

REPLIDYNE INC
Form S-4/A
January 26, 2009

Table of Contents

As filed with the U.S. Securities and Exchange Commission on January 26, 2009

Registration No. 333-155887

**SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**Amendment No. 3
to
Form S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Replidyne, Inc.

(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

2834

*(Primary Standard Industrial
Classification Code Number)*

84-1568247

*(I.R.S. Employer
Identification No.)*

**1450 Infinite Dr.
Louisville, CO 80027
(303) 996-5500**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Kenneth J. Collins
President and Chief Executive Officer
Replidyne, Inc.
1450 Infinite Dr.
Louisville, CO 80027
(303) 996-5500**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**James C. T. Linfield, Esq.
Laura M. Medina, Esq.
Cooley Godward Kronish LLP
380 Interlocken Crescent, Suite 900
Broomfield, CO 80021
(720) 566-4000**

**David L. Martin
President and Chief Executive
Officer
Cardiovascular Systems, Inc.
651 Campus Drive
St. Paul, MN 55112
(651) 259-2800**

**Robert K. Ranum, Esq.
Alexander Rosenstein, Esq.
Fredrikson & Byron, P.A.
200 South Sixth Street, Suite 4000
Minneapolis, MN 55402
(612) 492-7000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the merger agreement described herein.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this proxy statement/prospectus is not complete and may be changed. Replidyne may not sell its securities pursuant to the proposed transactions until the Registration Statement filed with the Securities and Exchange Commission is effective. This proxy statement/prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 26, 2009

We are furnishing this proxy statement/prospectus to the holders of Replidyne, Inc.'s common stock and to holders of Cardiovascular Systems, Inc.'s common stock, Series A convertible preferred stock, Series A-1 convertible preferred stock and Series B convertible preferred stock.

Replidyne, Inc., or Replidyne, and Cardiovascular Systems, Inc., or CSI, have entered into a merger agreement pursuant to which a wholly owned subsidiary of Replidyne will merge with and into CSI, with CSI continuing as a wholly owned subsidiary of Replidyne. Immediately prior to the effective time of the merger, each share of CSI preferred stock will be converted into shares of CSI common stock at a ratio determined in accordance with the CSI articles of incorporation. At the effective time of the merger, each share of CSI common stock will convert into the right to receive that number of shares of Replidyne common stock as determined pursuant to the conversion factor described in the merger agreement. Replidyne will assume outstanding and unexercised options and warrants to purchase CSI common stock, and they will be converted into warrants and options, as applicable, to purchase Replidyne common stock in accordance with the same conversion factor. Replidyne stockholders, optionholders and warrant holders will continue to own and hold, respectively, their existing shares of and options and warrants for Replidyne common stock. Immediately after the merger, current stockholders of Replidyne, together with holders of Replidyne options and warrants, are expected to own or have the right to acquire between 16.3% and 17.0% of the combined company, and current CSI stockholders, together with holders of CSI options and warrants, are expected to own or have the right to acquire between 83.0% and 83.7% of the combined company, in each case assuming that Replidyne's net assets at closing are between \$35.0 and \$37.0 million as calculated in accordance with the terms of the merger agreement, on a fully diluted basis using the treasury stock method of accounting for options and warrants.

Shares of Replidyne common stock are currently listed on the Nasdaq Global Market under the symbol RDYN. After completion of the merger, Replidyne will be renamed Cardiovascular Systems, Inc. and expects to trade on the Nasdaq Global Market under the symbol CSII. On , 2009, the last trading day before the date of this proxy statement/prospectus, the closing sale price of Replidyne common stock was \$ per share.

Replidyne is holding a special meeting of stockholders in order to obtain the stockholder approvals necessary to complete the merger and related matters. At the Replidyne special meeting, which will be held at 9:00 a.m., local time, on February 24, 2009 at Cooley Godward Kronish LLP, 380 Interlocken Crescent, Suite 900, Broomfield, Colorado, unless postponed or adjourned to a later date, Replidyne will ask its stockholders to, among other things, approve the issuance of Replidyne common stock pursuant to the merger and approve amendments to the Replidyne certificate of incorporation effecting a reverse stock split of Replidyne common stock, which is referred to as the reverse stock split, and changing the Replidyne corporate name to Cardiovascular Systems, Inc., each as described in the accompanying proxy statement/prospectus.

CSI is holding a special meeting of stockholders in order to obtain the stockholder approvals necessary to complete the merger and related matters. At the CSI special meeting, which will be held at 9:00 a.m., local time, on

February 24, 2009 at Cardiovascular Systems, Inc., 651 Campus Drive, St. Paul, Minnesota, unless postponed or adjourned to a later date, CSI will ask its stockholders to, among other things, approve and adopt the merger agreement and the merger contemplated therein.

After careful consideration, the Replidyne and CSI boards of directors have approved the merger agreement and the respective proposals referred to above, and each of the Replidyne and CSI boards of directors has determined that it is advisable to enter into the merger. The board of directors of Replidyne and CSI each recommends that its stockholders vote FOR the proposals described in the accompanying proxy statement. Several CSI stockholders have agreed with Replidyne to vote shares representing approximately 20% of the outstanding capital stock of CSI in favor of the merger and the other actions contemplated by the merger agreement. In addition, several Replidyne stockholders have agreed with CSI to vote shares representing approximately 32% of the outstanding common stock of Replidyne in favor of the issuance of the shares of Replidyne common stock pursuant to the merger and the other actions contemplated by the merger agreement.

More information about Replidyne, CSI and the proposed transaction is contained in this proxy statement/prospectus. Replidyne and CSI urge you to read the accompanying proxy statement/prospectus carefully and in its entirety. **In particular, you should carefully consider the matters discussed under *Risk Factors* beginning on page 18.**

This proxy statement/prospectus refers to important business and financial information about Replidyne and CSI that is not included in or delivered with this proxy statement/prospectus. Such information is available without charge to stockholders of Replidyne and CSI upon written or oral request at the following addresses: For information concerning Replidyne, Replidyne, Inc., Attn: Investor Relations, 1450 Infinite Drive, Louisville, Colorado 80027, or by telephone at (303) 996-5500; and for information concerning CSI, Cardiovascular Systems, Inc., Attn: Investor Relations, 651 Campus Drive, St. Paul, Minnesota 55112, or by telephone at (651) 259-2800. **To obtain timely delivery, Replidyne stockholders must request the information no later than five business days before the date of the special meeting of Replidyne stockholders, or no later than February 17, 2009, and CSI stockholders must request the information no later than five business days before the date of the special meeting of CSI stockholders, or no later than February 17, 2009.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this proxy statement/prospectus. Any representation to the contrary is a criminal offense.

The accompanying proxy statement/prospectus is dated _____, 2009, and is first being mailed to Replidyne and CSI stockholders on or about _____, 2009.

Table of Contents

**Replidyne, Inc.
1450 Infinite Dr.
Louisville, CO 80027
(303) 996-5500**

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
To Be Held On February 24, 2009**

To the Stockholders of Replidyne, Inc.:

On behalf of the board of directors of Replidyne, Inc., a Delaware corporation, we are pleased to deliver this proxy statement/prospectus for the proposed merger combining Replidyne, Inc., or Replidyne, and Cardiovascular Systems, Inc., or CSI, a Minnesota corporation. The special meeting of stockholders of Replidyne will be held on February 24, 2009 at 9:00 a.m. MST, at Cooley Godward Kronish LLP, 380 Interlocken Crescent, Suite 900, Broomfield, Colorado, for the following purposes:

1. To consider and vote upon a proposal to approve the issuance of Replidyne common stock pursuant to the Agreement and Plan of Merger and Reorganization, dated November 3, 2008, by and among Replidyne, Responder Merger Sub, Inc., and CSI as described in the attached proxy statement/prospectus.
2. To authorize Replidyne's board of directors to amend Replidyne's restated certificate of incorporation in order to effect a reverse stock split of the issued and outstanding shares of Replidyne common stock in a ratio of up to one for 50, if and as determined by Replidyne's board of directors.
3. To approve an amendment to Replidyne's restated certificate of incorporation to change the name Replidyne, Inc. to Cardiovascular Systems, Inc.
4. To approve Replidyne's assumption of the Cardiovascular Systems, Inc. 2007 Equity Incentive Plan to be used by Replidyne following the consummation of the merger, together with an increase in the number of shares of CSI common stock reserved for issuance under the plan from 3,379,397 to 3,879,397, which following the merger will be converted into shares of Replidyne common stock, subject to further adjustment for the reverse stock split anticipated before closing of the merger.
5. To approve an amendment to the Replidyne, Inc. 2006 Employee Stock Purchase Plan to (i) increase the number of shares of Replidyne common stock reserved under the plan from 305,872 to 1,920,872, subject to further adjustment for the reverse stock split anticipated before the closing of the merger and (ii) amend the evergreen provisions of the plan to provide that on July 1st of each year, beginning with July 1, 2009, the share reserve under the plan automatically will be increased by a number of shares equal to the lesser of (A) one percent (1.0%) of the total number of shares of Replidyne common stock outstanding on such date, or (B) 1,800,000 shares (subject to adjustment for the reverse stock split anticipated before the closing of the merger), unless Replidyne's board of directors designates a smaller number of shares.
6. To consider and vote upon an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Replidyne Proposal No. 1, 2, 3, 4 or 5.
7. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

The board of directors of Replidyne has fixed January 21, 2009 as the record date for the determination of stockholders entitled to notice of, and to vote at, the special meeting and any adjournment or postponement thereof. Only holders of record of shares of Replidyne common stock at the close of business on the record date are entitled to notice of, and to vote at, the special meeting. At the close of business on the record date, Replidyne had 27,114,677 shares of common stock outstanding and entitled to vote.

Your vote is important. The affirmative vote of the holders of a majority of the shares of Replidyne common stock casting votes in person or by proxy at the Replidyne special meeting is required for approval of Replidyne Proposal Nos. 1, 4, 5 and 6 and the affirmative vote of the holders of a majority of the shares of Replidyne common stock having voting power outstanding on the record date for the Replidyne special meeting is required for approval of Replidyne Proposal Nos. 2 and 3. Even if you plan to attend the special

Table of Contents

meeting in person, we request that you sign and return the enclosed proxy and thus ensure that your shares will be represented at the special meeting if you are unable to attend. If you sign, date and mail your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of Replidyne Proposal Nos. 1, 2, 3, 4, 5 and 6. If you fail to return your proxy card, the effect will be that your shares will not be counted for purposes of determining whether a quorum is present at the special meeting. You may revoke your proxy in the manner described in the proxy statement/prospectus before it has been voted at the special meeting. If you decide to attend the Replidyne special meeting, you may withdraw your proxy and vote in person.

By Order of the Board of Directors,

By:

Secretary

Louisville, Colorado
, 2009

THE REPLIDYNE BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE REPLIDYNE PROPOSALS OUTLINED ABOVE IS ADVISABLE, AND IN THE BEST INTERESTS OF, REPLIDYNE AND ITS STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE REPLIDYNE BOARD OF DIRECTORS RECOMMENDS THAT REPLIDYNE STOCKHOLDERS VOTE FOR EACH SUCH PROPOSAL.

Table of Contents

**Cardiovascular Systems, Inc.
651 Campus Dr.
St. Paul, MN 55112
(651) 259-2800**

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
To Be Held On February 24, 2009**

To the Stockholders of Cardiovascular Systems, Inc.:

On behalf of the board of directors of Cardiovascular Systems, Inc., a Minnesota corporation, we are pleased to deliver this proxy statement/prospectus for the proposed merger combining Replidyne, Inc., or Replidyne, a Delaware corporation, and Cardiovascular Systems, Inc., or CSI. The special meeting of stockholders of CSI will be held on February 24, 2009 at 9:00 a.m. CST, at Cardiovascular Systems Inc., 651 Campus Drive, St. Paul, Minnesota, for the following purposes:

1. To consider and vote upon a proposal to approve and adopt the Agreement and Plan of Merger and Reorganization, dated November 3, 2008, by and among Replidyne, Responder Merger Sub, Inc., and CSI and the merger contemplated therein, as described in the attached proxy statement/prospectus.
2. To authorize an increase in the number of shares of CSI common stock reserved under CSI's 2007 Equity Incentive Plan from 3,379,397 to 3,879,397.
3. To consider and vote upon an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of CSI Proposal No. 1 or 2.
4. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

The board of directors of CSI has fixed January 26, 2009 as the record date for the determination of stockholders entitled to notice of, and to vote at, the special meeting and any adjournment or postponement thereof. Only holders of record of shares of CSI common stock or preferred stock at the close of business on the record date are entitled to notice of, and to vote at, the special meeting. At the close of business on the record date, CSI had _____ shares of common stock, _____ shares of Series A convertible preferred stock, _____ shares of Series A-1 convertible preferred stock and _____ shares of Series B convertible preferred stock outstanding and entitled to vote. Each holder of CSI preferred stock is entitled to such number of votes per share on each proposal to be voted upon as shall equal the number of shares of common stock into which each share of the preferred stock is then convertible, and in the event each share of the preferred stock is convertible into a number of shares of common stock including a fraction, each holder shall be entitled to vote the sum of fractions of a share to which the holder is entitled, rounded down to the nearest whole number. As of the record date, each share of Series A convertible preferred stock was convertible into 1.01 shares of common stock, each share of Series A-1 convertible preferred stock was convertible into 1.03 shares of common stock, and each share of Series B convertible preferred stock was convertible into 1.01 shares of common stock.

Your vote is important. The affirmative vote of (i) the holders of a majority of the voting power of CSI common stock and preferred stock outstanding on the record date, voting as a single class on an as-converted to common stock basis, and (ii) a majority of the shares of CSI preferred stock outstanding on the record date, voting as a single class on an as-converted to common stock basis and including the shares of CSI preferred stock held by affiliates of Easton Capital Investment Group and Maverick Capital, Ltd., is required for

approval of CSI Proposal No. 1. The affirmative vote of the holders of a majority of the voting power of CSI common stock and preferred stock, voting as a single class on an as-converted to common stock basis, casting votes in person or by proxy at the CSI special meeting is required for approval of CSI Proposal Nos. 2 and 3. Even if you plan to attend the special meeting in person, we request that you sign and return the enclosed proxy and thus ensure that your shares will be represented at the special meeting if you are unable to attend. If you sign, date and mail your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of CSI Proposal Nos. 1, 2 and 3. If you fail to return your proxy card, the effect will be that your shares will not be counted for purposes of determining whether a quorum is present at the special meeting. You may revoke your proxy in the manner described in the proxy statement/prospectus

Table of Contents

before it has been voted at the special meeting. If you decide to attend the CSI special meeting, you may withdraw your proxy and vote in person.

By Order of the Board of Directors,

By:

James E. Flaherty
Secretary

St. Paul, Minnesota
, 2009

THE CSI BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE CSI PROPOSALS OUTLINED ABOVE IS ADVISABLE, AND IN THE BEST INTERESTS OF, CSI AND ITS STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE CSI BOARD OF DIRECTORS RECOMMENDS THAT CSI STOCKHOLDERS VOTE FOR EACH SUCH PROPOSAL.

