CARDIOVASCULAR SYSTEMS, INC.

Fiscal 2022 Stockholder Letter

To our stockholders,

The worldwide coronavirus pandemic has tested and challenged all of us to adapt to an incredibly dynamic and ever-changing environment. I am very proud of our team here at CSI. Our greatest asset is our people, and we are responding to this dynamic environment with incredible strength, resilience and creativity. The source of this motivation and enthusiasm is a deep commitment to our Mission to Save Limbs and Save Lives, Every Day.

Scott R. Ward
Chairman, President and
Chief Executive Officer

To that end, we are exceptionally proud that over 700,000 patients worldwide have been successfully treated using our orbital atherectomy technology. And today, we are working to not only improve upon our core technology, but also to expand our product offering so that we may reach even more patients in the years to come.

Fiscal 22 review

As we entered fiscal 2022, we anticipated that the adverse effects of the COVID-19 pandemic were largely behind us, and we forecasted robust growth for fiscal 2022. However, the volume of procedures involving our products was significantly adversely impacted beginning in the first quarter, primarily by hospital capacity constraints caused by the COVID-19 Delta variant, and then later the Omicron variant, which significantly impacted procedure volumes in the second and third quarters. We began to experience a recovery in the fourth quarter, but our results for the year overall fell short of our initial expectations. Our results were also affected by an increasingly competitive environment, although we believe to a lesser extent than COVID-19. These factors resulted in a 9% decrease in revenue for the year.

Despite the shortfall in revenue, we achieved several important strategic milestones relating to our future product and geographic expansion plans that position CSI for accelerating growth and profitability in the years to come. In fiscal 22, we:

- completed the first in-human experience with the Propel™ percutaneous ventricular assist device;
- announced a partnership with Innova Vascular, Inc. to develop a full line of thrombectomy devices;
- announced significant progress toward the commercialization of intravascular lithotripsy systems for the treatment of calcific coronary and peripheral artery disease;
- announced the first in-human experiences with the everolimus coronary and peripheral drug-coated balloons being developed by Chansu Vascular Technologies, LLC; and
- continued our international expansion, which led to our products being sold in 30 countries outside the United States by the end of the fiscal year.

Our strategy to accelerate growth

In 2018, CSI was a single-product, single-geography company. At that time, we launched a strategy to expand our product offering and globalize our company with the intent to reach more patients and drive revenue growth.

We have invested heavily in research and development, launched new products and expanded our geographic footprint outside the United States.

Our strategy domestically is to expand the use of orbital atherectomy while simultaneously driving more revenue per procedure. The products we have launched in recent years include both innovations on our core atherectomy technology and new interventional support devices (ISD), including angioplasty balloons, guidewires and catheters that are used in every orbital atherectomy case.

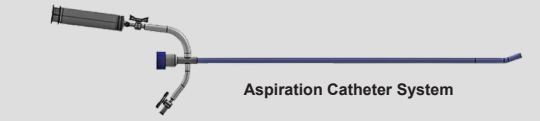
We began offering a full line of coronary ISDs several years ago and we now generate over $1,000 of incremental revenue for every orbital atherectomy procedure. We recently launched our

New product platforms

The new product platforms that we are pursuing target four of the largest and fastest-growing markets in cardiovascular medical technology. Commercialization of these products would be highly complementary to CSI's broader portfolio of advanced technologies used in the treatment of cardiovascular disease.

Thrombectomy System

In February 2022, we announced a partnership* with Innova Vascular, Inc. to develop a full line of novel thrombectomy devices. Thrombectomy is a rapidly growing interventional procedure performed to remove blood clots from arteries and veins. Innova is developing a manual aspiration catheter and a mechanical clot retriever that work in concert to capture and retrieve thrombus. We currently estimate that commercialization of these devices will begin in fiscal 23.



