

THORATEC CORP
Form 10-Q
May 14, 2009

Table of Contents

**U.S. SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q**

(Mark one)

**Quarterly report pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934
For the quarterly period ended April 4, 2009**

or

**Transition report pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934
For the transition period from _____ to _____**

COMMISSION FILE NUMBER: 000-49798

THORATEC CORPORATION

(Exact name of registrant as specified in its charter)

California

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

94-2340464

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

**6035 Stoneridge Drive, Pleasanton, California
(Address of principal executive offices)**

94588

(Zip Code)

(925) 847-8600

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act):

Yes No

As of May 2, 2009, the registrant had 56,463,601 shares of common stock outstanding.

THORATEC CORPORATION
TABLE OF CONTENTS

| | |
|--|----|
| <u>Part I. Financial Information</u> | 3 |
| <u>Item 1. Condensed Consolidated Financial Statements (unaudited)</u> | 3 |
| <u>Condensed Consolidated Balance Sheets as of April 4, 2009 and January 3, 2009</u> | 3 |
| <u>Condensed Consolidated Statements of Operations for the Three Months Ended April 4, 2009 and March 29, 2008</u> | 4 |
| <u>Condensed Consolidated Statements of Shareholders' Equity for the Three Months Ended April 4, 2009 and March 29, 2008</u> | 5 |
| <u>Condensed Consolidated Statements of Cash Flows for the Three Months Ended April 4, 2009 and March 29, 2008</u> | 6 |
| <u>Notes to Condensed Consolidated Financial Statements</u> | 7 |
| <u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u> | 26 |
| <u>Item 3. Quantitative and Qualitative Disclosure of Market Risk</u> | 40 |
| <u>Item 4. Controls and Procedures</u> | 41 |
| <u>Part II. Other Information</u> | 42 |
| <u>Item 1A. Risk Factors</u> | 42 |
| <u>Item 2. Unregistered Sale of Equity Securities and Use of Proceeds</u> | 42 |
| <u>Item 6. Exhibits</u> | 43 |
| <u>Signatures</u> | 44 |
| Exhibits | |
| <u>EX-10.34</u> | |
| <u>EX-10.35</u> | |
| <u>EX-31.1</u> | |
| <u>EX-31.2</u> | |
| <u>EX-32.1</u> | |
| <u>EX-32.2</u> | |

Thoratec, the Thoratec logo, Thoralon, HeartMate, and HeartMate II are registered trademarks of Thoratec Corporation, and IVAD is a trademark of Thoratec Corporation.

CentriMag is a registered trademark of Levitronix LLC.

ITC, A-VOX Systems, AVOXimeter, HEMOCHRON, ProTime, Surgicutt, Tenderlett, Tenderfoot, and IRMA are registered trademarks of International Technidyne Corporation, Thoratec Corporation's wholly-owned subsidiary.

Table of Contents**PART I. FINANCIAL INFORMATION****ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS****THORATEC CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS****(unaudited)
(in thousands)**

| | April 4, 2009 | January 3, 2009 As adjusted (1) |
|--|--------------------------|---|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 115,374 | \$ 107,053 |
| Restricted cash and cash equivalents | 20,000 | |
| Short-term available-for-sale investments | 109,505 | 141,598 |
| Receivables, net of allowances of \$1,054 and \$947, respectively | 59,476 | 55,065 |
| Inventories | 65,644 | 61,373 |
| Deferred tax assets | 8,397 | 8,397 |
| Prepaid expenses and other assets | 8,051 | 6,917 |
| Total current assets | 386,447 | 380,403 |
| Property, plant and equipment, net | 51,244 | 50,138 |
| Goodwill | 99,287 | 99,287 |
| Purchased intangible assets, net | 105,652 | 108,584 |
| Long-term available-for-sale investments | 29,928 | 29,959 |
| Other long-term assets | 16,045 | 15,716 |
| Total Assets | \$ 688,603 | \$ 684,087 |
| LIABILITIES AND SHAREHOLDERS EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 14,580 | \$ 10,563 |
| Accrued compensation | 12,639 | 25,550 |
| Other accrued liabilities | 15,982 | 12,410 |
| Total current liabilities | 43,201 | 48,523 |
| Senior subordinated convertible notes | 126,025 | 124,115 |
| Long-term deferred tax liability | 37,127 | 38,842 |
| Other | 7,092 | 6,328 |
| Total Liabilities | 213,445 | 217,808 |
| Shareholders equity: | | |
| Common shares: no par, authorized 100,000; issued and outstanding 56,367 and 56,395 as of April 4, 2009 and January 3, 2009, respectively | | |
| Additional paid-in capital | 533,832 | 528,657 |
| Accumulated deficit | (52,881) | (56,634) |

