company's directors for their services as directors. The foregoing options were issued outside the Company's stock option plans. The options were fully vested at the date of the grant, and are exercisable at $10.00 per share, which was the closing price of the Company's common stock on the OTC Bulletin Board on March 21, 2005. These options expire on March 21, 2015.

During the year ended April 30, 2006, the Company issued four and ten-year options to purchase an aggregate of 20,000 shares of the Company's common stock at exercise prices ranging from $7.10 to $8.70 per share to certain non-employees who are providing technical advisory services to the Company. The options vest over two years. The aggregate fair value of the options was $124,802 using the Black-Sholes valuation model. The amount expensed in fiscal year 2006 related to these options was $39,728. During the year ended April 30, 2005, the Company issued ten-year options to purchase an aggregate of 21,190 shares of the Company's common stock at exercise prices ranging from $16.70 to $20.00 per share to a non-employee who provided technical advisory services to the Company. The options vested immediately. The aggregate fair value of the options using the Black-Scholes valuation model was $247,796 and was expensed in fiscal year 2005.

The following table summarizes information about stock options outstanding and exercisable at April 30, 2006:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$ 5.10 - $ 9.50	756,857	6.44	$ 8.70	174,579	$ 8.74
10.00 - 16.80	115,269	7.54	12.70	44,025	13.83
20.00 - 45.00	31,127	7.81	22.81	19,079	23.79
	903,253			237,683	

The following assumptions were used to value the options for the years ended April 30, 2006 and 2005:

	2006	2005
Dividend yield rate	0%	0%
Risk free interest rate	4.22%	3.32 - 4.27%
Expected life	4 to 10 years	4 to 10 years
Volatility	136 percent	125 percent

Stock Warrants

At April 30, 2006 and 2005, the Company had outstanding and exercisable warrants to purchase 1,168,498 and 3,828,207 shares, respectively, of the Company's common stock at prices ranging from $3.25 to $67.50 per share. The warrants expire at various dates through March 2015. At April 30, 2006 and 2005, the weighted average remaining contractual life of the warrants was 5.47 and 9.02 years and the weighted average exercise price of the warrants was $11.24 and $7.10, respectively.

As discussed above under "Common Stock" during the fourth quarter of fiscal year 2006, warrants to purchase 37,214 units were exercised on a net exercise basis. The net result of the exercises was a reduction of 54,420 warrants to purchase shares of the Company's common stock.

As discussed above under "Redeemable Convertible Preferred Stock and Warrants," during the fourth quarter of fiscal year 2005, the Company issued warrants to purchase 2,705,250 shares of common stock to investors and issued warrants to purchase 163,596 shares to an agent and finder involved in the Company's private placement. Also, as noted above, 2,827,850 of these warrants were exercised in fiscal year 2006.

As discussed in Note 5, the Company issued to certain lenders, warrants to purchase 86,901 common shares during the year ended April 30, 2005. In addition, warrants to purchase 31,454 common shares were issued to agents or finders in fiscal year 2005.

As discussed in Note 5, several warrants issued contain anti-dilution features. Due to these features, holders of the outstanding warrants became eligible to purchase an additional 251,561 and 235,299 common shares during fiscal year 2006 and 2005, respectively.

As discussed in Note 7, the Company issued a seven-year warrant to purchase 2,500 shares of common stock for the achievement of a milestone in connection with a technology purchase agreement during the year ended April 30, 2005.

During the year ended April 30, 2006, warrants to purchase 29,000 shares of common stock expired.

A summary of warrant activity during the years ended April 30, 2006 and 2005 is as follows:

	Warrants
Outstanding, April 30, 2004	624,112
Issued	3,143,796
Impact of antidilution features	235,299
Expired	(175,000)
Outstanding, April 30, 2005	3,828,207
Impact of antidilution features	251,561
Exercised	(2,882,270)
Expired	(29,000)
Outstanding, April 30, 2006	1,168,498

10. Research and Development Costs

Research and development services include expenses the Company previously referred to as research and development expenses and engineering and regulatory expenses. Research and development costs included as part of research and development services in the statement of operations, totaled $3,471,241 and $1,278,709 for the fiscal years ended April 30, 2006 and 2005, respectively. Research and development costs relate primarily to product and process development initiatives.