Table of Contents**TABLE OF CONTENTS**

<u>QUESTIONS AND ANSWERS ABOUT THE MERGER, THE REPLIDYNE SPECIAL MEETING AND THE CSI SPECIAL MEETING</u>	vi
<u>SUMMARY</u>	1
<u>SELECTED HISTORICAL AND UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL DATA</u>	10
<u>Selected Historical Financial Data of Replidyne</u>	10
<u>Selected Historical Financial Data of CSI</u>	12
<u>Selected Unaudited Pro Forma Condensed Combined Financial Data of Replidyne and CSI</u>	14
<u>Comparative Historical and Unaudited Pro Forma Per Share Data</u>	16
<u>MARKET PRICE AND DIVIDEND INFORMATION</u>	17
<u>RISK FACTORS</u>	18
<u>Risks Relating to the Proposed Merger</u>	18
<u>Risks Relating to Replidyne</u>	21
<u>Risks Relating to CSI and the Combined Company</u>	24
<u>Risks Relating to CSI's Business and Operations</u>	24
<u>Risks Related to Government Regulation</u>	34
<u>Risks Relating to CSI's Intellectual Property</u>	39
<u>Risks Relating to Ownership of Common Stock of the Combined Company</u>	41
<u>FORWARD-LOOKING INFORMATION</u>	44
<u>MARKET AND INDUSTRY DATA</u>	44
<u>THE SPECIAL MEETING OF REPLIDYNE STOCKHOLDERS</u>	45
<u>Date, Time and Place</u>	45
<u>Purposes of the Replidyne Special Meeting</u>	45
<u>Recommendation of the Replidyne Board of Directors</u>	45
<u>Record Date and Voting Power</u>	46
<u>Voting and Revocation of Proxies</u>	47
<u>Quorum and Required Vote</u>	48
<u>Solicitation of Proxies</u>	48
<u>Other Matters</u>	48
<u>REPLIDYNE PROPOSAL NO. 1 APPROVAL OF ISSUANCE OF SHARES OF REPLIDYNE COMMON STOCK IN THE MERGER</u>	49
<u>General Description of the Merger</u>	49
<u>Background of the Merger</u>	49
<u>Reasons for the Merger</u>	55
<u>Opinion of Replidyne's Financial Advisor</u>	60
<u>Officers and Directors of the Combined Company Following the Merger</u>	66
<u>Interests of Replidyne's Executive Officers and Directors in the Merger</u>	66
<u>Interests of CSI's Executive Officers and Directors in the Merger</u>	70
<u>CSI Stock Options</u>	72
<u>CSI Warrants</u>	72
<u>CSI Preferred Stock</u>	73
<u>Regulatory Approvals</u>	73
<u>Appraisal and Dissenters' Rights</u>	73
<u>Material U.S. Federal Income Tax Consequences of the Merger</u>	74

Table of Contents

<u>Anticipated Accounting Treatment</u>	76
<u>Effects on CSI's Exchange Act Registration</u>	76
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	77
<u>THE MERGER AGREEMENT</u>	78
<u>General</u>	78
<u>Closing of the Merger</u>	78
<u>Merger Consideration</u>	78
<u>Assumption of CSI Stock Options and Warrants</u>	80
<u>Fractional Shares</u>	81
<u>Exchange of CSI Stock Certificates</u>	81
<u>Certificate of Incorporation and Bylaws of Replidyne</u>	81
<u>Conditions to the Completion of the Merger</u>	82
<u>Conduct of Business Prior to the Merger</u>	83
<u>Limitation on Soliciting, Discussing or Negotiating Other Acquisition Proposals</u>	85
<u>Change in Recommendation</u>	86
<u>Meeting of Stockholders</u>	87
<u>Other Agreements</u>	87
<u>Representations and Warranties</u>	89
<u>Material Adverse Effect</u>	89
<u>Termination of the Merger Agreement</u>	91
<u>Termination Fees</u>	92
<u>Amendment and Waiver of the Merger Agreement</u>	93
<u>OTHER AGREEMENTS RELATED TO THE MERGER</u>	94
<u>Voting Agreements</u>	94
<u>Lock-up Agreements</u>	95
<u>CSI Preferred Stockholder Conversion Agreement</u>	95
<u>REPLIDYNE PROPOSAL NO. 2 – AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT</u>	96
<u>Overview</u>	96
<u>Reasons for the Reverse Stock Split</u>	96
<u>Effects of the Reverse Stock Split</u>	97
<u>Effective Date</u>	98
<u>Payment for Fractional Shares</u>	98
<u>Exchange of Stock Certificates</u>	98
<u>Accounting Consequences</u>	99
<u>Material U.S. Federal Income Tax Consequences of the Reverse Stock Split</u>	99
<u>No Appraisal Rights</u>	100
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	100
<u>REPLIDYNE PROPOSAL NO. 3 – NAME CHANGE</u>	102
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	102
<u>REPLIDYNE PROPOSAL NO. 4 – APPROVAL OF ASSUMPTION OF THE CARDIOVASCULAR SYSTEMS, INC. 2007 EQUITY INCENTIVE PLAN</u>	103
<u>Effect of Stockholder Vote on Replidyne's Existing Plans</u>	103
<u>Reasons for Increase in Authorized Shares</u>	103
<u>Overview of Cardiovascular Systems, Inc. 2007 Equity Incentive Plan</u>	103
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	106

Table of Contents

<u>REPLIDYNE PROPOSAL NO. 5 APPROVAL OF AMENDMENT TO THE REPLIDYNE 2006 EMPLOYEE STOCK PURCHASE PLAN</u>	107
<u>Overview</u>	107
<u>Reasons for Increase in Authorized Shares</u>	107
<u>Overview of Replidyne 2006 Employee Stock Purchase Plan</u>	107
<u>Specific Benefits</u>	109
<u>Material U.S. Federal Income Tax Consequences</u>	109
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	109
<u>REPLIDYNE PROPOSAL NO. 6 APPROVAL OF POSSIBLE ADJOURNMENT OF THE SPECIAL MEETING</u>	111
<u>Overview</u>	111
<u>Vote Required; Recommendation of Replidyne Board of Directors</u>	111
<u>THE SPECIAL MEETING OF CSI STOCKHOLDERS</u>	112
<u>Date, Time and Place</u>	112
<u>Purposes of the CSI Special Meeting</u>	112
<u>Recommendation of the CSI Board of Directors</u>	112
<u>Record Date and Voting Power</u>	113
<u>Voting and Revocation of Proxies</u>	113
<u>Quorum and Required Vote</u>	113
<u>Solicitation of Proxies</u>	114
<u>Other Matters</u>	114
<u>CSI PROPOSAL NO. 1 APPROVAL OF THE MERGER AGREEMENT AND THE MERGER</u>	115
<u>Vote Required; Recommendation of CSI Board of Directors</u>	115
<u>CSI PROPOSAL NO. 2 APPROVAL OF INCREASE IN RESERVED SHARES UNDER THE 2007 EQUITY INCENTIVE PLAN</u>	116
<u>Proposed Amendment</u>	116
<u>Reasons for the Amendment</u>	116
<u>Vote Required; Recommendation of CSI Board of Directors</u>	116
<u>CSI PROPOSAL NO. 3 APPROVAL OF POSSIBLE ADJOURNMENT OF THE SPECIAL MEETING</u>	117
<u>Overview</u>	117
<u>Vote Required; Recommendation of CSI Board of Directors</u>	117
<u>INFORMATION ABOUT REPLIDYNE S BUSINESS</u>	118
<u>Overview</u>	118
<u>Sales and Marketing</u>	118
<u>Intellectual Property</u>	118
<u>Competition</u>	119
<u>Manufacturing</u>	119
<u>Insurance</u>	119
<u>Employees</u>	119
<u>Facilities</u>	119
<u>Legal Proceedings</u>	119

Table of Contents

<u>INFORMATION ABOUT CSI S BUSINESS</u>	120
<u>Corporate Information</u>	120
<u>Business Overview</u>	120
<u>Market Overview</u>	121
<u>CSI s Solution</u>	122
<u>CSI s Strategy</u>	124
<u>CSI s Product</u>	125
<u>Clinical Trials and Studies for CSI s Products</u>	127
<u>Sales and Marketing</u>	129
<u>Research and Development</u>	130
<u>Manufacturing</u>	130
<u>Third-Party Reimbursement and Pricing</u>	130
<u>Competition</u>	131
<u>Patents and Intellectual Property</u>	131
<u>Government Regulation of Medical Devices</u>	132
<u>Employees</u>	136
<u>Properties</u>	136
<u>Legal Proceedings</u>	137
<u>MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR REPLIDYNE</u>	141
<u>Overview</u>	141
<u>Results of Operations</u>	141
<u>Liquidity and Capital Resources</u>	145
<u>Critical Accounting Policies and Estimates</u>	147
<u>Recent Accounting Pronouncements</u>	150
<u>QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK FOR REPLIDYNE</u>	151
<u>MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR CSI</u>	152
<u>Overview</u>	152
<u>Financial Overview</u>	153
<u>Critical Accounting Policies and Significant Judgments and Estimates</u>	154
<u>Results of Operations</u>	163
<u>Liquidity and Capital Resources</u>	168
<u>Related Party Transactions</u>	173
<u>Off-Balance Sheet Arrangements</u>	173
<u>Recent Accounting Pronouncements</u>	173
<u>Inflation</u>	174
<u>QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK FOR CSI</u>	175
<u>CSI CONTROLS AND PROCEDURES</u>	178
<u>MANAGEMENT OF THE COMBINED COMPANY AFTER THE MERGER</u>	179
<u>Executive Officers and Directors</u>	179
<u>Committees of the Board of Directors</u>	182
<u>Compensation Committee Interlocks and Insider Participation in Compensation Decisions</u>	183
<u>Compensation of Directors</u>	183

Table of Contents

<u>CSI EXECUTIVE COMPENSATION AND OTHER INFORMATION</u>	184
<u>Compensation Discussion and Analysis</u>	184
<u>Summary Compensation Table for Fiscal Year 2008</u>	193
<u>Grants of Plan-Based Awards in Fiscal Year 2008</u>	195
<u>Outstanding Equity Awards at Fiscal Year-end for Fiscal Year 2008</u>	197
<u>Option Exercises and Stock Vested for Fiscal Year 2008</u>	198
<u>Potential Payments Upon Termination or Change of Control</u>	199
<u>Compensation of Directors</u>	200
<u>REPLIDYNE SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	204
<u>CSI SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	208
<u>PRINCIPAL STOCKHOLDERS OF THE COMBINED COMPANY</u>	213
<u>DESCRIPTION OF REPLIDYNE S CAPITAL STOCK</u>	217
<u>Common Stock</u>	217
<u>Preferred Stock</u>	217
<u>Registration Rights</u>	218
<u>Delaware Anti-Takeover Law and Provisions of Replidyne s Restated Certificate of Incorporation and Bylaws</u>	218
<u>Transfer Agent and Registrar</u>	220
<u>Market Listing</u>	220
<u>RELATED PARTY TRANSACTIONS INVOLVING DIRECTORS AND OFFICERS OF THE COMBINED COMPANY</u>	221
<u>Replidyne Transactions</u>	221
<u>CSI Transactions</u>	221
<u>COMPARATIVE RIGHTS OF REPLIDYNE AND CSI STOCKHOLDERS</u>	224
<u>UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS</u>	239
<u>LEGAL MATTERS</u>	248
<u>EXPERTS</u>	248
<u>HOUSEHOLDING OF PROXY MATERIALS</u>	248
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	248
<u>REPLIDYNE FINANCIAL STATEMENTS</u>	F-1
<u>CSI FINANCIAL STATEMENTS</u>	F-43
<u>ANNEXES:</u>	
<u>A Agreement and Plan of Merger and Reorganization</u>	A-1
<u>B Form of Replidyne Voting Agreement</u>	B-1
<u>C Form of CSI Voting Agreement</u>	C-1
<u>D Opinion of Morgan Stanley & Co. Incorporated</u>	D-1
<u>E Certificate of Amendment to the Restated Certificate of Incorporation of Replidyne</u>	E-1
<u>F Sections 302A.471 and 302A.473 of the Minnesota Business Corporation Act</u>	F-1
<u>G CSI 2007 Equity Incentive Plan</u>	G-1
<u>H Replidyne 2006 Employee Stock Purchase Plan</u>	H-1
<u>EX-23.1</u>	
<u>EX-23.2</u>	
<u>EX-23.3</u>	
<u>EX-99.4</u>	

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE MERGER, THE REPLIDYNE SPECIAL MEETING AND THE CSI SPECIAL MEETING

The following section provides answers to frequently asked questions about the merger and the effect of the merger on holders of Replidyne common stock and CSI common stock and preferred stock, the Replidyne special meeting and the CSI special meeting. This section, however, only provides summary information. Replidyne and CSI urge you to read carefully the remainder of this proxy statement/prospectus, including the annexes to this proxy statement/prospectus, because the information in this section does not provide all the information that might be important to you regarding the merger and the other matters being considered at the Replidyne special meeting and the CSI special meeting.

As used in this proxy statement/prospectus, references to Replidyne refer collectively to Replidyne, Inc. and all of its subsidiaries unless the context requires otherwise, references to CSI refer to Cardiovascular Systems, Inc. and all of its subsidiaries unless the context requires otherwise, and references to the combined company refer to Replidyne following the proposed transaction described in this proxy statement/prospectus.

Q: What is the merger?

A: Replidyne, CSI, and Responder Merger Sub, Inc., a Minnesota corporation and wholly owned subsidiary of Replidyne, have entered into an Agreement and Plan of Merger dated as of November 3, 2008, which is referred to in this proxy statement/prospectus as the merger agreement, that contains the terms and conditions of the proposed business combination of Replidyne and CSI. Pursuant to the merger agreement, on the terms and conditions set forth therein, Responder Merger Sub, Inc. will be merged with and into CSI, with CSI surviving the merger as a wholly owned subsidiary of Replidyne.

Immediately prior to the effective time of the merger, each share of CSI preferred stock outstanding at such time will be converted into shares of CSI common stock at the conversion ratio determined pursuant to CSI's articles of incorporation. At the effective time of the merger, each share of CSI common stock outstanding immediately prior to the effective time of the merger (excluding certain shares to be canceled pursuant to the merger agreement, and shares held by stockholders who have exercised and perfected dissenters' rights) will be converted into the right to receive between 6,460 and 6,797 shares of Replidyne common stock, assuming that the net assets of Replidyne are between \$35.0 million and \$37.0 million as calculated in accordance with the terms of the merger agreement and that the number of shares of Replidyne and CSI common stock outstanding on a fully diluted basis using the treasury stock method of accounting for options and warrants immediately prior to the effective time of the merger has not changed from the number of such shares as of October 31, 2008, subject to adjustment to account for the effect of a reverse stock split of Replidyne common stock to be implemented prior to the consummation of the merger, which is referred to as the reverse stock split. As a result of the merger, holders of CSI stock, options and warrants are expected to own or have the right to acquire in the aggregate between 83.0% and 83.7% of the combined company and the holders of Replidyne stock, options and warrants are expected to own or have the right to acquire in the aggregate between 16.3% and 17.0% of the combined company. At the effective time of the merger, Replidyne will change its corporate name to Cardiovascular Systems, Inc. as required by the merger agreement.

Q: Why are the two companies proposing to merge?

A: The combined company that results from the merger will be a medical device company focused on developing and commercializing interventional treatment systems for vascular disease. The combined company will have several potential advantages, including a highly differentiated product, the Diamondback 360° Orbital

Atherectomy System, sufficient capital to fund its projected operating requirements for the foreseeable future, a product that targets a large, underserved market opportunity, and a proven and experienced management team.