| | | |
|---|------------|------------|
| Accumulated other comprehensive income (loss): | | |
| Unrealized gain (loss) on investments | (3,433) | (3,337) |
| Cumulative translation adjustments | (2,360) | (2,407) |
| Total accumulated other comprehensive income (loss) | (5,793) | (5,744) |
| Total Shareholders' Equity | 475,158 | 466,279 |
| Total Liabilities and Shareholders' Equity | \$ 688,603 | \$ 684,087 |

See notes to condensed consolidated financial statements.

- (1) Adjusted for the retrospective adoption of Financial Accounting Standards Board (FASB) Staff Position (FSP) No. APB 14-1, *Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement)*. See Note 13 Long-Term Debt.

Table of Contents

THORATEC CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)
(in thousands, except per share data)

| | Three Months Ended | |
|---|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | | As adjusted(1) |
| Product sales | \$ 89,466 | \$ 64,427 |
| Cost of product sales | 35,439 | 28,590 |
| Gross profit | 54,027 | 35,837 |
| Operating expenses: | | |
| Selling, general and administrative | 27,455 | 20,636 |
| Research and development | 14,086 | 12,519 |
| Amortization of purchased intangible assets | 2,931 | 3,296 |
| Total operating expenses | 44,472 | 36,451 |
| Income (loss) from operations | 9,555 | (614) |
| Other income and (expense): | | |
| Interest expense and other | (2,866) | (2,587) |
| Interest income and other | 988 | 2,178 |
| Income (loss) before income taxes | 7,677 | (1,023) |
| Income tax (expense) benefit | (2,050) | 345 |
| Net income (loss) | \$ 5,627 | \$ (678) |
| Net income (loss) per share: | | |
| Basic | \$ 0.10 | \$ (0.01) |
| Diluted | \$ 0.10 | \$ (0.01) |
| Shares used to compute net income (loss) per share: | | |
| Basic | 56,384 | 54,222 |
| Diluted | 57,738 | 54,222 |

See notes to condensed consolidated financial statements.

(1) Adjusted for the retrospective adoption of FSP APB 14-1. See Note 13, Long-Term Debt.

Table of Contents

THORATEC CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY

| | Common | Additional | Accumulated | Accumulated | Total | Total |
|--|--------|--------------------|-------------|--|------------------------|-----------------------------------|
| | Shares | Paid-in Capital | Deficit | Other Comprehensive Income (Loss) (in thousands) | Shareholders Equity | Comprehensive Income (loss) |
| BALANCE, DECEMBER 29, 2007, as previously reported | 54,108 | \$ 458,383 | \$ (61,577) | \$ 1,223 | \$ 398,029 | |
| Retrospective application of FSP APB 14-1, net of taxes | | 28,462 | (12,682) | | 15,780 | |
| BALANCE, DECEMBER 29, 2007, as adjusted (1) | 54,108 | 486,845 | (74,259) | 1,223 | 413,809 | |
| Exercise of common stock options for cash | 15 | 147 | | | 147 | |
| Excess income tax deficiency on stock option exercises | (18) | (180) | | | (180) | |
| Repurchase and retirement of common shares, net | 358 | (534) | (434) | | (968) | |
| Share-based compensation | | 2,760 | | | 2,760 | |
| Comprehensive income (loss): | | | | | | |
| Unrealized loss on available-for-sale investments (net of taxes of \$1,835) | | | | (2,752) | (2,752) | (2,752) |
| Foreign currency translation adjustment | | | | 168 | 168 | 168 |
| Net loss (1) | | | (678) | | (678) | (678) |
| Total comprehensive income (loss) | | | | | | \$ (3,262) |
| BALANCE, MARCH 29, 2008 (1) | 54,463 | \$ 489,038 | \$ (75,371) | \$ (1,361) | \$ 412,306 | |
| BALANCE, JANUARY 3, 2009, as previously | 56,395 | \$ 500,195 | \$ (39,751) | \$ (5,744) | \$ 454,700 | |