Aspiration Catheter System

Clot Retriever System

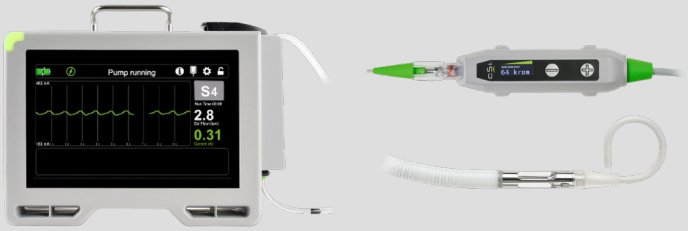
Intravascular Lithotripsy

In January 2022, we announced the development of intravascular lithotripsy technology for the treatment of peripheral and coronary calcified lesions. Lithotripsy is a medical procedure that uses non-invasive high-pressure waves to fracture and disrupt pathologic solid masses. We currently estimate that commercialization of the peripheral device will begin in fiscal 25.

Everolimus Drug Coated Balloons

In February 2021, we announced an agreement** with Chansu Vascular Technologies, LLC (CVT) to develop everolimus drug-coated balloons (DCB) for the treatment of peripheral and coronary artery diseases.

Everolimus, the active drug in CVT's DCB formulation, acts as a cytostatic agent to reduce tissue hyperplasia and associated restenosis and has a long history of safety and efficacy in coronary drug-eluting stent applications. We currently estimate that commercialization of these devices will begin in fiscal 27.



Mechanical Circulatory Support

In March 2022, we completed the first in-human experience with Propel™, our first-generation mechanical circulatory support system, offering hemodynamic support for patients undergoing high-risk percutaneous coronary interventions. We currently estimate that commercialization of this system will begin at the end of fiscal 27.

*Under the terms of the agreements signed with Innova, CSI has provided financing to Innova for the development of the thrombectomy devices. Under an acquisition option agreement, upon Innova's completion of key technical, regulatory and clinical milestones in the development program, CSI will have exclusive rights to acquire the thrombectomy devices, subject to the satisfaction of closing conditions set forth in the agreement.

**Under the terms of the agreements signed with CVT, CSI is providing milestone-based financing to CVT for the development of coronary and peripheral DCBs. Under an acquisition option agreement, upon CVT's completion of key technical and clinical milestones in the development program, CSI will have exclusive rights and obligations to acquire CVT, subject to the satisfaction of closing conditions set forth in the agreement.

Products are in development or under investigation and not approved for sale in the United States. Safety and effectiveness have not been established. Prototype products and components are depicted; actual commercial embodiments and names may vary.

full line of peripheral ISDs and we are on track to generate over $200 per procedure by the end of fiscal 23.

Looking ahead to fiscal 23

In fiscal 23*, we anticipate growing our domestic orbital atherectomy business in the mid-single digit range as the healthcare system returns to more normal procedure volume levels. Simultaneously, we expect to drive higher revenue from the sale of both coronary and peripheral ISDs. Finally, we plan to launch three new products that are expected to drive new growth.

For coronary, we are launching the Scoreflex® NC scoring balloon. To date, this product has been well-received by physicians and is noted for being a highly deliverable device with the highest burst pressure in the market, which gives us a unique tool for physicians to treat in-stent restenosis. And later this year, we plan to launch a full line of catheters used to treat chronic total occlusions. This portfolio includes antegrade/retrograde microcatheters, dual-access catheters and guide extension catheters. These new products are expected to drive incremental coronary revenue per procedure going forward.

For peripheral, we are excited to launch the 2.00 Max Crown Peripheral OAS. This new, larger crown will be available on all of our peripheral OAS platforms and is designed to treat mixed-plaque, above-the-knee lesions – a new market for CSI.

International expansion

Throughout fiscal 22, we continued to successfully execute a targeted geographic expansion strategy. Despite ongoing travel restrictions throughout much of our fiscal year, we launched orbital atherectomy in 16 new countries, and orbital atherectomy is now available in 30 countries outside the United States. International revenues increased 44% to $16.4 million in fiscal 22.

Identifying new markets and new users worldwide is expected to drive future growth. Europe is an attractive market for orbital atherectomy. Since launching the Diamondback 360® Coronary OAS in Europe last year, we have experienced strong demand from physicians. During fiscal 22, we trained and certified over 300 physicians outside the United States – most of these certifications were in Europe.