11. Savings and Retirement Plan

The Company sponsors a 401(k) savings and retirement plan (the "Plan") for all eligible employees. Under the Plan, the Company may make a discretionary contribution to the Plan upon approval by the Company's board of directors. Employees are fully vested in their own contributions and related earnings and become fully vested in the Company's contributions and related earnings. The Company made contributions to the Plan of $31,996 and $18,943 in fiscal years 2006 and 2005, respectively.

12. Restructuring Charge

In the quarter ended July 31, 2004, the Company restructured its executive management team, resulting in the termination of two employees, which resulted in a charge of $182,315 to general and administrative expenses. This charge represented the amount of future severance payments due to these former employees. During the quarter ended October 31, 2004, the Company terminated an additional five employees in an effort to reduce operating costs. This restructuring resulted in additional severance costs of $45,987, of which $19,999 is included in general and administrative expenses and $25,988 is included in discontinued operations. During the quarter ended January 31, 2005, the Company terminated an additional eleven employees resulting in $48,835 of severance costs, of which $17,206 included in general and administrative expenses and $31,629 is included in discontinued operations. During the quarter ended April 30, 2005, the Company terminated two additional employees resulting in $28,709 of severance costs charged to general and administrative expenses. At April 30, 2005, $24,834 of severance costs was accrued but not paid. During the quarter ended July 31, 2005, the Company entered into a separation agreement with an employee, resulting in a charge to general and administrative expense for severance pay of $40,382. The Company paid all amounts due to these former employees by September 30, 2005.

13. Contingencies and Uncertainty

In March 2005, the Company became aware that a patient who was utilizing the Company's heart valve had died. The Company has not received any claims related to this matter but believes that any such claim would be covered by its existing liability insurance. Based upon the expectation that insurance would cover the cost of any claims after the Company's payment of the deductible, the Company does not expect the ultimate resolution of this matter to have a material effect on the Company's business, financial condition, operating results or cash flows.

On March 9, 2006, J Giordano Securities LLC (d/b/a J Giordano Securities Group) ("JGSG") filed suit against the Company in U.S. District Court, District of Connecticut. JGSG claims that it is entitled to damages due to an alleged breach of the engagement agreement, as amended, between the Company and JGSG. In particular, JGSG claims that the exercise of outstanding warrants for the purchase of common stock by certain JGSG-identified investors and the Company's purchase of outstanding shares of preferred stock from certain JGSG-identified investors in December 2005 and January 2006 entitle JGSG to damages no less than $1,431,769. In particular, JGSG seeks (1) $279,191 in cash commissions, (2) warrants for the purchase of 85,905 shares at $3.25 per share, (3) lost profits of $751,669 on the argument that JGSG would have exercised the foregoing warrant and sold 85,905 shares on December 30, 2005, at a price of $12.00 per share, and (4) the $400,909 in cash commissions the Company paid C.E. Unterberg, Towbin,

LLC. JGSG also seeks reimbursement for reasonable expenses, interest, costs and attorneys' fees. In addition, JGSG notified us by letter dated May 26, 2006 that, pursuant to the agreement, it may claim compensation arising out of alleged rights to serve as a co-managing underwriter or member of the underwriting group of a proposed public offering set forth in the registration statement on Form SB-2 we filed with the Securities and Exchange Commission on May 19, 2006. The Company believes that this lawsuit is without merit and intends to vigorously defend itself.

14. Geographic Information

The following table summarizes net sales, all of which are reported as part of the loss from discontinued operations, by geographic area:

	Year Ended April 30,	
	2006	2005
Europe	$279,435	$1,190,967
United States	58,898	391,042
South Asia	—	51,800
Middle East	—	379,280
Far East	—	70,511
Other	—	221,297
Total	$338,333	$2,304,897

At April 30, 2006 and 2005, substantially all of the Company's operations and assets were based in the United States.