Table of Contents

THORATEC CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

| | Three Months Ended | |
|--|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | | As adjusted (1) |
| Cash flows from operating activities: | | |
| Net income (loss) | \$ 5,627 | \$ (678) |
| Adjustments to reconcile net income (loss) to net cash provided by operating activities: | | |
| Depreciation and amortization | 5,537 | 5,715 |
| Investment premium amortization, net | 691 | 290 |
| Non-cash expenses, net | (47) | 289 |
| Non-cash interest on convertible subordinated debt | 2,763 | 2,603 |
| Tax benefit related to stock options | 1,119 | |
| Share-based compensation expense | 4,036 | 2,657 |
| Excess tax benefits from share-based compensation | (1,041) | (28) |
| Change in net deferred tax liability | (2,801) | (1,844) |
| Changes in assets and liabilities: | | |
| Receivables | (4,552) | 2,607 |
| Inventories | (4,264) | 993 |
| Prepaid expenses and other assets | (110) | (806) |
| Accounts payable and other liabilities | (7,103) | (1,829) |
| Accrued income taxes, net | 1,501 | (253) |
| Net cash provided by operating activities | 1,356 | 9,716 |
| Cash flows from investing activities: | | |
| Purchases of available-for-sale investments | | (42,120) |
| Sales of available-for-sale investments | 20,808 | 69,820 |
| Maturities of available-for-sale investments | 10,460 | 24,536 |
| Restricted cash and equivalents | (20,000) | |
| Purchases of property, plant and equipment | (3,646) | (1,583) |
| Net cash provided by investing activities | 7,622 | 50,653 |
| Cash flows from financing activities: | | |
| Excess income tax deficiency on stock option exercises | | (180) |
| Excess tax benefits from share-based compensation | 1,041 | 28 |
| Proceeds from stock option exercises | 1,033 | 147 |
| Repurchase and retirement of common shares | (2,894) | (966) |
| Net cash (used in) financing activities | (820) | (971) |
| Effect of exchange rate changes on cash and cash equivalents | 163 | 47 |
| Net increase in cash and cash equivalents | 8,321 | 59,445 |
| Cash and cash equivalents at beginning of period | 107,053 | 20,689 |

| | | |
|--|------------|-----------|
| Cash and cash equivalents at end of period | \$ 115,374 | \$ 80,134 |
| Supplemental disclosure of cash flow information: | | |
| Cash paid for taxes | \$ 2,180 | \$ 1,933 |
| Supplemental disclosure of non-cash investing and financing activities: | | |
| Transfers of equipment from inventory | \$ 41 | \$ 763 |

See notes to condensed consolidated financial statements.

- (1) Adjusted for the retrospective adoption of FSP APB 14-1. See Note 13, Long-Term Debt.

Table of Contents

THORATEC CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. Operations and Significant Accounting Policies

Basis of Presentation

The interim condensed consolidated financial statements of Thoratec Corporation (Thoratec or the Company) have been prepared and presented in accordance with accounting principles generally accepted in the United States of America and the rules and regulations of the Securities and Exchange Commission (SEC), without audit, and reflect all adjustments necessary (consisting only of normal recurring adjustments) to present fairly the Company s financial position, results of operations and cash flows. Certain information and footnote disclosures normally included in the Company s annual financial statements, prepared in accordance with accounting principles generally accepted in the United States of America, have been condensed or omitted. The accompanying financial statements should be read in conjunction with the Company s fiscal 2008 consolidated financial statements, and the accompanying notes thereto, filed with the SEC in the Company s Annual Report on Form 10-K (the 2008 Annual Report). The operating results for any interim period are not necessarily indicative of the results that may be expected for any future period. The financial statements of the prior periods presented in this Quarterly Report on Form 10-Q have been adjusted for the retrospective adoption of FSP APB 14-1 on January 4, 2009. See Note 13, Long-Term Debt to these condensed consolidated financial statements for further discussion.