Q: Why am I receiving this proxy statement/prospectus?

A: You are receiving this proxy statement/prospectus because you have been identified as a stockholder of Replidyne or CSI. If you are a stockholder of Replidyne, you are entitled to vote at Replidyne's special meeting. If you are a stockholder of CSI, you are entitled to vote at CSI's special meeting. This document serves as a proxy statement of Replidyne and CSI, used to solicit proxies for the special meetings of Replidyne and CSI,

Table of Contents

and as a prospectus of Replidyne, used to offer shares of Replidyne common stock to CSI stockholders in exchange for shares of CSI capital stock pursuant to the terms of the merger agreement. This document contains important information about the merger, the shares of Replidyne common stock to be issued in the merger and the special meetings of Replidyne and CSI stockholders, and you should read it carefully.

Q: What is required to consummate the merger?

A: To consummate the merger, Replidyne stockholders must approve the issuance of shares of Replidyne common stock in the merger and the certificate of amendment to the restated certificate of incorporation of Replidyne and CSI stockholders must approve and adopt the merger agreement and the merger contemplated therein.

The approval by the stockholders of Replidyne requires the affirmative vote of the holders of a majority of the shares of Replidyne common stock casting votes in person or by proxy at the Replidyne special meeting for the issuance of shares of Replidyne common stock in the merger, and the affirmative vote of the holders of a majority of shares of Replidyne common stock having voting power outstanding on the record date for the Replidyne special meeting for the amendment to Replidyne's restated certificate of incorporation.

The approval by the stockholders of CSI requires the affirmative votes of (i) the holders of a majority of the outstanding shares of CSI common stock and preferred stock, voting as a single class on an as-converted to common stock basis, and (ii) the holders of a majority of the outstanding shares of CSI preferred stock, voting as a single class on an as-converted to common stock basis and including the shares of CSI preferred stock held by affiliates of Easton Capital Investment Group and Maverick Capital, Ltd.

Several CSI stockholders have agreed with Replidyne to vote shares representing approximately 20% of the outstanding capital stock of CSI in favor of the merger and the other actions contemplated by the merger agreement. These stockholders represented the maximum number of the outstanding shares of CSI capital stock that could be made subject to these voting agreements under Minnesota corporate law. In addition, several Replidyne stockholders, who beneficially own approximately 48% of the outstanding common stock of Replidyne, have agreed with CSI to vote shares representing approximately 32% of the outstanding common stock of Replidyne in favor of the issuance of the shares of Replidyne common stock pursuant to the merger and the other actions contemplated by the merger agreement.

The stockholders of Replidyne and CSI are also being asked to approve certain other matters in connection with the consummation of the merger that are described more fully in this proxy statement/prospectus. While approval of these proposals is not required to consummate the merger, the board of directors of Replidyne or CSI, as the case may be, recommends that you vote for these proposals.

In addition to the requirement of obtaining such stockholder approvals and appropriate regulatory approvals, each of the other closing conditions set forth in the merger agreement must be satisfied or waived. For a more complete description of the closing conditions under the merger agreement, we urge you to read the section entitled "The Merger Agreement - Conditions to the Completion of the Merger" on page 82 of this proxy statement/prospectus.

Q: What is the reverse stock split and why is it necessary?

A: Immediately prior to the effective time of the merger, the outstanding shares of Replidyne common stock will be reclassified and combined into a lesser number of shares to be determined by Replidyne and CSI prior to the effective time of the merger and publicly announced by Replidyne. The merger constitutes a reverse merger under applicable marketplace rules established by Nasdaq, which requires the combined company to comply with

the initial listing standards of the applicable Nasdaq market to continue to be listed on such market following the merger. The Nasdaq Global Market's initial listing standards require a company to have, among other things, a \$4.00 per share minimum bid price. Because Replidyne common stock is required to be listed on the Nasdaq Global Market as a condition to closing the merger and the current price of Replidyne common stock is less than the minimum bid prices required by the Nasdaq Global Market, the reverse stock split is necessary to consummate the merger.

Table of Contents

Q: What will CSI stockholders receive in the merger?

A: Replidyne has agreed to issue, and holders of CSI capital stock will receive, shares of Replidyne common stock such that following the consummation of the transactions contemplated by the merger agreement, current stockholders of Replidyne, together with holders of Replidyne options and warrants, are expected to own or have the right to acquire between 16.3% and 17.0% of the common stock of the combined company, and current CSI stockholders, together with holders of CSI options and warrants, are expected to own or have the right to acquire between 83.0% and 83.7% of the combined company, in each case assuming that Replidyne's net assets are between \$35.0 million and \$37.0 million as calculated in accordance with the terms of the merger agreement, on a fully diluted basis using the treasury stock method of accounting for options and warrants. Immediately prior to the effective time of the merger, all outstanding shares of CSI preferred stock will convert automatically into shares of CSI common stock pursuant to the terms of CSI's articles of incorporation and a preferred stockholder conversion agreement. The number of shares of Replidyne common stock each CSI stockholder will receive will be determined using a conversion factor based on the number of outstanding shares of capital stock of Replidyne and CSI, any outstanding options and warrants to purchase shares of capital stock of Replidyne and CSI, and Replidyne's net assets, in each case calculated in accordance with the terms of the merger agreement as of immediately prior to the effective time of the merger.

Q: How will the merger affect stock options and warrants for CSI common stock?

A: Replidyne will assume options and warrants to purchase shares of CSI common stock which will become exercisable for shares of Replidyne common stock with the same terms, exercisability, vesting schedule and other provisions, but with the number of shares and exercise price being appropriately adjusted to reflect the conversion factor between Replidyne common stock and CSI common stock determined in accordance with the merger agreement and described above.

Q: What are the material U.S. federal income tax consequences of the merger to me?

A: The merger has been structured to qualify as a tax-free reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. As a result of the merger's qualification as a reorganization, it is anticipated that CSI stockholders will not recognize gain or loss for U.S. federal income tax purposes upon the exchange of shares of CSI common stock for shares of Replidyne common stock, except with respect to cash received in lieu of fractional shares of Replidyne common stock.

Q: Who will be the directors of the combined company following the merger?

A: Following the merger, the board of directors of the combined company will be comprised of nine directors, seven of whom are currently directors of CSI and two of whom are currently directors of Replidyne. The current directors of CSI that are expected to become directors of the combined company are Brent G. Blackey, John H. Friedman, Geoffrey O. Hartzler, Roger J. Howe, David L. Martin, Glen D. Nelson and Gary M. Petrucci. The current directors of Replidyne that are expected to become directors of the combined company are Edward Brown and Augustine Lawlor.

Table of Contents

Q: Who will be the executive officers of the combined company following the merger?

A: Following the merger, the executive management team of the combined company is expected to be composed of CSI's executive management team prior to the merger and is contemplated to include each of the following individuals serving in the position set forth opposite his name. Each of the following individuals currently serves in the same position with CSI:

Name	Position in the Combined Company
David L. Martin	President and Chief Executive Officer
Laurence L. Betterley	Chief Financial Officer
James E. Flaherty	Chief Administrative Officer and Secretary
John Borrell	Vice President of Sales
Brian Dougherty	Vice President of Marketing
Robert J. Thatcher	Executive Vice President
Paul Tyska	Vice President of Business Development
Paul Koehn	Vice President of Manufacturing

Q: What risks should I consider in deciding whether to vote in favor of the proposals?

A: You should carefully review the section of this proxy statement/prospectus entitled "Risk Factors" beginning on page 18, which sets forth certain risks and uncertainties related to the merger, risks and uncertainties to which the combined company's business will be subject, and risks and uncertainties to which each of Replidyne and CSI, as an independent company, is subject.

Q: When do you expect the merger to be consummated?

A: We anticipate that the merger will occur in the first calendar quarter of 2009 and on or around February 25, 2009, shortly after the completion of both the Replidyne special meeting and the CSI special meeting, but we cannot predict the exact timing.

Q: What do I need to do now?

A: We urge you to read this proxy statement/prospectus carefully, including its annexes, and to consider how the merger affects you.

If you are a Replidyne stockholder, you may provide your proxy instructions in three different ways. First, you can mail your signed proxy card in the enclosed return envelope. Alternatively, you can provide your proxy instructions via the toll-free call center set up for this purpose at 1-800-Proxies (1-800-776-9437) in the United States or 1-718-921-8500 from foreign countries and follow the instructions. Please have your proxy card available when you call. Finally, you can provide your proxy instructions via the Internet at <http://www.voteproxy.com> and follow the on-screen instructions. Please have your proxy card available when you access the web page. Please provide your proxy instructions only once and as soon as possible so that your shares can be voted at the special meeting of Replidyne stockholders.

If you are a CSI stockholder, you may provide your proxy instructions in two different ways. First, you can mail your signed proxy card in the enclosed return envelope. Alternatively, you can provide your proxy instructions

via facsimile to 1-612-492-7077 to the attention of Bonnie Eichers of Fredrikson & Byron, P.A. Please provide your proxy instructions only once and as soon as possible so that your shares can be voted at the special meeting of CSI stockholders.

Q: As a Replidyne stockholder, how does Replidyne's board of directors recommend that I vote?

A: After careful consideration, Replidyne's board of directors has approved the merger agreement and each of the proposals described in this proxy statement/prospectus that the stockholders of Replidyne are being asked to consider, and has determined that they are advisable, fair to and in the best interests of Replidyne stockholders. Accordingly, Replidyne's board of directors recommends that Replidyne stockholders vote **FOR** each such proposal.

Table of Contents

Q: As a CSI stockholder, how does CSI's board of directors recommend that I vote?

A: After careful consideration, CSI's board of directors has approved the merger agreement and each of the proposals described in this proxy statement/prospectus that the stockholders of CSI are being asked to consider, and has determined that they are advisable, fair to and in the best interests of CSI stockholders. Accordingly, CSI's board of directors recommends that CSI stockholders vote **FOR** each such proposal.

Q: What happens if I do not return a proxy card or otherwise provide proxy instructions?

A: If you are a Replidyne stockholder and you do not submit a proxy card or vote at the Replidyne special meeting, your shares will not be counted as present for the purpose of determining the presence of a quorum and will have no effect on the approval of Replidyne Proposal Nos. 1, 4, 5 and 6, but would have the same effect as voting against Replidyne Proposal Nos. 2 and 3. Broker non-votes will similarly have no effect on the approval of Replidyne Proposal Nos. 1, 4, 5 and 6, but would have the same effect as voting against Replidyne Proposal Nos. 2 and 3. If you submit a proxy card and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum but will not be voted at the meeting. As a result, your abstention will have no effect on the approval of Replidyne Proposal Nos. 1, 4, 5 and 6, but would have the same effect as voting against Replidyne Proposal Nos. 2 and 3.

If you are a CSI stockholder and you do not submit a proxy card or vote at the CSI special meeting, your shares will not be counted as present for the purpose of determining the presence of a quorum and would have the same effect as voting against CSI Proposal No. 1, but will have no effect on the approval of CSI Proposal Nos. 2 and 3. If you submit a proxy card and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum but will not be voted at the meeting. As a result, your abstention would have the same effect as voting against CSI Proposal No. 1, but will have no effect on the approval of CSI Proposal Nos. 2 and 3.

Q: May I vote in person?

A: If your shares of Replidyne common stock are registered directly in your name with Replidyne's transfer agent you are considered, with respect to those shares, the stockholder of record, and the proxy materials and proxy card are being sent directly to you. If you are a Replidyne stockholder of record as of January 21, 2009, you may attend the special meeting of Replidyne stockholders to be held on February 24, 2009 and vote your shares in person, rather than signing and returning your proxy card or otherwise providing proxy instructions. However, we urge you to return your proxy card with your voting instructions in any event, just in case your plans should change.

If your shares of Replidyne common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you are also invited to attend the special meeting of Replidyne stockholders. Since a beneficial owner is not the stockholder of record, you may not vote these shares in person at the special meeting unless you obtain a legal proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting.

If your shares of CSI common stock or preferred stock are registered directly in your name on the books of CSI you are considered, with respect to those shares, the stockholder of record, and the proxy materials and proxy card are being sent directly to you. If you are a CSI stockholder of record as of January 26, 2009, you may attend the special meeting of CSI stockholders to be held on February 24, 2009 and vote your shares in person, rather

than signing and returning your proxy card or otherwise providing proxy instructions. However, we urge you to return your proxy card with your voting instructions in any event, just in case your plans should change.

Q: If my Replidyne shares are held in street name by my broker, will my broker vote my shares for me?

A: Your broker will not be able to vote your shares of Replidyne common stock without instructions from you. You should instruct your broker to vote your shares, following the procedure provided by your broker.

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Table of Contents

Q: May I change my vote after I have provided proxy instructions?

A: Replidyne stockholders of record, other than those Replidyne stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the Replidyne special meeting in one of three ways. First, you can send a written notice stating that you would like to revoke your proxy. Second, you can submit new proxy instructions either on a new proxy card, by telephone or via the Internet. Third, you can attend the meeting and vote in person. Your attendance alone will not revoke your proxy. If you have instructed a broker to vote your shares, you must follow directions received from your broker to change those instructions.

CSI stockholders of record, other than those CSI stockholders who have executed voting agreements, may change their vote at any time before their proxy is voted at the CSI special meeting in one of three ways. First, you can send a written notice stating that you would like to revoke your proxy. Second, you can submit new proxy instructions either on a new proxy card, by mail or facsimile. Third, you can attend the CSI special meeting and vote in person. Your attendance alone will not revoke your proxy.

Q: Am I entitled to appraisal or dissenters rights?

A: Under Delaware law, holders of Replidyne common stock are not entitled to appraisal rights in connection with the merger.

Under Minnesota law, holders of CSI common stock and preferred stock are entitled to dissenters rights in connection with the merger. If you do not wish to accept shares of Replidyne common stock in the merger and you do not vote in favor of CSI Proposal No. 1, you have the right under Minnesota law to seek from CSI the fair value of your shares in lieu of the Replidyne common stock you would receive if the merger is completed. We refer you to the information under the heading *Appraisal and Dissenters Rights* on page 73 of this proxy statement/prospectus and to the applicable Minnesota statute attached as *Annex F* to this proxy statement/prospectus for information on how to exercise your dissenters rights. Failure to follow all of the steps required under Minnesota law will result in the loss of your dissenters rights.

Q: Who is paying for this proxy solicitation?

A: Replidyne and CSI are conducting this proxy solicitation and will each bear one-half the cost of the proxy solicitation, including the preparation, assembly, printing and mailing of this proxy statement/prospectus, the proxy card and any additional information furnished to stockholders. Replidyne and CSI will each bear its own legal expenses. Replidyne has engaged and will pay D. F. King & Co, Inc., a proxy solicitation firm, to solicit proxies from Replidyne stockholders. Replidyne may also reimburse brokerage houses and other custodians, nominees and fiduciaries for their costs of forwarding proxy and solicitation materials to beneficial owners.

Q: Who can help answer my questions?