15. Subsequent event

Reverse Stock Split

The Company's board of directors approved a one-for-ten reverse stock split of its common stock and preferred stock, effective May 31, 2006. The accompanying financial statements and related notes give retroactive effect to this reverse stock split.

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Restated Articles of Incorporation of the Registrant, as Amended (incorporated by reference to Amendment No. 1 to our Registration Statement on Form SB-2, filed on June 6, 2006 (File No. 333-134315)).
3.2	Bylaws of the Registrant (incorporated by reference to our Registration Statement on Form SB-2, filed on August 31, 2001 (File No. 333-68884)).
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2	Specimen common stock certificate (incorporated by reference to Amendment No. 1 to our Registration Statement on Form SB-2, filed on June 6, 2006 (File No. 333-134315)).
10.1	1992 Stock Option Plan (incorporated by reference to our Registration Statement on Form SB-2, filed on August 31, 2001 (File No. 333-68884)).
10.2	1993 Director Stock Option Plan (incorporated by reference to our Registration Statement on Form SB-2, filed on August 31, 2001 (File No. 333-68884)).
10.3	1997 Stock Option Plan (incorporated by reference to our Registration Statement on Form SB-2, filed on August 31, 2001 (File No. 333-68884)).
10.4	Amended and Restated 2001 Equity Incentive Plan (incorporated by reference to our Definitive Schedule 14A (Proxy Statement), filed on August 25, 2005 (File No. 000-33295)).
10.5	Common Stock Purchase Warrant issued by the Registrant to PKM Properties, LLC, dated January 17, 2003 (incorporated by reference to our Quarterly Report on Form 10-QSB/A, filed on April 4, 2003 (File No. 000-33295)).
10.6	Amendment to Warrants by and between the Registrant and PKM Properties, LLC, dated July 1, 2003 (incorporated by reference to our Current Report on Form 8-K, filed on July 14, 2003 (File No. 000-33295)).
10.7	Warrant Agreement to purchase 32,017 shares of common stock issued by the Registrant to PKM Properties, LLC, dated July 1, 2003 (incorporated by reference to our Current Report on Form 8-K, filed on July 14, 2003 (File No. 000-33295)).
10.8	Warrant Agreement to purchase 6,017 shares of common stock issued by MedicalCV, Inc. to PKM Properties, LLC, dated August 20, 2003 (incorporated by reference to our Quarterly Report on Form 10-QSB filed on December 15, 2003 (File No. 000-33295)).
10.9	Warrant Agreement to purchase 7,738 shares of common stock issued by the Registrant to PKM Properties, LLC, dated November 13, 2003 (incorporated by reference to our Quarterly Report on Form 10-QSB filed on March 22, 2004 (File No. 000-33295)).
10.10	Warrant Agreement to purchase 33,093 shares of common stock issued by the Registrant to PKM Properties, LLC, dated February 3, 2004 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).
10.11	Non-Qualified Stock Option Agreement issued by the Registrant to Lawrence L. Horsch in the amount of 10,000 shares, dated August 19, 2003 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).
10.12	Building Lease Agreement between the Registrant and PKM Properties, LLC, dated April 4, 2003 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).

