

## To Our Stockholders

Fiscal 2008 was an exceptional year for Cardica. We made excellent commercial and corporate progress, gained recognition among cardiovascular surgeons and expanded into additional surgical areas. We expanded our product lines and the applications for our products, extended our pipeline of innovative devices, improved our manufacturing and commercial processes, grew our sales force and bolstered our management team. And now we are off to a terrific start in fiscal 2009 with clearance from the U.S. Food and Drug Administration (FDA) in September for our PAS-Port® Proximal Anastomosis System.

Over the last 30 years, few significant changes have been implemented broadly across the field of coronary artery bypass graft (CABG) surgery due to technical limitations, particularly the difficulty of hand sewing bypass grafts during these procedures. Cardica's automated anastomosis systems help overcome this limitation and, today, allow surgeons to perform reliable, consistent connections of bypass vessels in a variety of procedures – ranging from traditional open-chest surgery with a heart-lung machine to open-chest beating heart surgery to robot-assisted closed-chest procedures. Moreover, our automated anastomosis systems may help facilitate improved patient outcomes by shortening surgery times and hospital stays and reducing complications associated with aortic clamping, heart-lung bypass and splitting the sternum.

Our accomplishments since the beginning of fiscal 2008 underscore the integral role we are playing in driving broader implementation of less invasive and minimally-invasive CABG procedures.

### **PAS-PORT COMMERCIALLY AVAILABLE IN THE UNITED STATES**

The PAS-Port system is the only fully-automated, integrated device that allows a surgeon to complete an automated proximal anastomosis during CABG procedures. The compelling clinical benefit is that the PAS-Port system completes the anastomosis without the need to clamp and manipulate the aorta. Clamping the aorta has been associated with neurological complications, including stroke.

The PAS-Port device has several other features and benefits. Clinical data have shown that the PAS-Port system significantly reduces the surgical time required to complete a consistent, reliable anastomosis compared to hand-sewn anastomoses. Also, the PAS-Port system allows the graft vessel to be loaded without damaging endothelial cells while maximizing the orifice. Additionally, the PAS-Port system leaves no metal within the lumen of the graft vessel, which clinical data have shown is critical for reducing restenosis. In addition, numerous peer-reviewed journal articles have supported the efficacy, reliability and application of this device.

The PAS-Port system has been available in Japan and the European Union for four years, and we had shipped more than 8,800 units as of June 30, 2008. In Japan, where a majority of the PAS-Port devices have been deployed, it is used in more than 20 percent of all bypass procedures today that use a vein graft.

As we prepare to launch the PAS-Port system in the United States, we intend to be deliberate and systematic, just as we were with the introduction of our C-Port® Distal Anastomosis Systems. Leveraging our seasoned sales force, a satisfied customer base and peer-reviewed clinical literature, we believe we will be able to build our PAS-Port customer base quickly. Due to the intuitive nature of the product, we intend to train 50 to 60 surgeons per quarter in fiscal 2009 on the benefits and use of the PAS-Port system, with the goal of ramping quickly thereafter.

### **C-PORT COMMERCIAL VALIDATION**

An expanded product line, key data presentations and broader application in beating heart and robot-assisted bypass procedures bolstered acceptance of our C-Port systems among cardiothoracic surgeons. Revenue from our C-Port systems, which are cleared for marketing in the United States and Europe, more than doubled in fiscal 2008, with reorders accounting for more than 75 percent of sales. As of June 30, 2008, we had shipped nearly 6,000 C-Port units since introduction, and trained 318 surgeons in the United States on the benefits and use of this innovative product line.

### C-Port xA® X-CHANGE™

Distal Anastomosis System



### C-Port® Flex-A®

Anastomosis System



### PAS-Port®

Proximal Anastomosis System



In response to physician feedback, in fiscal 2008 we introduced the C-Port xA® X-CHANGE™ Distal Anastomosis System, a cartridge-based, reloadable C-Port system that allows surgeons to attach multiple blood vessel grafts, even as small as 1 mm in diameter, using the same handle during a multi-vessel bypass surgery.

In addition, key surgeon-sponsored follow-up studies and cost analyses provided continued validation that our C-Port systems produce excellent patency results and facilitate less invasive CABG surgery.

We are pleased with physician adoption to date, as a number of surgeons now use our C-Port systems routinely in a range of bypass procedures, including traditional open-chest, beating heart and robot-assisted CABG surgeries.

In fiscal 2009, we expect to continue to grow our customer base and build our C-Port system product line. Subject to FDA clearance, we plan to introduce the C-Port® xV™ Distal Anastomosis System, a cartridge-based device similar to the C-Port X-CHANGE, to be used with larger grafts.