A: If you are a Replidyne stockholder and would like additional copies, without charge, of this proxy statement/prospectus or if you have questions about the merger, including the procedures for voting your shares, you should contact:

Replidyne, Inc.
Attn: Investor Relations
1450 Infinite Drive
Louisville, CO 80027

(303) 996-5500

If you are a CSI stockholder and would like additional copies, without charge, of this proxy statement/prospectus or if you have questions about the merger, including the procedures for voting your shares, you should contact:

Cardiovascular Systems, Inc.
Attn: Investor Relations
651 Campus Drive
St. Paul, MN 55112
(651) 259-2800

Table of Contents

SUMMARY

*This summary highlights selected information from this proxy statement/prospectus. To understand the merger fully, you should read carefully this entire document and the documents to which we refer, including the annexes attached hereto. See *Where You Can Find More Information* on page 248. The merger agreement is attached as Annex A to this proxy statement/prospectus. We encourage you to read the merger agreement as it is the legal document that governs the merger. We have included page references in parentheses to direct you to a more detailed description of the topics presented in this summary.*

The Companies

Replidyne, Inc.

1450 Infinite Drive
Louisville, CO 80027
(303) 996-5500

Replidyne was incorporated in Delaware in December 2000 and began as a biopharmaceutical company focused on discovering, developing, in-licensing and commercializing innovative anti-infective products. In April 2008, Replidyne suspended enrollment in the last of its clinical trials on its lead product candidate, faropenem medoxomil, in order to conserve its cash assets and further support initiatives related to the pursuit of strategic transactions. As a result of its inability to secure a partner for the faropenem medoxomil program, Replidyne announced in June 2008 that it would return the license for faropenem medoxomil to its licensor, Asubio Pharma Co., Ltd. In August 2008, Replidyne suspended the development of REP3123, an investigational narrow-spectrum antibacterial agent for the treatment of *clostridium difficile* (*C. difficile*) bacteria and *C. difficile* infection, and its other anti-infective programs based on its bacterial DNA replication inhibition technology. These and subsequent related actions have reduced the Replidyne workforce to a level of three employees as of December 31, 2008. Replidyne is pursuing the sale of REP3123 and its related technology and the sale of the anti-infective programs based on its bacterial DNA replication inhibition technology in a transaction or transactions separate from the merger. Replidyne no longer has employees engaged in development and commercialization activities.

Responder Merger Sub, Inc.

1450 Infinite Drive
Louisville, CO 80027
(303) 996-5500

Responder Merger Sub, Inc. is a wholly owned subsidiary of Replidyne that was incorporated in Minnesota in October 2008. Responder Merger Sub, Inc. does not engage in any operations and exists solely to facilitate the merger.

Cardiovascular Systems, Inc.

651 Campus Drive,
St. Paul, MN 55112
(651) 259-2800

CSI is a medical device company focused on developing and commercializing interventional treatment systems for vascular disease. CSI's initial product, the Diamondback 360° Orbital Atherectomy System, is a minimally invasive catheter system for the treatment of peripheral arterial disease, or PAD. In August 2007, the U.S. Food and Drug Administration, or FDA, granted CSI 510(k) clearance for use of the Diamondback 360° as a therapy in patients with

PAD. CSI was formed in 1989 as Shturman Cardiology Systems, Inc. and is incorporated in Minnesota.

The Merger (see page 49)

If the merger is consummated, CSI and Responder Merger Sub, Inc. will merge, with CSI surviving as a wholly owned subsidiary of Replidyne. It is anticipated that shortly after the merger Replidyne will change its name to

Table of Contents

Cardiovascular Systems, Inc. A copy of the merger agreement is attached as *Annex A* to this proxy statement/prospectus. You are encouraged to read the merger agreement in its entirety because it is the legal document that governs the merger.

Immediately after the merger, subject to adjustments to reflect certain events that could occur prior to closing of the merger, CSI stockholders, optionholders and warrant holders will own or have the right to acquire between 83.0% and 83.7% of the combined company and Replidyne stockholders, optionholders and warrant holders will own or have the right to acquire between 16.3% and 17.0% of the combined company, in each case calculated on a fully diluted basis using the treasury stock method of accounting for options and warrants. Replidyne will assume outstanding and unexercised options and warrants to purchase CSI common stock, and they will be converted into options and warrants, as applicable, to purchase Replidyne common stock. The foregoing percentages assume that Replidyne's net assets at closing are between \$35.0 and \$37.0 million as calculated in accordance with the terms of the merger agreement.

For a more complete description of the merger conversion factor, see the section entitled "The Merger Agreement" in this proxy statement/prospectus.

The closing of the merger will occur no later than the fifth business day after the last of the conditions to the merger has been satisfied or waived, or at another time as Replidyne and CSI agree. Replidyne and CSI anticipate that the consummation of the merger will occur shortly after the Replidyne and CSI special meetings. However, because the merger is subject to a number of conditions, neither Replidyne nor CSI can predict exactly when the closing will occur or if it will occur at all. After completion of the merger, assuming that Replidyne receives the required stockholder approval of Replidyne Proposal No. 3, Replidyne will be renamed Cardiovascular Systems, Inc.

Reasons for the Merger (see page 55)

The combined company that results from the merger will be a medical device company focused on developing and commercializing interventional treatment systems for vascular disease. CSI's initial product, the Diamondback 360° Orbital Atherectomy System, is a minimally invasive catheter system for the treatment of peripheral arterial disease, or PAD. Replidyne and CSI believe that the combined company will have the following potential advantages:

Highly differentiated product. The Diamondback 360° Orbital Atherectomy System has received FDA clearance. Replidyne and CSI also believe that the Diamondback 360° has features that differentiate it from other FDA approved or cleared minimally invasive atherectomy devices. CSI's revenues in the four fiscal quarters since the launch of the product and the high reorder rate among its initial customers demonstrate CSI's ability to retain its customer base.

Financial resources of the combined company. CSI believes that Replidyne's projected available cash at closing, together with CSI's other cash resources, will be sufficient to fund CSI's currently projected operating requirements for the foreseeable future.

Large underserved PAD market opportunity. PAD is a circulatory problem in which plaque deposits build up on the walls of arteries, reducing blood flow to the limbs. As cited by the authors of the PARTNERS study published in the Journal of the American Medical Association in 2001, PAD affects approximately eight to 12 million people in the United States. Despite the severity of PAD, it remains relatively under diagnosed. Recent emphasis on PAD education from medical associations, insurance companies and other groups, coupled with publications in medical journals, is increasing physician and patient awareness of PAD risk factors, symptoms and treatment options.

Proven management team with deep PAD experience. CSI's management team has a background in developing and marketing PAD devices and has demonstrated the ability to successfully execute CSI's growth strategy.

Table of Contents

Each of the board of directors of Replidyne and CSI also considered other reasons for the merger, as described herein. The board of directors of Replidyne considered, among other things:

the strategic alternatives available to Replidyne, including a transaction with another potential partner, liquidation of the company and the continued development of its former product candidates;

the failure of Replidyne's lead product candidate, faropenem medoxomil, to receive approval from the FDA for its new drug application;

the early stage of development of Replidyne's research pipeline programs and the capital that would be required to achieve regulatory approval to complete the development of those programs; and

the recent volatility in the public markets that, when combined with Replidyne's net cash position and its public listing, could allow Replidyne to obtain favorable terms in a reverse merger transaction.

In addition, the board of directors of CSI approved the merger based on a number of factors, including the following:

the expectation that the merger would be a more time- and cost-effective means to access capital than other options considered, including an initial public offering or an additional round of private equity financing;

the judgment of CSI's board of directors that the merger is the best alternative available to CSI and its stockholders; and

the likelihood that the merger will be consummated on a timely basis.

Opinion of Replidyne's Financial Advisor (see page 60)

Morgan Stanley & Co. Incorporated, or Morgan Stanley, the financial advisor of Replidyne, delivered to the board of directors of Replidyne a written opinion, dated November 3, 2008, addressed to the board of directors of Replidyne, to the effect that, as of the date of the opinion and based on and subject to the various assumptions, qualifications and limitations set forth in the opinion, the conversion factor pursuant to the merger agreement was fair from a financial point of view to Replidyne. The full text of Morgan Stanley's opinion, which sets forth, among other things, the assumptions made, procedures followed, matters considered and limitations on the scope of the review undertaken by Morgan Stanley in rendering its opinion, is attached as *Annex D* to this proxy statement/prospectus and is incorporated by reference in its entirety into this proxy statement/prospectus. Holders of Replidyne common stock are encouraged to read the opinion carefully and in its entirety. **Morgan Stanley's opinion was directed to the board of directors of Replidyne and only addresses the fairness from a financial point of view of the conversion factor pursuant to the merger agreement to Replidyne as of the date of the opinion. Morgan Stanley's opinion does not address any other aspect of the proposed merger or any alternative to the proposed merger. Morgan Stanley expressed no opinion or recommendation as to how the stockholders of Replidyne or CSI should vote at the stockholders meetings to be held in connection with the proposed merger.**

Overview of the Merger Agreement

Merger Consideration (see page 78)

At the effective time of the merger, each share of CSI capital stock not held as treasury stock or owned by CSI shall be converted into a right to receive a number of shares of Replidyne common stock equal to the conversion factor. The

conversion factor shall equal: (i) (A) the number of surviving Replidyne securities divided by the Replidyne post-closing stockholder ownership percentage minus (B) the number of surviving Replidyne securities, divided by (ii) the number of converting CSI securities, each as defined in the merger agreement and explained in this proxy statement/prospectus.

Pursuant to the terms of the merger agreement, CSI and Replidyne have agreed upon a methodology to determine the conversion factor as defined above. The conversion factor shall be determined as of immediately prior to the effective time of the merger and is subject to change based upon Replidyne's net assets as of such time, and the number of shares of CSI and Replidyne capital stock outstanding and issuable upon exercise of outstanding options

Table of Contents

and warrants, each as calculated in accordance with the terms of the merger agreement. For illustrative purposes only, below is a table that sets forth several levels of net assets for Replidyne as of the closing of the merger, and the conversion factor and aggregate post-closing ownership percentage in the combined company for the stockholders, optionholders and warrantholders of each of Replidyne and CSI that would result based on each such level of net assets, in each case calculated in accordance with the terms of the merger agreement and assuming that the capitalization of both Replidyne and CSI is as of October 31, 2008, except that the acceleration of vesting of certain outstanding options to purchase Replidyne common stock that is expected to occur upon the consummation of the merger is assumed to have occurred for purposes of this calculation.

Net Assets	Conversion Factor	Replidyne Securityholder	CSI Securityholder
		Ownership Percentage in the Combined Company	Ownership Percentage in the Combined Company
\$ 41,000,000	6.304	17.4%	82.6%
40,000,000	6.460	17.0%	83.0%
37,000,000	6.460	17.0%	83.0%
36,000,000	6.624	16.7%	83.3%
35,000,000	6.797	16.3%	83.7%
34,000,000	6.979	15.9%	84.1%
33,000,000	7.172	15.6%	84.4%

The foregoing table is presented for illustrative purposes only. The conversion factor is subject to the variables described above and will not be calculated until immediately prior to the effective time of the merger. Replidyne cannot assure you that its level of net assets as of the effective time of the merger will fall within the range set forth in this table. The conversion factor is subject to proportionate adjustment to account for the effect of the reverse stock split of Replidyne's issued and outstanding common stock.

Conditions to the Completion of the Merger (see page 82)

Each party's obligation to complete the merger is subject to a number of conditions, which may be waived by the applicable party, and that include, among others, and subject to specified exceptions, the following:

stockholders of CSI must have approved and adopted the merger agreement and the merger contemplated therein, and stockholders of Replidyne must have approved the issuance of Replidyne common stock in the merger and the amendment to the restated certificate of incorporation of Replidyne;

no temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the merger shall have been issued by any court of competent jurisdiction or other governmental body and remain in effect, and there shall not be any legal requirement enacted or deemed applicable to the merger that makes consummation of the merger illegal;

the initial listing application on the Nasdaq Global Market shall have been conditionally approved, and the shares of Replidyne common stock to be issued in the merger shall be conditionally approved for listing on the Nasdaq Global Market, both subject only to the completion of the closing and completion by Replidyne of any

reverse stock split required by Nasdaq; and

since the signing of the merger agreement, there shall not have occurred and be continuing any material adverse effect for either party.

Limitation on Soliciting, Discussing or Negotiating Other Acquisition Proposals (see page 85)

Pursuant to the merger agreement, each of Replidyne and CSI agreed that, except as described below, they will not, during the pre-closing period, directly or indirectly:

solicit, initiate, knowingly encourage, induce or facilitate the making, submission or announcement of any acquisition proposal or acquisition inquiry, each as defined in the merger agreement and explained in this proxy statement/prospectus, or take any action that would reasonably be expected to lead to an acquisition proposal or acquisition inquiry;

Table of Contents

furnish any nonpublic information regarding CSI or Replidyne, as the case may be, to any person in connection with or in response to an acquisition proposal or acquisition inquiry;

engage in discussions or negotiations with any person with respect to any acquisition proposal or acquisition inquiry;

approve, endorse or recommend any acquisition proposal; or

execute or enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any acquisition transaction.

Notwithstanding the foregoing, prior to obtaining the consent of its stockholders, either party may furnish information regarding such party to, and may enter into discussions or negotiations with, any third party in response to a superior offer (as defined in the merger agreement and explained in this proxy statement/prospectus) or an unsolicited bona fide written acquisition proposal made or received after the date of the merger agreement that is reasonably likely to result in a superior offer, if:

neither such party nor any representative of such party has breached the no solicitation provisions of the merger agreement described above with respect to that particular superior offer or acquisition proposal;

the board of directors of such party concludes in good faith, based on the advice of outside legal counsel, that such action is required in order for such party's board of directors to comply with its fiduciary obligations to such party's stockholders under applicable legal requirements;

at least three business days prior to furnishing any such information to, or entering into discussions with, such person, such party gives the other party written notice of the identity of such person and of such party's intention to furnish information to, or enter into discussions with, such person;

such party receives from such person an executed confidentiality agreement containing provisions (including nondisclosure provisions, use restrictions, non-solicitation provisions, no hire provisions and standstill provisions) at least as favorable to such party as those contained in the confidentiality agreement previously entered into between Replidyne and CSI; and

at least three business days prior to furnishing any such nonpublic information to such person, such party furnishes such information to the other party (to the extent such nonpublic information has not been previously furnished by such party to the other party).

Termination of the Merger Agreement (see page 91)

The merger agreement may be terminated prior to the effective time of the merger (whether before or after approval and adoption of the merger agreement by CSI stockholders and whether before or after approval of the amendment to Replidyne's restated certificate of incorporation and the issuance of Replidyne common stock in the merger by Replidyne stockholders):

by mutual written consent of Replidyne and CSI, duly authorized by their respective boards of directors;

subject to certain limitations, by either Replidyne or CSI if the merger shall not have been consummated by April 30, 2009;

by either Replidyne or CSI if a court of competent jurisdiction or other governmental body shall have issued a final and nonappealable order, or shall have taken any other final and nonappealable action, having the effect of permanently restraining, enjoining or otherwise prohibiting the consummation of the merger;

by either Replidyne or CSI if Replidyne stockholders fail to approve either the amendment to Replidyne's restated certificate of incorporation or the issuance of the Replidyne common stock pursuant to the merger agreement at the special meeting;

by either Replidyne or CSI if CSI stockholders fail to approve the adoption of the merger agreement at the special meeting;

Table of Contents

by either Replidyne or CSI if (i) the Replidyne board of directors has withheld, withdrawn, amended or modified its recommendation because it has determined in good faith, based on the advice of its outside legal counsel, that such action is required in order for the Replidyne board of directors to comply with its fiduciary obligations to Replidyne stockholders under applicable legal requirements, or (ii) Replidyne enters into a letter of intent, memorandum of understanding or definitive agreement with respect to a superior offer;

by either Replidyne or CSI if (i) the CSI board of directors has withheld, withdrawn, amended or modified its recommendation because it has determined in good faith, based on the advice of its outside legal counsel, that such action is required in order for the CSI board of directors to comply with its fiduciary obligations to CSI stockholders under applicable legal requirements, or (ii) CSI enters into a letter of intent, memorandum of understanding or definitive agreement with respect to a superior offer; or

subject to certain limitations, by either party in the event of any inaccuracy of representations and warranties of the other party having a material adverse effect or a material breach by the other party of its obligations or covenants under the merger agreement.