Exhibit Number	Description
10.13	Technology Purchase Agreement between the Registrant and LightWave Ablation Systems, Inc., Gregory Brucker and Robert Svenson M.D., dated August 27, 2003 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).
10.14	Technology Assignment Agreement between the Registrant, LightWave Ablation Systems, Inc., Robert H. Svenson, M.D. and Gregory Brucker, dated August 27, 2003 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).
10.15	Proprietary Information and Inventions Agreement between the Registrant, Robert H. Svenson, M.D. and Gregory Brucker, dated August 10, 2003 (incorporated by reference to our Annual Report on Form 10-KSB filed on July 29, 2004 (File No. 000-33295)).
10.16	Severance and Release Agreement between the Registrant and Blair P. Mowery, effective August 11, 2004 (incorporated by reference to Post Effective Amendment No. 1 to our Registration Statement on Form SB-2 filed on September 9, 2004 (File No. 333-116394)).
10.17	Severance and Release Agreement between the Registrant and Allan R. Seck, effective August 6, 2004 (incorporated by reference to Post Effective Amendment No. 1 to our Registration Statement on Form SB-2 filed on September 9, 2004 (File No. 333-116394)).
10.18	Letter Agreement between the Registrant and Marc P. Flores, effective August 30, 2004 (incorporated by reference to our Current Report on Form 8-K, filed on September 2, 2004 (File No. 000-33295)).
10.19	October 2004 Discretionary Credit Agreement by and between MedicalCV, Inc. and PKM Properties, LLC, dated October 29, 2004, effective November 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on November 23, 2004 (File No. 000-33295)).
10.20	October 2004 Credit Note issued by MedicalCV, Inc. (maker) to PKM Properties, LLC (payee), dated October 29, 2004, effective November 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on November 23, 2004 (File No. 000-33295)).
10.21	Intellectual Property Security Agreement by and between PKM Properties, LLC (secured party) and MedicalCV, Inc. (debtor), dated October 29, 2004, effective November 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on November 23, 2004 (File No. 000-33295)).
10.22	Waiver Agreement by and between MedicalCV, Inc. (borrower) and PKM Properties, LLC (lender), dated October 29, 2004, effective November 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on November 23, 2004 (File No. 000-33295)).
10.23	Warrant Agreement issued to PKM Properties, LLC, dated November 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on November 23, 2004 (File No. 000-33295)).
10.24	Form of Bridge Note Purchase Agreement including form of convertible promissory note and form of common stock purchase warrant), dated December 31, 2004 (incorporated by reference to our Current Report on Form 8-K filed on January 14, 2005 (File No. 000-33295)).
10.25	February 2005 Discretionary Credit Agreement by and between MedicalCV, Inc. and PKM Properties, LLC, dated February 16, 2005, effective March 3, 2005 (incorporated by reference or our Current Report on Form 8-K/A filed on March 9, 2005 (File No. 000-33295)).
10.26	February 2005 Discretionary Credit Note issued by MedicalCV, Inc. (maker) and PKM Properties, LLC (payee), dated February 16, 2005, effective March 3, 2005 (incorporated by reference or our Current Report on Form 8-K/A filed on March 9, 2005 (File No. 000-33295)).

Exhibit Number	Description
10.27	Warrant Agreement issued to PKM Properties, LLC, dated February 16, 2005, effective March 3, 2005 (incorporated by reference or our Current Report on Form 8-K/A filed on March 9, 2005 (File No. 000-33295)).
10.28	Form of Non-Qualified Stock Option Agreement under the MedicalCV, Inc. 2001 Equity Incentive Plan issued to Executive Officers.
10.29	Form of Non-Qualified Stock Option Agreement under the MedicalCV, Inc. 1997 Stock Option Plan (incorporated by reference to our Quarterly Report on Form 10-QSB filed on March 17, 2005 (File No. 000-33295)).
10.30	Form of Non-Qualified Stock Option Agreement under the MedicalCV, Inc. 1993 Director Stock Option Plan (incorporated by reference to our Quarterly Report on Form 10-QSB filed on March 17, 2005 (File No. 000-33295)).
10.31	Form of Stand-Alone Non-Qualified Stock Option Agreement issued to Non-Employee Directors (incorporated by reference to our Current Report on Form 8-K filed on March 25, 2005 (File No. 000-33295)).
10.32	Securities Purchase Agreement between the Registrant and the Investors named as signatories thereto, dated March 31, 2005 (effective April 1, 2005) (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.33	Form of 2005 Private Placement Warrant (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.34	Form of Debt Conversion Agreement dated March 29, 2005 (effective April 1, 2005) (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.35	Registration Rights Agreement between the Registrant and the Investors named as signatories thereto, dated March 31, 2005 (effective April 1, 2005) (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.36	Engagement Letter between the Registrant and J Giordano Securities Group, dated December 17, 2004 (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.37	Amendment to Engagement Letter between the Registrant and J Giordano Securities Group, dated March 16, 2005 (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.38	Letter Agreement between the Registrant and Tower Finance, Ltd., dated December 8, 2004 (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.39	Amendment to Letter Agreement between the Registrant and Tower Finance, Ltd., dated March 16, 2005 (incorporated by reference to our Current Report on Form 8-K filed on April 4, 2005 (File No. 000-33295)).
10.40	2005 Director Stock Option Plan (incorporated by reference to our Definitive 14A (Proxy Statement), filed on August 25, 2005 (File No. 000-33295)).
10.41	Lease Termination Agreement entered into by and between PKM Properties, LLC and the Registrant, dated June 29, 2005 (incorporated by reference to our Quarterly Report on Form 10-QSB filed on September 14, 2005 (File No. 000-33295)).