In addition, to broaden the application of our automated anastomosis technology to other revascularization needs, subject to FDA clearance, we plan to launch the C-Port® Flex-AV™ Anastomosis System, a specialized C-Port® Flex-A® device for the creation of arteriovenous fistulae (AVF) for hemodialysis patients. An AVF is the direct connection of a vein to an artery, usually in the forearm, that causes more blood to flow into the vein to facilitate the hemodialysis process. These connections reduce the risk of a clot or infection and last significantly longer than other hemodialysis access ports. This market, already more than 200,000 procedures per year, is growing at 6 to 7 percent annually and provides a natural extension for our automated anastomosis technology.

#### DEVELOPMENT SUCCESS

Turning to product development, we continued to make progress under two separate agreements with Cook Medical (Cook). During fiscal 2008, we expanded our vascular closure

device agreement with Cook to extend the Cook Vascular Closure Device (CVCD) product family, innovative devices designed to close access openings in femoral arteries after interventional vascular procedures. We received an aggregate of \$3.2 million for the achievement of significant milestones for the CVCD and under a second agreement to develop a closure device for holes in the heart caused by a genetic defect called patent foramen ovales (PFO). We expect continued progress under both agreements in the year ahead.

#### LOOKING AHEAD

We recently strengthened our management team with the addition of Frederick Bauer as vice president of operations. He will help us expand our manufacturing operations to meet the increasing demand for our C-Port systems and the introduction of our PAS-Port system in the United States.

This is a pivotal time for Cardica as our suite of anastomosis products is positioned to help drive a paradigm shift from the use of traditional hand-sewn anastomoses to the use of automated, reliable and consistent connections of bypass grafts in the field of cardiothoracic surgery. Our growing product portfolio, expanding customer base and a seasoned management team to execute on our vision are setting the stage for continued momentum in fiscal 2009.

I would like to thank our employees for their tireless efforts, those forward-thinking cardiothoracic surgeons who are advocating innovation in revascularization, and our investors for their dedication to our vision to revolutionize revascularization and enable minimally-invasive cardiovascular surgery for all patients.

Sincerely,

Kevin T. Larkin  
Chairman of the Board

Bernard A. Hausen, M.D., Ph.D.  
President and  
Chief Executive Officer



While shoveling snow during the harsh winter of 2008, Gwynn Theusch twice experienced severe tightness in his chest that required him to stop for several minutes to catch his breath. After cardiologists at The Wisconsin Heart Hospital (TWHH) diagnosed significant coronary artery disease including substantial blockages in three vessels, Mr. Theusch was referred to Dr. Husam H. Balkhy, chairman of the Department of Cardiac and

Vascular Surgery and head of the robotics program at TWHH. As a cardiothoracic surgeon on the cutting edge of cardiac revascularization, Dr. Balkhy offered Mr. Theusch the option of minimally-invasive, closed-chest bypass surgery facilitated by Intuitive Surgical's *da Vinci*® Surgical System robot and Cardica's C-Port Flex-A system.

As part of a hybrid revascularization procedure, Dr. Balkhy successfully bypassed two blockages using Cardica's C-Port Flex-A system to attach the graft vessels, with a stent used for the third blockage. Mr. Theusch was up and walking within a few hours of the procedure, and returned home just two days later. Eight weeks after surgery, he was feeling great and walking three times each day to maintain his new healthy lifestyle. "I owe it all to Dr. Balkhy and the robotic procedure."

---

Doctor: Husam H. Balkhy, M.D.

---

Patient: Gwynn Theusch

---

Age: 58 years old

---

Diagnosis: Significant coronary artery disease

---

Procedure: Robot-assisted, minimally-invasive, beating heart, multi-vessel bypass with the C-Port system

---





MARK ROGERS, CHIEF FINANCIAL OFFICER,  
GENESIS HEALTH SYSTEM

Drs. Nicholas Augelli and Robert Fietsam of Genesis Medical Center in Davenport, Iowa, conducted a six-month economic analysis to determine the cost benefit of beating heart bypass procedures using the C-Port systems and other ancillary devices compared to traditional on-pump “stopped heart” surgery. Genesis Health System’s Chief Financial Officer, Mark Rogers, wanted to understand the financial impact of adding more disposable devices per procedure.

Their analysis demonstrated that beating heart surgery using the C-Port systems saved the hospital approximately \$1,650 per procedure, including approximately two hours in operating room time savings. “Before this study, the vast majority of CABG procedures at Genesis were performed on-pump. We have dramatically changed our practice after this study due to both the significant benefits to patients and reduced costs of beating heart CABG surgeries. And we are able to perform more beating heart procedures by using the C-Port system,” said Dr. Augelli.