Termination Fees (see page 92)

Replidyne must pay CSI a nonrefundable fee of \$1.5 million and reimburse CSI for all actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the merger agreement and transactions contemplated by the merger agreement if:

the merger agreement is terminated by Replidyne or CSI if (i) the Replidyne board of directors has withheld, withdrawn, amended or modified its recommendation because it has determined in good faith, based on the advice of its outside legal counsel, that such action is required in order for the Replidyne board of directors to comply with its fiduciary obligations to Replidyne stockholders under applicable legal requirements, or (ii) Replidyne enters into a letter of intent, memorandum of understanding or definitive agreement with respect to a superior offer; or

the merger agreement is terminated by Replidyne or CSI if the stockholders of Replidyne do not approve either the amendment to Replidyne's restated certificate of incorporation or the issuance of Replidyne common stock at the Replidyne special meeting of stockholders, and both of the following conditions are met:

prior to the Replidyne special meeting of stockholders, an acquisition proposal with respect to Replidyne has been publicly made and not withdrawn; and

within twelve months of the termination of the merger agreement, Replidyne enters into any agreement for an acquisition transaction contemplated by such acquisition proposal or consummates an acquisition transaction contemplated by such acquisition proposal.

CSI must pay Replidyne a nonrefundable fee of \$1.5 million and reimburse Replidyne for all actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the merger agreement and transactions contemplated by the merger agreement if:

the merger agreement is terminated by Replidyne or CSI if (i) the CSI board of directors has withheld, withdrawn, amended or modified its recommendation because it has determined in good faith, based on the advice of its outside legal counsel, that such action is required in order for the CSI board of directors to comply with its fiduciary obligations to CSI stockholders under applicable legal requirements, or (ii) CSI enters into a

letter of intent, memorandum of understanding or definitive agreement with respect to a superior offer; or the merger agreement is terminated by Replidyne or CSI if the stockholders of CSI do not approve the adoption of the merger agreement (including the consummation of the merger) at the CSI special meeting of stockholders, and all of the following conditions are met:

prior to the CSI special meeting of stockholders, an acquisition proposal with respect to CSI has been publicly made and not withdrawn; and

Table of Contents

within twelve months of the termination of the merger agreement, CSI enters into any agreement for an acquisition transaction contemplated by such acquisition proposal or consummates an acquisition transaction contemplated by such acquisition proposal.

Voting Agreements (see page 94)

In order to induce Replidyne to enter into the merger agreement, several CSI stockholders entered into voting agreements with and granted irrevocable proxies in favor of Replidyne pursuant to which, among other things, each of these stockholders agreed, solely in its capacity as a stockholder, to vote shares representing approximately 20% of the outstanding capital stock of CSI in favor of the merger, the other actions contemplated by the merger agreement and any action in furtherance of any of the foregoing, and against, among other things, any proposal made in opposition to, or in competition with, the merger. These stockholders represented the maximum number of the outstanding shares of CSI capital stock that could be made subject to these voting agreements under Minnesota corporate law. All of these stockholders are executive officers, directors, or entities controlled by such persons, or 5% stockholders, of CSI.

In addition, in order to induce CSI to enter into the merger agreement, several Replidyne stockholders, who together with their respective affiliates, beneficially own approximately 48% of the outstanding common stock of Replidyne, entered into voting agreements and irrevocable proxies in favor of CSI pursuant to which, among other things, each of these stockholders agreed, solely in his capacity as a stockholder, to vote shares representing approximately 32% of the outstanding common stock of Replidyne in favor of the merger, the other actions contemplated by the merger agreement and any action in furtherance of any of the foregoing, and against, among other things, any proposal made in opposition to, or in competition with, the merger.

Replidyne and CSI stockholders that executed these voting agreements have agreed not to engage in certain actions that would solicit, encourage or support acquisition transactions other than the merger.

Lock-up Agreements (see page 95)

The directors and certain stockholders of both Replidyne and CSI entered into lock-up agreements in favor of Replidyne and CSI pursuant to which they have agreed, subject to limited exceptions, not to sell or otherwise dispose of any shares of CSI common stock or Replidyne common stock or any securities convertible into or exercisable or exchangeable for shares of CSI common stock or Replidyne common stock or engage in certain transactions with respect thereto during the period beginning on the date of the merger agreement and ending 90 days after the closing of the merger. The lock-up restrictions will not apply to certain transfers not involving a disposition for value, provided that the recipient agrees to be bound by these lock-up restrictions and provided that such transfers are not required to be reported, and are not voluntarily reported, in any public report or filing with the SEC during the lock-up period. As of December 31, 2008, the parties to the lock-up agreements owned approximately 37% of Replidyne's outstanding common stock and 28% of CSI's outstanding capital stock, calculated on an as-converted to common stock basis.

Pursuant to the merger agreement, Replidyne and CSI have each agreed to use commercially reasonable efforts to cause its respective officers to enter into lock-up agreements in favor of Replidyne and CSI on substantially the same terms as described above.

CSI Stock Options and Warrants (see page 72)

Upon the consummation of the merger, Replidyne will assume all options and warrants to purchase shares of CSI common stock. Each CSI option and warrant will become exercisable for shares of Replidyne common stock, and the

share quantity and exercise price of each instrument will be adjusted according to the conversion factor between Replidyne common stock and CSI common stock determined in accordance with the merger agreement.

Conversion of CSI Preferred Stock (see page 95)

Concurrently with the execution of the merger agreement, the holders of approximately 68% of CSI's outstanding preferred stock, calculated on an as-converted to common stock basis, entered into an agreement with

Table of Contents

CSI pursuant to which all outstanding shares of CSI preferred stock will be automatically converted into shares of CSI common stock, effective as of immediately prior to the effective time of the merger.

Management Following the Merger (see page 66)

Immediately following the merger, the executive management team of the combined company is expected to be composed of CSI's executive management team prior to the merger and is contemplated to include the following individuals serving in the position set forth opposite his name. Each of the following individuals currently serves in the same position with CSI:

Name	Position in the Combined Company
David L. Martin	President and Chief Executive Officer
Laurence L. Betterley	Chief Financial Officer
James E. Flaherty	Chief Administrative Officer and Secretary
John Borrell	Vice President of Sales
Brian Doughty	Vice President of Marketing
Robert J. Thatcher	Executive Vice President
Paul Tyska	Vice President of Business Development
Paul Koehn	Vice President of Manufacturing

Interests of Certain Directors, Officers and Affiliates of Replidyne and CSI (see page 66)***Interests of Replidyne's Executive Officers and Directors in the Merger***

When considering the recommendation by the Replidyne board of directors, you should be aware that a number of Replidyne's executive officers and directors have interests in the merger that are different from those of other Replidyne stockholders. As of December 31, 2008, all directors and executive officers of Replidyne, together with their affiliates, beneficially owned approximately 35% of the shares of Replidyne common stock. For a more complete description of the interests of current and former officers and directors of Replidyne, see the section entitled "Interests of Replidyne's Executive Officers and Directors in the Merger" on page 66 of this proxy statement/prospectus.

Interests of CSI's Executive Officers and Directors in the Merger

You also should be aware that a number of CSI's executive officers and directors have interests in the merger that are different from those of other CSI stockholders. As of December 31, 2008, all directors and executive officers of CSI, together with their affiliates, beneficially owned approximately 28% of the shares of CSI capital stock. For a more complete description of the interests of current and former officers and directors of CSI, see the section entitled "Interests of CSI's Executive Officers and Directors in the Merger" on page 70 of this proxy statement/prospectus.

Risk Factors (see page 18)

The merger (including the possibility that the merger may not be completed) poses a number of risks to each company and its respective stockholders. In addition, both Replidyne and CSI are subject to various risks associated with their businesses and their industries, and the combined company is subject to additional risks. The risks are discussed in greater detail under the caption "Risk Factors" beginning on page 18 of this proxy statement/prospectus. Replidyne and CSI both encourage you to read and consider all of these risks carefully.

Material U.S. Federal Income Tax Consequences of the Merger (see page 74)

As provided in the merger agreement, Cooley Godward Kronish LLP and Fredrikson & Byron, P.A. will each issue a tax opinion to the effect that the merger will constitute a reorganization under Section 368 of Internal Revenue Code of 1986, as amended. In such a reorganization, a CSI stockholder generally will not recognize any gain or loss for U.S. federal income tax purposes upon the exchange of its shares of CSI capital stock for shares of

Table of Contents

Replidyne common stock. However, any cash received for any fractional share will result in the recognition of gain or loss as if such stockholder sold its fractional share.

Tax matters can be complicated, and the tax consequences of the merger to you will depend on the facts of your own situation. You should consult your own tax advisors to fully understand the tax consequences of the merger to you, including the applicability and effect of federal, state, local and foreign income and other tax laws.

Regulatory Approvals and Nasdaq Stock Market Listing (see page 73)

As of the date of this proxy statement/prospectus, neither Replidyne nor CSI is required to make filings or to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the merger. In the United States, Replidyne must comply with applicable federal and state securities laws and the rules and regulations of any stock exchange to which it becomes subject, in connection with the issuance of shares of Replidyne common stock in the merger and the filing of this proxy statement/prospectus with the Securities and Exchange Commission.

Replidyne and CSI have filed an initial listing application with the Nasdaq Global Market pursuant to Nasdaq Stock Market LLC reverse merger rules. If such application is accepted, Replidyne and CSI anticipate that the combined company's stock will be listed on the Nasdaq Global Market following the closing of the merger under the trading symbol CSII.

Anticipated Accounting Treatment (see page 76)

The merger will be treated as a purchase of the net assets of Replidyne by CSI in accordance with accounting principles generally accepted in the United States.

Appraisal and Dissenters' Rights (see page 73)

Under Delaware law, holders of Replidyne common stock are not entitled to appraisal rights in connection with the merger.

Under Minnesota law, holders of CSI common stock and preferred stock are entitled to dissenters' rights in connection with the merger. A CSI stockholder that does not wish to accept shares of Replidyne common stock in the merger and does not vote in favor of the merger has the right under Minnesota law to seek from CSI the fair value of the holder's CSI shares in lieu of the Replidyne common stock the CSI stockholder would receive if the merger is completed. A CSI stockholder's failure to follow all of the steps required under Minnesota law will result in the loss of dissenters' rights.

Comparison of Stockholder Rights (see page 224)

Replidyne is incorporated under the laws of the State of Delaware, and the rights of Replidyne stockholders are accordingly governed by the Delaware General Corporation Law, or DGCL. CSI is incorporated under the laws of the State of Minnesota, and the rights of CSI stockholders are accordingly governed by the Minnesota Business Corporation Act, or MBCA. If the merger is completed, CSI stockholders will become stockholders of Replidyne, and their rights will be governed by the DGCL and the restated certificate of incorporation and the bylaws of Replidyne, as they may be amended. The rights of Replidyne stockholders under the DGCL and the restated certificate of incorporation and bylaws of Replidyne differ from the rights of CSI stockholders under the MBCA and the articles of incorporation and bylaws of CSI.

Table of Contents

**SELECTED HISTORICAL AND UNAUDITED PRO FORMA CONDENSED
COMBINED FINANCIAL DATA**

The following tables present summary historical financial data for Replidyne and CSI, summary unaudited pro forma condensed combined financial data for Replidyne and CSI, and comparative historical and unaudited pro forma per share data for Replidyne and CSI.

Selected Historical Financial Data of Replidyne

The following selected financial data should be read together with Replidyne's financial statements and accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations for Replidyne included elsewhere in this proxy statement/prospectus. The selected financial data in this section is not intended to replace Replidyne's financial statements and the accompanying notes. Historical results are not necessarily indicative of operating results to be expected in the future.

The selected financial data presented below for each year in the five years ended December 31, 2007 are derived from Replidyne's audited financial statements, and are qualified by reference to such financial statements and notes thereto. The statements of operations data for the years ended December 31, 2005, 2006 and 2007 and the balance sheet data as of December 31, 2006 and 2007 are derived from Replidyne's audited financial statements included elsewhere in this proxy statement/prospectus. The statements of operations data for the years ended December 31, 2003 and 2004 and the balance sheet data as of December 31, 2003, 2004 and 2005 are derived from Replidyne's audited financial statements not included in this proxy statement/prospectus. The statements of operations data for the nine months ended September 30, 2007 and 2008 and the balance sheet data as of September 30, 2008 are derived from Replidyne's unaudited financial statements that are included elsewhere in this proxy statement/prospectus. The unaudited financial data as of September 30, 2008 and for the nine months ended September 30, 2007 and 2008 include all adjustments (consisting only of normal recurring adjustments) that Replidyne considers necessary for a fair presentation of the financial position and operating results for the periods presented.

Table of Contents

	Years Ended December 31,					Nine Months Ended September 30,	
2003	2004	2005	2006(1)	2007(1)	2007(1)	2008(1)	
	(In thousands, except per share amounts)						
						(unaudited)	(unaudited)
Statement of Operations Data:							
Revenue	\$ 726	\$ 834	\$ 441	\$ 15,988	\$ 58,571	\$ 58,571	\$
Costs and expenses							
Research and development	12,331	16,282	29,180	38,295	43,313	28,462	26,842
Sales, general and administrative	2,155	2,994	5,329	12,187	13,020	9,803	12,290
Total costs and expenses	14,486	19,276	34,509	50,482	56,333	38,265	39,132
Income (loss) from operations	(13,760)	(18,442)	(34,068)	(34,494)	2,238	20,306	(39,132)
Other income (expense), net	(190)	(797)	399	5,245	5,454	4,329	1,529
Net income (loss)	(13,950)	(19,239)	(33,669)	(29,249)	7,692	24,635	(37,603)
Preferred stock dividends and accretion	(1,294)	(3,560)	(7,191)	(5,391)			
Net income (loss) attributable to common stockholders	\$ (15,244)	\$ (22,799)	\$ (40,860)	\$ (34,640)	\$ 7,692	\$ 24,635	\$ (37,603)
Basic net income (loss) attributable to common stockholders per share	\$ (20.82)	\$ (30.55)	\$ (39.20)	\$ (2.49)	\$ 0.29	\$ 0.92	\$ (1.39)
Diluted net income (loss) attributable to common stockholders per share	\$ (20.82)	\$ (30.55)	\$ (39.20)	\$ (2.49)	\$ 0.28	\$ 0.89	\$ (1.39)
Weighted average shares used in computing net (income) loss per share:							
Basic	732	746	1,042	13,908	26,730	26,696	27,049

Diluted 732 746 1,042 13,908 27,666 27,666 27,049

(1) Costs and expenses for periods subsequent to December 31, 2005 include stock-based compensation expense in accordance with SFAS No. 123(R), *Share-Based Payment*, which was adopted by Replidyne on January 1, 2006.