Exhibit Number	Description
10.42	Employment Agreement by and between Marc P. Flores and the Registrant, dated August 9, 2005 (incorporated by reference to our Current Report on Form 8-K/A filed on August 9, 2005 (File No. 000-33295)).
10.43	Employment Agreement by and between John H. Jungbauer and the Registrant, dated August 9, 2005 (incorporated by reference to our Current Report on Form 8-K/A filed on August 9, 2005 (File No. 000-33295)).
10.44	Form of Non-Qualified Stock Option Agreement Issued to Executive Officers (incorporated by reference to our Current Report on Form 8-K/A filed on August 9, 2005 (File No. 000-33295)).
10.45	Form of Non-Employee Director Stock Option Agreement issuable under the 2005 Director Stock Option Plan (incorporated by reference to our Current Report on Form 8-K filed on September 23, 2005 (File No. 000-33295)).
10.46	Letter Agreement by and between MedicalCV, Inc. and Marc P. Flores, dated November 2, 2005 (incorporated by reference to our Current Report on Form 8-K filed on November 8, 2005 (File No. 000-33295)).
10.47	Form of Amendment to Non-Qualified Stock Option Agreement (incorporated by reference to our Quarterly Report on Form 10-QSB filed on December 14, 2005 (File No. 000-33295)).
10.48	Form of Preferred Stock Acquisition Agreement, dated December 21, 2005 (including form of Registration Rights Agreement) (incorporated by reference to our Current Report on Form 8-K filed on December 22, 2005 (File No. 000-33295)).
10.49	Form of Amendment No. 1 to Securities Purchase Agreement (originally dated March 31, 2005), dated December 21, 2005 (incorporated by reference to our Current Report on Form 8-K filed on December 22, 2005 (File No. 000-33295)).
10.50	Form of Amendment No. 1 to Warrant Agreement (originally issued April 1, 2005), dated December 21, 2005 (incorporated by reference to our Current Report on Form 8-K filed on December 22, 2005 (File No. 000-33295)).
10.51	Form of Amendment to Executive Employment Agreement by and between John H. Jungbauer and MedicalCV, Inc., dated April 6, 2006 (incorporated by reference to our Current Report on Form 8-K filed on April 7, 2006 (File No. 000-33295)).
10.52	Executive Employment Agreement by and between Adam L. Berman and the Registrant, dated August 17, 2005.
10.53	Executive Employment Agreement by and between Robert W. Clapp and the Registrant, dated August 17, 2005.
10.54	Executive Employment Agreement by and between Dennis E. Steger and the Registrant, dated August 18, 2005.
10.55	Executive Employment Agreement by and between James E. Jeter and the Registrant, dated November 7, 2005.
10.56	Executive Employment Agreement by and between Gary O. Tegan and the Registrant, dated April 19, 2006.
10.57	Restated Employment Agreement by and between Eapen Chacko and the Registrant, dated May 30, 2006 (incorporated by reference to our Current Report on Form 8-K filed on June 5, 2006 (File No. 000-33295)).
10.58	Form of Non-Qualified Stock Option Agreement issued to Directors under Amended and Restated 2001 Equity Incentive Plan.