---

Total cost savings for 78 procedures using  
Cardica's C-Port systems: ~ \$131,000

---

Average cost savings per procedure: ~ \$1,650

---



Internationally-renowned cardiothoracic surgeon and educator Dr. Sudhir Srivastava has performed more minimally-invasive coronary bypass procedures than any other surgeon in the world. He pioneered robot-assisted CABG surgery using Intuitive Surgical's *da Vinci*® Surgical System, and surgeons travel from around the world to learn his innovative techniques.

Today, he continues to innovate robot-assisted, closed-chest bypass surgery methods using Cardica's automated C-Port systems to provide consistent, mechanically-governed and reproducible attachments of the vessel grafts during robotic surgery. Dr. Srivastava said, "Because the C-Port Flex-A system helps facilitate the next generation of robot-assisted cardiac surgery, I expect more cardiac surgeons to adopt minimally-invasive CABG procedures." As of September 2008, Dr. Srivastava and his team have completed 34 anastomoses in single and multi-vessel beating heart *da Vinci* revascularization procedures using the C-Port Flex-A system through small incisions in the chest cavity that create finger-size ports. Of 32 grafts studied, all were determined to be patent, or open, based on an analysis of pre-discharge angiography.

---

Doctor: Sudhir Srivastava, M.D.

---

Team: Zoila Reyna Barrera, P.A., and  
Shaune Quismundo, RN, BSN

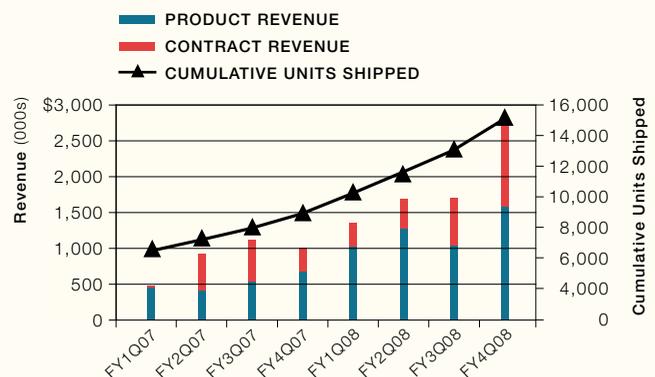
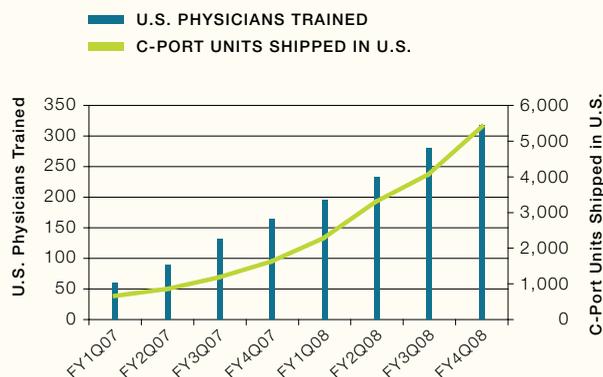
---

Innovated: *da Vinci* Robotic Revascularization

---

## Fiscal 2008 Accomplishments

- Submitted a 510(k) premarket notification to the FDA for our PAS-Port system, based on positive pivotal trial data showing that the PAS-Port system met all primary and secondary endpoints in a randomized clinical trial. In early September, we received 510(k) clearance from the FDA to market our PAS-Port system for use in cardiac bypass surgery
- Trained a total of 318 surgeons on our C-Port systems since product introduction
- Increased cumulative worldwide shipments of our C-Port systems to nearly 6,000 units
- Increased cumulative worldwide shipments of our PAS-Port systems to more than 8,800 units, with the vast majority of these to Japan
- Launched our C-Port xA X-CHANGE system
- Received European CE Mark approval for our C-Port Flex-A system for use in CABG procedures
- Reported results of a six-month economic analysis conducted at Genesis Medical Center, which showed that beating heart CABG surgery using the C-Port system saved approximately \$1,650 per procedure, compared with traditional on-pump “stopped heart” bypass procedures
- Announced that two independent groups of leading cardiothoracic surgeons performed ground-breaking minimally-invasive, closed-chest bypass procedures using our C-Port Flex-A Anastomosis System and Intuitive Surgical’s *da Vinci*® Surgical System robot
- Hosted innovative educational symposia for cardiothoracic and thoracic surgeons in conjunction with the annual meetings of the Society of Thoracic Surgeons, the American Association of Thoracic Surgeons and the International Society for Minimally Invasive Cardiothoracic Surgery
- Received \$3.2 million for the achievement of multiple milestones under two separate product development agreements with Cook Medical
- Raised \$15.4 million in net proceeds from the sale of 1,981,170 shares of Cardica’s common stock



## Corporate Directory

### BOARD OF DIRECTORS

Kevin T. Larkin  
Chairman of the Board  
Cardica, Inc. and  
President and Chief Executive Officer  
TherOx, Inc.