	2003	2004	As of December 31, 2005 2006 (In thousands)		2007	As of September 30, 2008 (unaudited)
Consolidated Balance Sheet Data:						
Cash, cash equivalents and short-term investments	\$ 692	\$ 27,018	\$ 59,420	\$ 125,567	\$ 90,266	\$ 50,591
Working capital	(1,657)	24,409	50,755	68,147	80,440	45,034
Total assets	4,169	30,067	63,579	135,561	94,690	52,112
Long-term debt, net of current portion and discount	1,208	84				
Accumulated deficit	(20,105)	(42,235)	(83,107)	(116,980)	(109,288)	(146,891)
Preferred stock	20,058	69,447	136,815			
Total shareholders equity (deficit)	(20,115)	(42,202)	(82,632)	71,372	82,404	45,237

Table of Contents**Selected Historical Financial Data of CSI**

The following table presents CSI's selected historical consolidated financial data. CSI derived the selected statements of operations data for the years ended June 30, 2006, 2007 and 2008 and balance sheet data as of June 30, 2007 and 2008 from CSI's audited consolidated financial statements and related notes that are included elsewhere in this proxy statement/prospectus. CSI derived the selected consolidated statements of operations data for the years ended June 30, 2004 and 2005 and the balance sheet data as of June 30, 2004, 2005 and 2006 from CSI's audited consolidated financial statements that do not appear in this proxy statement/prospectus. CSI derived the consolidated statements of operations data for the three months ended September 30, 2007 and 2008 and the balance sheet data as of September 30, 2008 from CSI's unaudited consolidated financial statements and related notes that are included elsewhere in this proxy statement/prospectus. CSI has prepared this unaudited information on the same basis as the audited consolidated financial statements and has included all adjustments, consisting only of normal recurring adjustments, that CSI considers necessary for a fair presentation of CSI's financial position and operating results for such period. CSI has prepared the unaudited interim consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, or GAAP, and the rules and regulations of the SEC for interim financial statements. CSI's historical results are not necessarily indicative of the results that may be expected in the future and the results for the three months ended September 30, 2008 are not necessarily indicative of the results for the full year. You should read this data together with CSI's consolidated financial statements and related notes included elsewhere in this proxy statement/prospectus and the information under Management's Discussion and Analysis of Financial Condition and Results of Operations for CSI.

	2004	2005	Years Ended June 30,			Three Months Ended			
			2006	2007(1)	2008(1)	2007(1)	2008(1)		
	(In thousands, except share and per share amounts)								
Consolidated Statements of Operations Data:									
Revenues	\$	\$	\$	\$	\$	22,177	\$	\$	11,646
Cost of goods sold						8,927		(539)	3,881
Gross profit						13,250		(539)	7,765
Expenses(1):									
Selling, general and administrative	984	1,177	1,735	6,691	35,326	3,552			16,424
Research and development	3,246	2,371	3,168	8,446	16,068	3,328			4,955
Total expenses	4,230	3,548	4,903	15,137	51,394	6,880			21,379
	(4,230)	(3,548)	(4,903)	(15,137)	(38,144)	(7,419)			(13,614)

Loss from operations								
Other income (expense):								
Interest expense			(48)	(1,340)	(923)	(300)	(227)	
Interest income	18	37	56	881	1,167	278	142	
Impairment on investments					(1,267)			
Total other income (expense)	18	37	8	(459)	(1,023)	(22)	(85)	
Net loss	(4,212)	(3,511)	(4,895)	(15,596)	(39,167)	(7,441)	(13,699)	
Accretion of redeemable convertible preferred stock(2)				(16,835)	(19,422)	(4,853)		
Net loss available to common shareholders	\$ (4,212)	\$ (3,511)	\$ (4,895)	\$ (32,431)	\$ (58,589)	\$ (12,294)	\$ (13,699)	
Loss per common share:								
Basic and diluted(3)	\$ (0.78)	\$ (0.61)	\$ (0.79)	\$ (5.22)	\$ (8.57)	\$ (1.95)	\$ (1.78)	
Weighted average common shares used in computation:								
Basic and diluted(3)	5,375,795	5,779,942	6,183,715	6,214,820	6,835,126	6,291,512	7,692,248	

(1) Operating expenses in the years ended June 30, 2007 and 2008 and three months ended September 30, 2007 and 2008 include stock-based compensation expense as a result of the adoption of SFAS No. 123(R), *Share-Based Payment* on July 1, 2006, as follows (in thousands):

Table of Contents

	Years Ended		Three Months Ended	
	June 30,		September 30,	
	2007	2008	2007	2008
Cost of goods sold	\$	\$ 232	\$	\$ 176
Selling, general and administrative	327	6,852	277	1,384
Research and development	63	297	73	112

- (2) See Notes 1 and 10 of the notes to CSI's consolidated financial statements included elsewhere in this proxy statement/prospectus for a discussion of the accretion of redeemable convertible preferred stock.
- (3) See Note 12 of the notes to CSI's consolidated financial statements included elsewhere in this proxy statement/prospectus for a description of the method used to compute basic and diluted net loss per common share and basic and diluted weighted-average number of shares used in per common share calculations.

	2004	2005	As of June 30,		2008	As of
			2006	2007		September 30,
			(In thousands)			2008
Consolidated Balance Sheet Data:						
Cash and cash equivalents	\$ 3,144	\$ 1,780	\$ 1,554	\$ 7,908	\$ 7,595	\$ 14,727
Short-term investments				11,615		
Working capital(1)	2,868	1,349	(1,240)	18,171	(3,118)	(11,144)
Total current assets	3,166	2,116	2,424	20,828	18,204	24,914
Total assets	4,031	2,874	3,296	22,025	41,958	
(12.3)						
)						
Reduction to LIFO cost basis						
(15.1)						
)						
(15.3)						
)						
Total inventories, net						
\$						
322.0						
\$						
309.2						

Table of Contents

Note 8. Supplemental Balance Sheet Information

The following table presents the balance of selected components of Teledyne's balance sheet (in millions):

Balance sheet items	Balance sheet classification	Balance at	
		April 3, 2016	January 3, 2016
Income tax receivable	Prepaid expenses and other current assets	\$ 18.3	\$ 28.8
Deferred compensation assets	Other assets, net	\$47.2	\$ 47.9
Salaries and wages	Accrued liabilities	\$86.8	\$ 89.5
Customer deposits and credits	Accrued liabilities	\$48.9	\$ 37.6
Accrued pension obligation	Other long-term liabilities	\$43.7	\$ 46.7
Accrued postretirement benefits	Other long-term liabilities	\$9.4	\$ 9.6
Deferred compensation liabilities	Other long-term liabilities	\$44.5	\$ 43.9
Deferred tax liabilities	Other long-term liabilities	\$41.2	\$ 37.9

Some of the Company's products are subject to specified warranties and the Company provides for the estimated cost of product warranties. The adequacy of the warranty liabilities is assessed regularly and the reserve is adjusted as necessary based on a review of historic warranty experience with respect to the applicable business or products, as well as the length and actual terms of the warranties. The product warranty reserve is included in current and long-term accrued liabilities on the balance sheet.

Warranty Reserve (in millions):	Three Months	
	2016	2015
Balance at beginning of year	\$ 17.1	\$ 18.5
Accruals for product warranties charged to expense	1.9	1.5
Cost of product warranty claims	(1.6)	(2.1)
Balance at end of period	\$ 17.4	\$ 17.9

Note 9. Income Taxes

The income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which the Company operates. However, losses in certain jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately.

The Company's effective income tax rate for the first quarter of 2016 was 28.9%. The Company's effective income tax rate for the first quarter 2015 was 29.8%. The first quarter of 2016 included net discrete income tax expense of \$0.1 million compared with net discrete income tax expense of \$0.2 million for the first quarter of 2015. Excluding net discrete income tax items in both periods, the effective tax rates would have been 28.8% for the first quarter of 2016 and 29.5% for the first quarter of 2015.

Table of Contents

Note 10. Long-Term Debt, Capital Lease and Letters of Credit

	Balance at	
	April 3, 2016	January 3, 2016
Long-Term Debt (in millions):		
\$750.0 million revolving credit facility due March 2018, weighted average rate of 1.70% at April 3, 2016 and 1.67% at January 3, 2016	99.0	150.5
Term loans due through March 2019, weighted average rate of 1.68% at April 3, 2016 and 1.55% at January 3, 2016	187.5	190.0
4.74% Senior Notes due September 2017*	100.0	100.0
2.61% Senior Notes due December 2019*	30.0	30.0
5.30% Senior Notes due September 2020*	75.0	75.0
2.81% Senior Notes due November 2020*	25.0	25.0
3.09% Senior Notes due December 2021*	95.0	95.0
3.28% Senior Notes due November 2022*	100.0	100.0
Total debt	711.5	765.5
Less: current portion of long-term debt	(11.3)	(10.0)
Total long-term debt	\$700.2	\$ 755.5

* Senior Notes are at a fixed rate of interest.

Available borrowing capacity under the \$750.0 million credit facility, which is reduced by borrowings and certain outstanding letters of credit, was \$640.5 million at April 3, 2016. The credit agreement requires the Company to comply with various financial and operating covenants and at April 3, 2016, the Company was in compliance with these covenants.

Teledyne estimates the fair value of its long-term debt based on debt of similar type, rating and maturity and at comparable interest rates. The Company's long-term debt is considered a level 2 fair value hierarchy and is valued based on observable market data. The estimated fair value of Teledyne's long-term debt at April 3, 2016 and January 3, 2016, approximated the carrying value.

At April 3, 2016, the Company had \$8.0 million in capital leases, of which \$1.1 million is current. At January 3, 2016, the Company had \$8.6 million in capital leases, of which \$1.2 million was current. At April 3, 2016, Teledyne had \$12.0 million in outstanding letters of credit.

Note 11. Lawsuits, Claims, Commitments, Contingencies and Related Matters

For a further description of the Company's commitments and contingencies, reference is made to Note 14 of the Company's financial statements as of and for the fiscal year ended January 3, 2016, included in our 2015 Form 10-K. At April 3, 2016, the Company's reserves for environmental remediation obligations totaled \$8.5 million, of which \$4.7 million is included in current accrued liabilities. The Company periodically evaluates whether it may be able to recover a portion of future costs for environmental liabilities from its insurance carriers and from third parties. The timing of expenditures depends on a number of factors that vary by site, including the nature and extent of contamination, the number of potentially responsible parties, the timing of regulatory approvals, the complexity of the investigation and remediation, and the standards for remediation. The Company expects that it will expend present accruals over many years and will complete remediation of all sites with which it has been identified in up to 30 years. A number of other lawsuits, claims and proceedings have been or may be asserted against the Company, including those pertaining to product liability, acquisitions, patent infringement, contracts, environmental, employment and employee benefits matters. While the outcome of litigation cannot be predicted with certainty, and some of these lawsuits, claims or proceedings may be determined adversely to the Company, management does not believe that the disposition of any such pending matters is likely to have a material adverse effect on the Company's financial statements.

Table of Contents

Note 12. Pension Plans and Postretirement Benefits

Teledyne's pension income was \$0.5 million for the first quarter of 2016, compared with pension income of \$0.2 million for the first quarter of 2015. In the first quarter of 2015, Teledyne froze its non-qualified pension plan for top executives which resulted in a one-time gain of \$1.2 million in the first quarter of 2015. For the domestic pension plan, the discount rate increased to 4.91 percent in 2016 compared with a 4.5 percent discount rate used in 2015. Pension expense allocated to contracts pursuant to U.S. Government Cost Accounting Standards ("CAS") was \$3.5 million for both the first quarters of 2016 and 2015, respectively. Pension expense determined under CAS can generally be recovered through the pricing of products and services sold to the U.S. Government. Teledyne did not make any cash pension contributions to its domestic pension plan in the first three months of 2016 or in 2015. No cash pension contributions are planned for 2016 for the domestic pension plan.

The Company sponsors several postretirement defined benefit plans that provide health care and life insurance benefits for certain eligible retirees.

	First Quarter	
	2016	2015
Net periodic pension benefit income - in millions:		
Service cost — benefits earned during the period	\$2.8	\$3.3
Interest cost on benefit obligation	10.1	9.9
Expected return on plan assets	(18.7)	(19.2)
Amortization of prior service cost	(1.5)	(1.5)
Amortization of net actuarial loss	6.8	8.5
Pension plan curtailment	—	(1.2)
Net periodic pension income	\$(0.5)	\$(0.2)
	First Quarter	
	2016	2015
Net periodic Postretirement Benefits expense - in millions:		
Interest cost on benefit obligation	\$0.1	\$0.1
Amortization of net actuarial gain	(0.1)	—
Net periodic postretirement expense	\$—	\$0.1

Note 13. Segment Information

Teledyne is a leading provider of sophisticated instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems. Our customers include government agencies, aerospace prime contractors, energy exploration and production companies, major industrial companies and airlines. The Company has four reportable segments: Instrumentation; Digital Imaging; Aerospace and Defense Electronics; and Engineered Systems.

Segment results include net sales and operating income by segment but excludes noncontrolling interest, equity income or loss, unusual non-recurring legal matter settlements, interest income and expense, gains and losses on the disposition of assets, sublease rental income and non-revenue licensing and royalty income, domestic and foreign income taxes and corporate office expenses. Corporate expense includes various administrative expenses relating to the corporate office and certain non-operating expenses not allocated to our segments.

Table of Contents

The following table presents Teledyne's segment disclosures.

(Dollars in millions)	First Quarter		% Change
	2016	2015	
Net sales(a):			
Instrumentation	\$223.7	\$270.3	(17.2)%
Digital Imaging	89.9	90.4	(0.6)%
Aerospace and Defense Electronics	152.6	141.2	8.1 %
Engineered Systems	64.3	63.1	1.9 %
Total net sales	\$530.5	\$565.0	(6.1)%
Operating income:			
Instrumentation	\$31.4	\$42.1	(25.4)%
Digital Imaging	8.2	9.3	(11.8)%
Aerospace and Defense Electronics	24.1	19.4	24.2 %
Engineered Systems	8.0	6.7	19.4 %
Corporate expense	(10.7)	(10.2)	4.9 %
Operating income	\$61.0	\$67.3	(9.4)%

(a) Net sales excludes inter-segment sales of \$5.1 million and \$4.9 million for the first quarter of 2016 and 2015, respectively.

Product Lines

The Instrumentation segment includes three product lines: Environmental Instrumentation, Marine Instrumentation and Test and Measurement Instrumentation. The Digital Imaging segment contains one product line as does the Aerospace and Defense Electronics segment. The Engineered Systems segment includes three product lines: Engineered Products and Services, Turbine Engines and Energy Systems.

The following tables provide a summary of the net sales by product line for the Instrumentation segment and the Engineered Systems segment (in millions):

	First Quarter	
	2016	2015
Instrumentation		
Marine Instrumentation	\$112.9	\$159.5
Environmental Instrumentation	68.7	67.7
Test and Measurement Instrumentation	42.1	43.1
Total	\$223.7	\$270.3

	First Quarter	
	2016	2015
Engineered Systems		
Engineered Products and Services	\$52.8	\$49.1
Turbine Engines	5.0	5.6
Energy Systems	6.5	8.4
Total	\$64.3	\$63.1

Note 14. Subsequent events

In the second quarter of 2016, Teledyne completed the acquisitions of two test and measurement instrumentation companies and one imaging software company for initial aggregate cash consideration of \$60.0 million. Also in the second quarter of 2016, Teledyne entered into an agreement to sell assets of Teledyne's printed circuit technology business for \$9.3 million in cash. The completion of the transaction, which is subject to certain conditions and approvals, is anticipated to occur in the second quarter of 2016.