Japan remains the number two coronary atherectomy market in the world. The widespread use of imaging in Japan supports the use of orbital atherectomy and clearly demonstrates the benefits of its dual mechanism of action – which both removes intimal calcium and fractures medial calcium. Our market share in Japan is strong and our revenues grew over 21% during the past year.

Looking ahead, we intend to drive adoption within our current markets, while simultaneously launching orbital atherectomy in 15 new countries in fiscal 23.

New portfolio products begin launching next year

Over the past several years, we have also built an impressive flywheel of new platforms designed to diversify our company and accelerate our growth in the years ahead.

We will continue to be heavy investors in research and development as we pursue the successful commercialization of each product over the next five years. Fortunately, our strategy is supported by a strong balance sheet, with nearly $160 million in cash and no long-term debt as of June 30, 2022.

These new product platforms target some of the largest and fastest growing markets within medical technology. Our portfolio includes mechanical and aspiration thrombectomy devices, intravascular lithotripsy and everolimus drug-coated balloons, as well as hemodynamic support devices. These products are being developed using in-house core competencies and knowledgeable strategic partners. When commercialized, each of these products will leverage our large and well-established domestic sales channel.

We believe that any one of these products, on its own, has the potential to transform the trajectory of our company. But combined, we see the potential as having the potential for creating a truly special company.

The successful development of this pipeline will transform CSI into a highly-diversified company, serving patient populations that represent a total addressable market of approximately $19 billion, making CSI a formidable company in cardiovascular medical technology. And what makes this plan so exciting and tangible is that we plan to begin launching our thrombectomy products for peripheral vascular indications, in the summer of 2023 – less than one year from now.

Gratitude

In fiscal 23, our plan is to drive growth in our core atherectomy business, launch new products and achieve rapid growth from the sale of interventional support devices. In addition, we expect to continue to drive attractive growth outside the United States, where orbital atherectomy is gaining momentum.

In addition to strong commercial execution, we anticipate achieving several important product development and clinical milestones that will enable CSI to introduce innovative new products into large and fast growing markets, beginning in the summer of 2023. These products are expected to diversify our product offering and put CSI on a higher revenue growth trajectory in the years to come.

I want to thank all our CSI employees for their commitment to the patients that we serve. Guided by our Mission, our extraordinary team continues to make meaningful progress on our efforts to support our customers, improve patient care, accelerate revenue growth and deliver sustainable, attractive profitability.

Sincerely,

Scott R. Ward
Chairman, President and Chief Executive Officer

September 28, 2022

*Fiscal 23 outlook assumes there will not be any major disruptions in our supply chain, new COVID variants materially impacting procedure volumes, worsening staff shortages, global recession, or additional reimbursement changes.

All product disclosures are available here: https://csi360.com/product-solutions/

Corporate Information

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Annual Meeting
The annual meeting of the stockholders of Cardiovascular Systems, Inc., will be held November 8, 2022, at 10:00 a.m. CT, as a virtual meeting at www.virtualshareholdermeeting.com/CSII2022.

Board of Directors

Scott R. Ward
Chairman of the Board, President and CEO
Cardiovascular Systems, Inc.

Martha G. Aronson
Director
Former Executive Vice President and President – Global Healthcare
Ecolab, Inc.

William E. Cohn, M.D.
Director
Vice President of Medical Devices and Director of the Center for Device Innovation
Johnson & Johnson
Professor of Surgery
Baylor College of Medicine

Sachin H. Jain, M.D., M.B.A
Director
President and Chief Executive Officer
SCAN Group and Health Plan

Augustine Lawlor
Director
Managing Partner
HealthCare Ventures, LLC

Erik Paulsen
Director
Former Member, United States House of Representatives
Minnesota – 3rd Congressional District

Stephen Stenbeck
Director
Former Partner
Ernst & Young LLP

Kelvin Womack
Director
Vice President for Diversity and Inclusion
St. Jude Children's Research Hospital

Executive Leadership

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Chairman of the Board, President and CEO