J. Michael Egan  
Chief Executive Officer  
Steadman Hawkins Research  
Foundation

Bernard A. Hausen, M.D., Ph.D.  
President, Chief Executive Officer  
and Co-Founder  
Cardica, Inc.

Richard P. Powers  
President and Chief Executive Officer  
Aspire Medical, Inc.

Jeffrey L. Purvin  
Chairman, President and  
Chief Executive Officer  
Calibra Medical, Inc.

Robert C. Robbins, M.D.  
Chairman, Department of  
Cardiothoracic Surgery,  
Stanford University School  
of Medicine and Director,  
Stanford Cardiovascular Institute

John Simon, Ph.D.  
Managing Director  
Allen & Company LLC

Stephen A. Yencho, Ph.D.  
President  
Water of Life, LLC

William H. Younger, Jr.  
Managing Director  
Sutter Hill Ventures

### MANAGEMENT TEAM

Bernard A. Hausen, M.D., Ph.D.  
President, Chief Executive Officer  
and Co-Founder

Frederick M. Bauer  
Vice President  
Operations

Douglas T. Ellison  
Vice President  
Worldwide Sales and Marketing

Bryan D. Knodel, Ph.D.  
Vice President  
Research and Development

Robert Y. Newell  
Vice President, Finance  
and Chief Financial Officer

Richard M. Ruedy  
Vice President  
Regulatory, Clinical and Quality Affairs

### ANNUAL MEETING

The annual meeting of stockholders will be held on November 19, 2008, at 11:30 a.m. Pacific Time at Cardica, 900 Saginaw Drive, Redwood City, CA

### INVESTOR INFORMATION

Recent press releases and other Cardica information are available without charge on Cardica's website at [www.cardica.com](http://www.cardica.com) or upon written request to:

Cardica, Inc.  
900 Saginaw Drive  
Redwood City, CA 94063  
Tel: (650) 364-9975  
Fax: (650) 364-3134  
Email: [investors@cardica.com](mailto:investors@cardica.com)

### STOCK LISTING

Cardica's common stock trades on the Nasdaq Global Market under the symbol CRDC.

### TRANSFER AGENT

Computershare Investor Services  
250 Royall Street  
Canton, MA 02021  
(781) 575-4238

### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP  
Palo Alto, CA

### CORPORATE COUNSEL

Cooley Godward Kronish LLP  
Palo Alto, CA

### FORWARD-LOOKING STATEMENTS

This Annual Report contains "forward-looking" statements, including statements relating to Cardica's intention to broaden its product portfolio, the anticipated receipt of FDA clearance of future products and the timing thereof, expected product revenue growth, the launch of Cardica's PAS-Port system and other products and the timing thereof, the influence Cardica's products may have on physician adoption of less invasive and minimally-invasive CABG procedures and cost savings Cardica's products may create. Any statements contained in this annual report that are not historical facts may be deemed to be forward-looking statements. The words "anticipate," "believe," "expect," "plan," "intend" and "will" or similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause Cardica's results to differ materially from those indicated by these forward-looking statements, including risks associated with market acceptance of Cardica's C-Port and PAS-Port systems, manufacturing of the C-Port systems and PAS-Port systems, Cardica's sales, marketing and distribution strategy and capabilities, Cardica's ability to obtain regulatory clearance to market the C-Port xV and C-Port Flex-AV systems in the United States, the timing and success of pre-clinical studies of and regulatory activities related to the Cook Vascular Access Closure Device and specialized PFO closure device, as well as other risks detailed from time to time in Cardica's SEC reports, including its Annual Report for the year ended June 30, 2008. Cardica does not undertake any obligation to update forward-looking statements. You are encouraged to read Cardica's reports filed with the U.S. Securities and Exchange Commission, available at [www.sec.gov](http://www.sec.gov).

Cardica®, C-Port®, C-Port xA®, Flex-A® and PAS-Port® are our registered trademarks and X-CHANGE®, Flex-AV® and xV® are our common law trademarks.



Cardica, Inc.  
900 Saginaw Drive  
Redwood City, CA 94063  
[www.cardica.com](http://www.cardica.com)  
650.364.9975