Table of Contents

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Teledyne Technologies Incorporated provides enabling technologies for industrial growth markets. We have evolved from a company that was primarily focused on aerospace and defense to one that serves multiple markets that require advanced technology and high reliability. These markets include deepwater oil and gas exploration and production, oceanographic research, air and water quality environmental monitoring, factory automation and medical imaging. Our products include monitoring instrumentation for marine and environmental applications, harsh environment interconnects, electronic test and measurement equipment, digital imaging sensors and cameras, aircraft information management systems, and defense electronics and satellite communication subsystems. We also supply engineered systems for defense, space, environmental and energy applications. We differentiate ourselves from many of our direct competitors by having a customer and company sponsored applied research center that augments our product development expertise.

Strategy/Overview

Our strategy continues to emphasize growth in our core markets of instrumentation, digital imaging, aerospace and defense electronics and engineered systems. Our core markets are characterized by high barriers to entry and include specialized products and services not likely to be commoditized. We intend to strengthen and expand our core businesses with targeted acquisitions and through product development. We continue to focus on balanced and disciplined capital deployment among capital expenditures, acquisitions and share repurchases. We aggressively pursue operational excellence to continually improve our margins and earnings. At Teledyne, operational excellence includes the rapid integration of the businesses we acquire. Using complementary technology across our businesses and internal research and development, we seek to create new products to grow our company and expand our addressable markets. We continue to evaluate our businesses to ensure that they are aligned with our strategy.

Our Recent Acquisitions

In the first quarter of 2016, Teledyne did not make any acquisitions, however, in the second quarter of 2016, Teledyne made three acquisitions for an aggregate purchase price of approximately \$60.0 million. Teledyne spent \$66.7 million on acquisitions and other investments in 2015, of which \$18.8 million was spent in the first quarter of 2015.

In June 2015, Teledyne DALSA BV, a Netherlands-based subsidiary, acquired Industrial Control Machines SA (“ICM”). In April 2015, Teledyne DALSA, Inc. acquired the remaining 49% noncontrolling interest in the parent company of Optech Incorporated (“Optech”). On February 2015, Teledyne acquired Bowtech Products Limited (“Bowtech”) through a U.K.-based subsidiary. Also in 2015, Teledyne made an additional investment in Ocean Aero, Inc. (“Ocean Aero”).

Teledyne funded the purchases from borrowings under its credit facility and cash on hand. The results of the acquisitions have been included in Teledyne’s results since the dates of the respective acquisition.

For a further description of the Company’s acquisition activity for the fiscal year ended January 3, 2016, please refer to Note 3 of our 2015 Annual Report on Form 10-K (“2015 Form 10-K”).

Results of Operations

(in millions)	First Quarter	
	2016	2015
Net sales	\$530.5	\$565.0
Costs and expenses		
Cost of sales	324.8	345.9
Selling, general and administrative expenses	144.7	151.8
Total costs and expenses	469.5	497.7
Operating income	61.0	67.3
Interest expense, net	(5.7)	(5.9)
Other income (expense), net	(1.3)	0.8
Income before income taxes	54.0	62.2
Provision for income taxes	15.6	18.5
Net income attributable to Teledyne	\$38.4	\$43.7

Table of Contents

(Dollars in millions)	First Quarter		%
	2016	2015	Change
Net sales(a):			
Instrumentation	\$223.7	\$270.3	(17.2)%
Digital Imaging	89.9	90.4	(0.6)%
Aerospace and Defense Electronics	152.6	141.2	8.1 %
Engineered Systems	64.3	63.1	1.9 %
Total net sales	\$530.5	\$565.0	(6.1)%
Operating income:			
Instrumentation	\$31.4	\$42.1	(25.4)%
Digital Imaging	8.2	9.3	(11.8)%
Aerospace and Defense Electronics	24.1	19.4	24.2 %
Engineered Systems	8.0	6.7	19.4 %
Corporate expense	(10.7)	(10.2)	4.9 %
Total operating income	\$61.0	\$67.3	(9.4)%

(a) Net sales excludes inter-segment sales of \$5.1 million and \$4.9 million for the first quarter of 2016 and 2015, respectively.

The table below presents sales and cost of sales by segment and total company:

(Dollars in millions)	First Quarter		
	2016	2015	
Instrumentation			
Sales	\$223.7	\$270.3	
Cost of sales	\$121.2	\$149.7	
Cost of sales % of sales	54.2 %	55.4 %	
Digital Imaging			
Sales	\$89.9	\$90.4	
Cost of sales	\$55.9	\$55.2	
Cost of sales % of sales	62.2 %	61.1 %	
Aerospace and Defense Electronics			
Sales	\$152.6	\$141.2	
Cost of Sales	\$96.6	\$90.2	
Cost of sales % of sales	63.3 %	63.9 %	
Engineered Systems			
Sales	\$64.3	\$63.1	
Costs of sales	\$51.1	\$50.8	
Cost of sales % of sales	79.5 %	80.5 %	
Total Company			
Sales	\$530.5	\$565.0	
Costs of sales	\$324.8	\$345.9	
Cost of sales % of sales	61.2 %	61.2 %	

Table of Contents

First quarter of 2016 compared with the first quarter of 2015

Our first quarter 2016 sales were \$530.5 million, compared with sales of \$565.0 million for the first quarter of 2015, a decrease of 6.1%. Net income attributable to Teledyne was \$38.4 million (\$1.10 per diluted share) for the first quarter of 2016, compared with \$43.7 million (\$1.20 per diluted share) for the first quarter of 2015, a decrease of 12.1%.

Sales

The first quarter of 2016, compared with the first quarter of 2015, reflected lower sales in Instrumentation and Digital Imaging segments, partially offset by higher sales in the Aerospace and Defense and Electronics and Engineered Systems segments. First quarter 2015 sales included \$2.4 million from recent acquisitions.

Cost of Sales

Cost of sales decreased by \$21.1 million in the first quarter of 2016, compared with the first quarter of 2015, which primarily reflected the impact of lower sales. Cost of sales as a percentage of sales for the first quarter of 2016 remained at 61.2%.

Certain contracts are accounted for under the percentage of completion (“POC”) method and related contract cost and revenue estimates for significant contracts are reviewed and reassessed quarterly. The aggregate effects of these changes in estimates on contracts accounted for under the POC accounting method, in the first quarter of 2016 and 2015, were \$6.7 million and \$4.4 million of favorable operating income and \$7.6 million and \$6.4 million of unfavorable operating income, respectively. None of the effects of changes in estimates on any individual contract were material to the condensed consolidated statements of income for any period presented.

Selling, general and administrative expenses

Selling, general and administrative expenses, including research and development and bid and proposal expense, decreased by \$7.1 million in the first quarter of 2016, compared with the first quarter of 2015, and primarily reflected the impact of lower sales. Selling, general and administrative expenses for the first quarter of 2016, as a percentage of sales increased slightly to 27.3% compared with 26.9% for the first quarter of 2015. Corporate expense was \$10.7 million for the first quarter of 2016, compared with \$10.2 million for the first quarter of 2015. In the first quarter of 2016 and 2015, we recorded a total of \$3.3 million and \$3.8 million, respectively, in stock option compensation expense. The lower amount in 2016 primarily reflected the absence of stock option grants in 2015. Employee stock option grants are expensed evenly over the three year vesting period.

Pension Income/Expense

The first quarter of 2016 included pension income of \$0.5 million, compared with pension income of \$0.2 million in the first quarter of 2015. In the first quarter of 2015, Teledyne froze the non-qualified pension plan for top executives which resulted in a one-time gain of \$1.2 million in the first quarter of 2015. For 2016, the discount rate to determine the benefit obligation for the domestic plan was 4.91 percent compared with 4.5 percent in 2015. Pension expense allocated to contracts pursuant to U.S. Government Cost Accounting Standards (“CAS”) was \$3.5 million in both the first quarter of 2016 and the first quarter of 2015. Pension expense determined allowable under CAS can generally be recovered through the pricing of products and services sold to the U.S. Government.

Operating Income

Operating income was \$61.0 million for the first quarter of 2016, compared with \$67.3 million for the first quarter of 2015, a decrease of 9.4%. The first quarter of 2016, compared with the first quarter of 2015, reflected lower operating income in the Instrumentation and Digital Imaging segments, partially offset by higher operating income in the Aerospace and Defense Electronics and Engineered Systems segments.

Interest Expense and Other Income

Interest expense, net of interest income, was \$5.7 million for the first quarter of 2016, compared with \$5.9 million for the first quarter of 2015. Other income and expense was expense of \$1.3 million for the first quarter of 2016, compared with expense of \$0.8 million for the first quarter of 2015. The change in other income and expense primarily reflected the impact of exchange rate changes.

Table of Contents

Income Taxes

The income tax provision is calculated using an estimated annual effective tax rate, based upon estimates of annual income, permanent items, statutory tax rates and planned tax strategies in the various jurisdictions in which we operate except that certain loss jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately. The Company's effective income tax rate for the first quarter of 2016 was 28.9% compared with 29.8% for the first quarter of 2015.

The first quarter of 2016 reflected \$0.1 million in net discrete income tax expense. The first quarter of 2015 reflected \$0.2 million in net discrete income tax expense. Excluding the net discrete income tax expense in both quarters, the effective tax rates would have been 28.8% for first quarter of 2016 and 29.5% for the first quarter of 2015. The Company's effective tax rate for fiscal year 2016 is expected to be 28.8%, based on the projected mix of earnings before tax by jurisdiction, excluding the impact of any matters that would be treated as discrete.

Segment Results

Segment results include net sales and operating income by segment but excludes noncontrolling interest, equity income or loss, unusual non-recurring legal matter settlements, interest income and expense, gains and losses on the disposition of assets, sublease rental income and non-revenue licensing and royalty income, domestic and foreign income taxes and corporate office expenses. See Note 13 to these condensed consolidated financial statements for additional segment information.

Instrumentation

(Dollars in millions)	First Quarter	
	2016	2015
Sales	\$223.7	\$270.3
Cost of sales	\$121.2	\$149.7
Selling, general and administrative expenses	\$71.1	\$78.5
Operating income	\$31.4	\$42.1
Cost of sales % of sales	54.2	% 55.4
Selling, general and administrative expenses % of sales	31.8	% 29.0
Operating income % of sales	14.0	% 15.6

First quarter of 2016 compared with the first quarter of 2015

The Instrumentation segment's first quarter 2016 sales were \$223.7 million, compared with \$270.3 million in the first quarter of 2015, a decrease of 17.2%. Operating income for the first quarter of 2016 was \$31.4 million, compared with operating income of \$42.1 million in the first quarter of 2015, a decrease of 25.4%.

The first quarter 2016 sales decrease resulted from lower sales of marine instrumentation. Sales for marine instrumentation decreased by \$46.6 million and primarily reflected lower sales of interconnect systems and other marine sensors for energy exploration and production, partially offset by higher sales of interconnects and marine systems for U.S. Government applications. Sales of electronic test and measurement instrumentation decreased \$1.0 million and sales of environmental instrumentation increased \$1.0 million.

The decrease in operating income primarily reflected the impact of lower sales and lower margins for marine instrumentation. The first quarter of 2016 reflected \$0.7 million in higher severance costs compared with the first quarter of 2015.

First quarter 2016 cost of sales decreased by \$28.5 million, compared with the first quarter of 2015, and primarily reflected the impact of lower sales. The cost of sales percentage decreased to 54.2% from 55.4%. First quarter 2016 selling, general and administrative expenses, including research and development and bid and proposal expense, decreased by \$7.4 million, compared with the first quarter of 2015, and reflected the impact of lower sales. The selling, general and administrative expense percentage increased to 31.8% in the first quarter of 2016 from 29.0% in the first quarter of 2015 as selling expense did not decrease in-line with the sales decrease.

Table of Contents

Digital Imaging

(Dollars in millions)	First Quarter	
	2016	2015
Sales	\$89.9	\$90.4
Cost of sales	\$55.9	\$55.2
Selling, general and administrative expenses	\$25.8	\$25.9
Operating income	\$8.2	\$9.3
Cost of sales % of sales	62.2 %	61.1 %
Selling, general and administrative expenses % of sales	28.7 %	28.6 %
Operating income % of sales	9.1 %	10.3 %

First quarter of 2016 compared with the first quarter of 2015

The Digital Imaging segment's first quarter 2016 sales were \$89.9 million, compared with \$90.4 million in the first quarter of 2015, a decrease of 0.6%. Operating income was \$8.2 million for the first quarter of 2016, compared with operating income of \$9.3 million in the first quarter of 2015, a decrease of 11.8%.

The first quarter 2016 sales reflected lower sales of laser-based mapping systems and infrared imaging sensors for the U.S. Government, partially offset by higher sales of commercial digital imaging systems, including sensors and systems for life sciences and industrial X-ray applications. The first quarter 2016 sales included \$2.3 million in incremental sales from a recent acquisition. The decrease in operating income in 2016 reflected slightly lower sales and product mix differences.

First quarter 2016 cost of sales increased by \$0.7 million, compared with the first quarter of 2015 and reflected the impact of product mix differences. The cost of sales percentage in 2016 increased to 62.2% in the first quarter of 2016, compared with 61.1% for the first quarter of 2015 and reflected product mix differences. Selling, general and administrative expenses, including research and development and bid and proposal expense, decreased to \$25.8 million in 2016, from \$25.9 million in 2015. The selling, general and administrative expense percentage increased slightly to 28.7% in the first quarter of 2016 from 28.6% in the first quarter of 2015.

Aerospace and Defense Electronics

(Dollars in millions)	First Quarter	
	2016	2015
Sales	\$152.6	\$141.2
Cost of sales	\$96.6	\$90.2
Selling, general and administrative expenses	\$31.9	\$31.6
Operating income	\$24.1	\$19.4
Cost of sales % of sales	63.3 %	63.9 %
Selling, general and administrative expenses % of sales	20.9 %	22.4 %
Operating income % of sales	15.8 %	13.7 %

First quarter of 2016 compared with the first quarter of 2015

The Aerospace and Defense Electronics segment's first quarter 2016 sales were \$152.6 million, compared with \$141.2 million in the first quarter of 2015, an increase of 8.1%. Operating income was \$24.1 million for the first quarter of 2016, compared with operating income of \$19.4 million in the first quarter of 2015, an increase of 24.2%.

The first quarter 2016 sales reflected higher net sales of \$6.9 million from avionics products and electronic relays, higher sales of \$2.4 million from electronic manufacturing services products and \$2.1 million of microwave and interconnect systems. Operating income in the first quarter of 2016 reflected the impact of higher sales and improved margins for both avionics products and electronic relays and electronic manufacturing services products.

First quarter 2016 cost of sales increased by \$6.4 million, compared with the first quarter of 2015 and reflected the impact of higher sales. Cost of sales as a percentage of sales for the first quarter of 2016 decreased to 63.3% from 63.9% in the first quarter of 2015. Selling, general and administrative expenses, including research and development and bid and proposal expense increased slightly to \$31.9 million in the first quarter of 2016, compared with the \$31.6 million in the first quarter of 2015 and reflected higher selling, general and administrative expenses partially offset by research and development expense. The selling, general and administrative expense percentage decreased to 20.9% in

the first quarter of 2016, compared with 22.4% in the first quarter of 2015 and reflected the impact of lower research and development spending.