Exhibit Number	Description
10.59	Second Amendment to Executive Employment Agreement by and between John H. Jungbauer and the Registrant, dated July 18, 2006 (incorporated by reference to our Current Report on Form 8-K filed on July 20, 2006 (File No. 000-33295)).
16.1	Letter on Change in Certifying Accountant, dated June 14, 2005 (incorporated by reference to our Current Report on Form 8-K filed on June 14, 2005 (File No. 000-33295)).
16.2	Letter on Change in Certifying Accountant, dated July 25, 2005 (incorporated by reference to our Current Report on Form 8-K filed on July 25, 2005 (File No. 000-33295)).
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Independent Registered Public Accounting Firm.
24	Power of Attorney (included on signature page to Form 10-KSB).
31.1	Chief Executive Officer Certification pursuant to Exchange Act Rule 13a-14(a).
31.2	Chief Financial Officer Certification pursuant to Exchange Act Rule 13a-14(a).
32.1	Chief Executive Officer Certification pursuant to 18 U.S.C. Section 1350.
32.2	Chief Financial Officer Certification pursuant to 18 U.S.C. Section 1350.

medical CV™

MANAGEMENT TEAM

[redacted]
President and Chief Executive Officer

[redacted]
Vice President, Finance and
Chief Financial Officer

[redacted]
Vice President, Research and Development

[redacted]
Vice President, Operations

[redacted]
Vice President, Sales

[redacted]
Vice President, Regulatory Affairs and Quality Assurance

[redacted]
Vice President, Marketing

BOARD OF DIRECTORS

[redacted]
Chairperson of the Board,
MedicalCV, Inc.

[redacted]
President and Chief Executive Officer,
MedicalCV, Inc.

[redacted]
President,
Heimovitch Medical Technology Consultants

[redacted]
Chairman,
Management & Financial Corp.

[redacted]
President and Chief Executive Officer,
Thoratec, Inc.

[redacted]
Private Investor

[redacted]
President, Chief Executive Officer and Director,
Viacor Medical, Inc.

CORPORATE DATA AND SHAREHOLDER INFORMATION

Corporate Headquarters
MedicalCV, Inc.
9725 South Robert Trail
Inver Grove Heights, MN 55077
(651) 452-3000

Auditors
Ernst & Young LLP
2501 Wayzata Boulevard
Minneapolis, MN 55405

Legal Counsel
Briggs and Morgan, PA
2200 IDS Center
Minneapolis, MN 55402

Securities
MedicalCV's common stock is publicly traded on the OTC Bulletin Board under the ticker symbol "MCVI."

Transfer Agent and Registrar
Registrar and Transfer Company
10 Commerce Drive
Cranford, NJ 07016-3572

Annual Meeting
The annual meeting of shareholders will be held at the Radisson Hotel, 35 South Seventh Street, Minneapolis, Minnesota, on October 19, 2006, at 3:30 p.m. central time.

Financial Information
MedicalCV's financial results and news are available online at www.medevinc.com. Shareholders may obtain, without a charge, an additional copy of the Annual Report on Form 10-KSB as filed with the Securities and Exchange Commission for the year ended April 30, 2006, by writing:

Jason Chacko
Vice President, Finance and
Chief Financial Officer
MedicalCV, Inc.
9725 South Robert Trail
Inver Grove Heights, MN 55077

This report contains certain forward-looking statements of expected future developments, as defined in the Private Securities Litigation Reform Act of 1995. The forward-looking statements in this report refer to our expectations regarding our development and commercialization of products for the minimally invasive treatment of atrial fibrillation and other matters. These forward-looking statements reflect our current expectations and are based on currently available data; however, actual results are subject to future risks and uncertainties, which could materially affect actual performance. Risks and uncertainties that could affect such performance include those set forth under "Management's Discussion and Analysis or Plan of Operation – Cautionary Statement" in the attached Form 10-KSB.

MedicalCV, Inc.

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