Robert T. Beverly
Vice President and General Manager, Peripheral Sales

Harrison T. Boyd II
Vice President and General Manager, Coronary Sales

Jeffrey W. Chambers, M.D.
Chief Medical Officer

Jack E. Nielsen
Vice President, Investor Relations and Corporate Communications

Jeffrey S. Points
Chief Financial Officer

Stephen J. Rempe
Chief Human Resources Officer

Alexander Rosenstein
General Counsel and Corporate Secretary

Sandra M. Sedo
Chief Compliance Officer

Christopher R. Volker
Vice President and General Manager, International

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Forward-Looking Statements
Certain statements herein are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and are provided under the protection of the safe harbor for forward-looking statements provided by that Act. For example, statements herein regarding (i) CSI's strategy and goals; (ii) markets, market share and market leadership; (iii) future growth and profitability, including anticipated growth rates; (iv) the impact of ISDs, including increases in revenue per procedure; (v) our clinical trials, including enrollment, results and the announcement of results; (vi) the development and introduction of new products, including the specific products, the number of new products, the anticipated timing thereof, and the anticipated revenue generated therefrom; (vii) international expansion, including the anticipated timing thereof and numbers of new geographies; and (viii) new growth platforms and product introductions, including the anticipated timing and revenue opportunities thereof, are forward-looking statements. These statements involve risks and uncertainties that could cause results to differ materially from those projected, including, but not limited to, the ongoing COVID-19 pandemic and the impact and scope thereof on CSI, our distribution partners, the supply chain and physicians and facilities, including government actions related to the COVID-19 outbreak, material delays and cancellations of procedures, delayed spending by healthcare providers, and distributor and supply chain disruptions; regulatory developments, clearances and approvals; approval of CSI's products for distribution outside of the United States; approval of products for reimbursement and the level of reimbursement in the U.S. and foreign countries; dependence on market growth; agreements with third parties to sell their products; the ability of CSI and our distribution partners to successfully launch our products outside of the United States; CSI's ability to maintain third-party supplier relationships and renew existing purchase agreements; CSI's ability to maintain our relationships and agreements with distribution partners; the experience of physicians regarding the effectiveness and reliability of the products we sell; the reluctance of physicians, hospitals and other organizations to accept new products; the potential for unanticipated delays in enrolling medical centers and patients for clinical trials; actual clinical trial and study results; the impact of competitive products and pricing; unanticipated developments affecting our estimates regarding expenses, future revenues and capital requirements; the difficulty of successfully managing operating costs; CSI's ability to manage our sales force strategy; actual research and development efforts and needs, including the timing of product development programs; successful collaboration on the development of new products; agreements with development partners, advisors and other third parties; the ability of CSI and these third parties to meet developmental, contractual and other milestones; contractual rights and obligations; technical challenges; CSI's ability to obtain and maintain intellectual property protection for product candidates; fluctuations in results and expenses based on new product introductions, sales mix, unanticipated warranty claims, and the timing of project expenditures; CSI's ability to manage costs; CSI's actual financial resources and ability to obtain additional financing; investigations or litigation threatened or initiated against CSI; court rulings and future actions by the FDA and other regulatory bodies; international trade developments; the potential impact of any future strategic transactions; general economic conditions; and other factors detailed from time to time in CSI's SEC reports, including its most recent annual report on Form 10-K and subsequent quarterly reports on Form 10-Q. CSI encourages you to consider all of these risks, uncertainties and other factors carefully in evaluating the forward-looking statements contained herein. As a result of these matters, changes in facts, assumptions not being realized or other circumstances, CSI's actual results may differ materially from the expected results discussed in the forward-looking statements contained herein. The forward-looking statements made herein are made only as of the date hereof, and CSI undertakes no obligation to update them to reflect subsequent events or circumstances.

About CSI
Cardiovascular Systems, Inc., based in St. Paul, Minn., is a medical device company focused on developing and commercializing innovative solutions for treating vascular and coronary disease. The company's orbital atherectomy system treats calcified and fibrotic plaque in arterial vessels throughout the leg and heart and addresses many of the limitations associated with existing surgical, catheter and pharmacological treatment alternatives. For additional information, please visit www.csi360.com and connect on Twitter @csi360.