21

Table of Contents

Engineered Systems

(Dollars in millions)	First Quarter	
	2016	2015
Sales	\$64.3	\$63.1
Cost of sales	\$51.1	\$50.8
Selling, general and administrative expenses	\$5.2	\$5.6
Operating income	\$8.0	\$6.7
Cost of sales % of sales	79.5 %	80.5 %
Selling, general and administrative expenses % of sales	8.1 %	8.9 %
Operating income % of sales	12.4 %	10.6 %

First quarter of 2016 compared with the first quarter of 2015

The Engineered Systems segment's first quarter 2016 sales were \$64.3 million, compared with \$63.1 million in the first quarter of 2015, an increase of 1.9%. Operating income was \$8.0 million for the first quarter 2016, compared with operating income of \$6.7 million in the first quarter of 2015, an increase of 19.4%.

The first quarter 2016 sales reflected higher sales of engineered products and services of \$3.7 million, partially offset by lower sales of energy systems products of \$1.9 million and lower turbine engine sales of \$0.6 million. The higher sales of engineered products and services primarily resulted from increased sales of nuclear and environmental programs. Operating income in the first quarter of 2016 reflected the impact of higher sales and higher pension income of \$0.6 million.

First quarter 2016 cost of sales increased by \$0.3 million, compared with the first quarter of 2015. Cost of sales as a percentage of sales for the first quarter of 2016 decreased to 79.5% from 80.5% in the first quarter of 2015 and reflected product mix differences, partially offset by higher pension income. Selling, general and administrative expenses, including research and development and bid and proposal expense, decreased to \$5.2 million for the first quarter of 2016, compared with \$5.6 million for the first quarter of 2015. The selling, general and administrative expense percentage decreased to 8.1% for the first quarter of 2016 compared with 8.9% for the first quarter of 2015.

Financial Condition, Liquidity and Capital Resources
Our net cash provided by operating activities was \$69.1 million for the first three months of 2016, compared with net cash provided by operating activities of \$16.7 million for the first three months of 2015. The higher cash provided by operating activities in the first three months of 2016 reflected lower annual bonus and regular payroll payments and lower income tax payments, partially offset by lower net income. The first quarter of 2015 amount included payments of legal matters.

Our net cash used by investing activities was \$14.5 million for the first three months of 2016, compared with net cash used by investing activities of \$26.2 million for the first three months of 2015. The 2015 amount includes \$18.8 million for acquisitions. See "Our Recent Acquisitions" section of this Management's Discussion and Analysis for additional information on acquisitions. Capital expenditures for the first three months of 2016 and 2015 were \$14.2 million and \$7.7 million, respectively. In the second quarter of 2016, Teledyne completed the acquisitions of two test and measurement instrumentation companies and one imaging software company for initial aggregate cash consideration of \$60.0 million. Also in the second quarter of 2016, Teledyne entered into an agreement to sell assets of Teledyne's printed circuit technology business for \$9.3 million in cash. The completion of the transaction, which is subject to certain conditions and approvals, is anticipated to occur in the second quarter of 2016.

Our goodwill was \$1,151.9 million at April 3, 2016 and \$1,140.2 million at January 3, 2016. The increase in the balance of goodwill in 2016 resulted from the impact of exchange rate changes. Teledyne's net acquired intangible assets were \$240.0 million at April 3, 2016 and \$243.3 million at January 3, 2016. The decrease in the balance of acquired intangible assets in 2016 primarily resulted from amortization, partially offset by the impact of exchange rate changes.

Financing activities used cash of \$59.2 million for the first three months of 2016, compared with cash used by financing activities of \$13.7 million for the first three months of 2015. Financing activities for the first three months of

2016 reflected net payments on debt of \$62.3 million while the first three months of 2015 included net proceeds from debt of \$127.1 million. Proceeds from the exercise of stock options were \$2.6 million and \$2.7 million for the first three months of 2016 and 2015, respectively. In February 2015, the Company entered into a \$142.0 million accelerated share repurchase (“ASR”) agreement. Pursuant to the ASR agreement, in February 2015, the Company advanced \$142.0 million to the ASR counterparty and received 1,425,000 shares of common stock, which used \$134.9 million of the \$142.0 million advanced, representing 95% of the estimated shares to be repurchased under the ASR agreement. On January 26, 2016, Teledyne’s Board of Directors authorized

Table of Contents

a stock repurchase program for up to an additional 3,000,000 shares of Teledyne common stock. No repurchases have been made under this authorization in 2016.

Our principal cash and capital requirements are to fund working capital needs, capital expenditures, income tax payments, pension contributions, debt service requirements and the stock repurchase program, as well as acquisitions. It is anticipated that operating cash flow, together with available borrowings under the credit facility described below, will be sufficient to meet these requirements over the next twelve months. We may raise other forms of debt capital, depending on financial, market and economic conditions. We may need to raise additional capital to support acquisitions. We currently expect to spend up to \$60.0 million for capital expenditures in 2016, of which \$14.2 million has been spent in the first three months of 2016. No cash pension contributions are planned for 2016 for the domestic pension plan.

Total debt, including capital lease obligations, at April 3, 2016 was \$719.5 million, which includes \$99.0 million outstanding under the \$750.0 million credit facility. At April 3, 2016, Teledyne had \$12.0 million in outstanding letters of credit. Available borrowing capacity under the \$750.0 million credit facility, which is reduced by borrowings and certain outstanding letters of credit, was \$640.5 million at April 3, 2016. The credit agreements require the Company to comply with various financial and operating covenants and at April 3, 2016, the Company was in compliance with these covenants.

As of April 3, 2016, the Company had a significant amount of margin between required financial covenant ratios and our actual ratios. At April 3, 2016, the required financial ratios and the actual ratios were as follows:

\$750.0 million Credit Facility expires December 2020 and \$187.5 million term loans due through March 2019 (issued in October 2012)

Financial Covenants	Requirement	Actual Measure
Consolidated Leverage Ratio (Net Debt/EBITDA) (a)	No more than 3.25 to 1	2.0 to 1
Consolidated Interest Coverage Ratio (EBITDA/Interest) (b)	No less than 3.0 to 1	15.6 to 1

\$425.0 million Private Placement Senior Notes due from 2017 to 2022

Financial Covenants	Requirement	Actual Measure
Consolidated Leverage Ratio (Net Debt/EBITDA) (a)	No more than 3.25 to 1	2.0 to 1
Consolidated Interest Coverage Ratio (EBITDA/Interest) (b)	No less than 3.0 to 1	15.6 to 1

a) The Consolidated Leverage Ratio is equal to Net Debt/EBITDA as defined in our private placement note purchase agreement and our \$750.0 million credit agreement.

b) The Consolidated Interest Coverage Ratio is equal to EBITDA/Interest as defined in our private placement note purchase agreement and our \$750.0 million credit agreement.

Our liquidity is not dependent upon the use of off-balance sheet financial arrangements. We have no off-balance sheet financing arrangements that incorporate the use of special purpose entities or unconsolidated entities.

Critical Accounting Policies

Our critical accounting policies are those that are reflective of significant judgments and uncertainties, and may potentially result in materially different results under different assumptions and conditions. Our critical accounting policies are the following: revenue recognition; accounting for pension plans; accounting for business combinations, goodwill, acquired intangible assets and other long-lived assets; and accounting for income taxes.

For additional discussion of the application of the other critical accounting policies and other accounting policies, see Note 1 to these condensed consolidated financial statements and also Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Note 2 of the Notes to Consolidated Financial Statements included in Teledyne's 2015 Form 10-K.

Safe Harbor Cautionary Statement Regarding Forward-Looking Information

From time to time we make, and this report contains, forward looking statements, as defined in the Private Securities Litigation Reform Act of 1995, relating to earnings, growth opportunities, acquisitions and divestitures, product sales, note issuances, capital expenditures, pension matters, stock option compensation expense, the credit facility, interest expense, severance and relocation and facility consolidation costs, environmental remediation costs, stock repurchases, taxes, exchange rates and strategic plans. Forward-looking statements are generally accompanied by

words such as “estimate”, “project”, “predict”, “believes” or “expect”, that convey the uncertainty of future events or outcomes. All statements made in this Management’s Discussion and Analysis of Financial Condition and Results of Operations and in other sections of this Form 10-Q that are not historical in nature should be considered forward-looking.

Table of Contents

Actual results could differ materially from these forward-looking statements. Many factors could change the anticipated results, including: disruptions in the global economy; changes in demand for products sold to the defense electronics, instrumentation, digital imaging, energy exploration and production, commercial aviation, semiconductor and communications markets; funding, continuation and award of government programs; cuts to defense spending resulting from existing and future deficit reduction measures; and threats to the security of our confidential and proprietary information, including cyber security threats. Lower oil and natural gas prices, as well as instability in the Middle East or other oil producing regions, and new regulations or restrictions relating to energy production, including with respect to hydraulic fracturing, could negatively affect the Company's businesses that supply the oil and gas industry. Increasing fuel costs could negatively affect the markets of our commercial aviation businesses. In addition, financial market fluctuations affect the value of the Company's pension assets. Changes in the policies of U.S. and foreign governments, could result, over time, in reductions and realignment in defense or other government spending and further changes in programs in which the company participates.

While the company's growth strategy includes possible acquisitions, we cannot provide any assurance as to when, if or on what terms any acquisitions will be made. Acquisitions involve various inherent risks, such as, among others, our ability to integrate acquired businesses, retain customers and achieve identified financial and operating synergies. There are additional risks associated with acquiring, owning and operating businesses outside of the United States, including those arising from U.S. and foreign government policy changes or actions and exchange rate fluctuations. While we believe our internal and disclosure control systems are effective, there are inherent limitations in all control systems, and misstatements due to error or fraud may occur and not be detected.

Readers are urged to read our periodic reports filed with the Securities and Exchange Commission for a more complete description of our Company, its businesses, its strategies and the various risks that we face. Various risks are identified in Teledyne's 2015 Form 10-K and this Form 10-Q.

We assume no duty to publicly update or revise any forward-looking statements, whether as a result of new information or otherwise.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Except as set forth below, there were no material changes to the information provided under "Item 7A, Quantitative and Qualitative Disclosure About Market Risk" included in our 2015 Form 10-K.

Market Risk

We are exposed to various market risks, including changes in foreign currency exchange rates and interest rates. Foreign currency forward contracts are used primarily to hedge anticipated exposures. We do not enter into derivatives or other financial instruments for trading or speculative purposes.

Foreign Currency Exchange Rate Risk

Notwithstanding our efforts to mitigate portions of our foreign currency exchange rate risks, there can be no assurance that our hedging activities will adequately protect us against the risks associated with foreign currency fluctuations. A hypothetical 10 percent price change in the U.S. dollar from its value at April 3, 2016 would result in a decrease or increase in the fair value of our foreign currency forward contracts designated as cash flow hedges to buy Canadian dollars and to sell U.S. dollars by approximately \$7.3 million. For additional information please see Derivative Instruments discussed in Note 4 to these condensed consolidated financial statements.

Interest Rate Exposure

We are exposed to market risk through the interest rate on our borrowings under our \$750.0 million credit facility and our \$187.5 million in term loans. Borrowings under our credit facility and our term loans are at variable rates which are, at our option, tied to a Eurocurrency rate equal to LIBOR (London Interbank Offered Rate) plus an applicable rate or a base rate as defined in our credit agreement. Eurocurrency rate loans may be denominated in U.S. dollars or an alternative currency as defined in the agreement. Eurocurrency or LIBOR based loans under the facility typically have terms of one, two, three or nine months and the interest rate for each such loan is subject to change if the loan is continued or converted following the applicable maturity date. The Company has not drawn any loans with a term longer than three months under the credit facility. Base rate loans have interest rates that primarily fluctuate with changes in the prime rate. Interest rates are also subject to change based on our consolidated leverage ratio as defined in the credit agreement. As of April 3, 2016, we had \$286.5 million in outstanding indebtedness under our credit

facility and term loans. A 100 basis point increase in interest rates would result in an increase in annual interest expense of approximately \$2.9 million, assuming the \$286.5 million in debt was outstanding for the full year.

Table of Contents

Item 4. Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed in reports that we file or submit under the Securities Exchange Act of 1934, are recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and to provide reasonable assurance that information required to be disclosed by us in such reports is accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Our Chairman, President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer, with the participation and assistance of other members of management, have reviewed the effectiveness of our disclosure controls and procedures and have concluded that the disclosure controls and procedures, as of April 3, 2016, are effective at the reasonable assurance level.

In connection with our evaluation during the quarterly period ended April 3, 2016, we have made no changes in our internal controls over financial reporting that have materially affected or are reasonably likely to materially affect our internal controls over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings

See Item 1 of Part 1, "Financial Statements -- Note 11 -- Lawsuits, Claims, Commitments, Contingencies and Related Matters."

Item 1A. Risk Factors

There are no material changes to the risk factors previously disclosed in our 2015 Form 10-K in response to Item 1A to Part 1 of Form 10-K. See also Part I Item 3, Quantitative and Qualitative Disclosures About Market Risk, for updated disclosures about interest rate exposure and exchange rate risks.

Item 2. Unregistered sales of equity securities and use of proceeds

On January 26, 2016, the Company's Board of Directors authorized an additional stock repurchase program authorizing the Company to repurchase up to an additional 3,000,000 shares of its common stock. On February 19, 2016, a November 2015 accelerated share repurchase agreement was settled and Teledyne received 135,374 shares of common stock.

Fiscal Month 2016	Total number of shares purchased	Average price paid per share*	Total number of shares purchased as part of publicly announce plans or programs	Maximum number of shares that may be purchased under the plans or programs
January 4 - February 7	—	—	—	3,396,626
February 8 - March 6	135,374	\$ 85.17	135,374	3,261,252
March 7 - April 3	—	—	—	3,261,252
	135,374	\$ 85.17	135,374	

* Represents the average price paid per share for the November 2015 accelerated stock repurchase program.

Table of Contents

Item 6. Exhibits

(a) Exhibits

Exhibit 31.1	302 Certification – Robert Mehrabian
Exhibit 31.2	302 Certification – Susan L. Main
Exhibit 32.1	906 Certification – Robert Mehrabian
Exhibit 32.2	906 Certification – Susan L. Main
Exhibit 101 (INS)	XBRL Instance Document
Exhibit 101 (SCH)	XBRL Schema Document
Exhibit 101 (CAL)	XBRL Calculation Linkbase Document
Exhibit 101 (LAB)	XBRL Label Linkbase Document XBRL Schema Document
Exhibit 101 (PRE)	XBRL Presentation Linkbase Document XBRL Schema Document
Exhibit 101 (DEF)	XBRL Definition Linkbase Document XBRL Schema Document

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

TELEDYNE TECHNOLOGIES INCORPORATED

DATE: May 6, 2016 By: /s/ Susan L. Main

Susan L. Main, Senior Vice President and

Chief Financial Officer

(Principal Financial Officer and Authorized Officer)

Table of Contents

Teledyne Technologies Incorporated

Index to Exhibits

Exhibit Number Description

Exhibit 31.1 302 Certification – Robert Mehrabian

Exhibit 31.2 302 Certification – Susan L. Main

Exhibit 32.1 906 Certification – Robert Mehrabian

Exhibit 32.2 906 Certification – Susan L. Main

Exhibit 101 (INS) XBRL Instance Document

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