The preparation of the Company s condensed consolidated financial statements necessarily requires the Company s management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the condensed consolidated balance sheet dates and the reported amounts of revenues and expenses for the periods presented.

Revenue Recognition and Product Warranty

The Company recognizes revenue from product sales of its Cardiovascular and ITC segments when evidence of an arrangement exists, title has passed (generally upon shipment) or services have been rendered, the selling price is fixed or determinable and collectibility is reasonably assured. Sales to distributors are recorded when title transfers upon shipment. One distributor has certain limited product return rights. Other distributors have certain rights of return upon termination of their distribution agreement. A reserve for sales returns is recorded for these customers applying reasonable estimates of product returns based upon significant historical experience in accordance with SFAS No. 48, *Revenue Recognition when Right of Return Exists*. No other direct sales customers or distributors have return rights.

Cardiovascular segment sales of certain products to first-time customers are recognized when it has been determined that the customer has the ability to use such products. These sales frequently include the sale of products and training services under multiple element arrangements. Training is not essential to the functionality of the products. Revenue under these arrangements is allocated to training at fair value, which is typically performed on behalf of the Company by third party providers. The balance of the revenue from the multiple arrangement is recorded to product sales.

Table of Contents

The majority of the Company's products are covered by up to a two-year limited manufacturer's warranty. Estimated contractual warranty obligations are recorded when related sales are recognized and any additional amounts are recorded when such costs are probable and can be reasonably estimated and are included in Cost of product sales. The change in accrued warranty expense is summarized in the following table:

| | Balance Beginning of Period | Cost of Warranty Claims | Accruals of Product Warranties | Balance End of Period |
|-----------------------------------|--|--|---|--------------------------------------|
| | (in thousands) | | | |
| Three months ended April 4, 2009 | \$ 1,071 | \$ (882) | \$ 1,072 | \$ 1,261 |
| Three months ended March 29, 2008 | \$ 1,006 | \$ (589) | \$ 549 | \$ 966 |

2. Business Combination

On February 12, 2009, the Company entered into a definitive merger agreement with HeartWare International Inc., a company listed on the NASDAQ Global Market and the Australian stock exchange under which the Company will acquire HeartWare. Under the merger agreement, at the effective time of the merger, each share of HeartWare common stock, including shares of common stock represented by HeartWare Chess Depositary Interests (HeartWare CDIs), will be converted into the right to receive \$14.30 in cash, without interest, and 0.6054 of a share of Thoratec common stock, subject to certain adjustments provided for in the merger agreement. Based on the number of shares of HeartWare common stock and shares issuable upon exercise of stock options and other stock-based awards outstanding as of February 12, 2009, and a price of \$26.25 per Thoratec common share (the volume weighted average closing price of Thoratec common shares on The NASDAQ Stock Market for the four trading days preceding the execution of the merger agreement), HeartWare stockholders would receive Thoratec common shares having a market value of approximately \$141.0 million in the merger and an aggregate of approximately \$141.0 million in cash, reflecting a price of \$30.19 per share of HeartWare common stock or \$0.86 for each HeartWare CDI (based upon the assumed US/AUS exchange rate of 1.5265) provided in the merger agreement.

The HeartWare board of directors and the Thoratec board of directors have approved the merger agreement. The completion of the merger depends on a number of conditions being satisfied or, where legally permissible, waived. These conditions include, among others, receipt of the requisite approval of HeartWare stockholders, the expiration or termination of the required waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the HSR Act) and the absence of legal impediments to the consummation of the merger. HeartWare and Thoratec have completed the initial filing of applications and notifications to obtain the expiration or termination of the waiting period under the HSR Act. On March 26, 2009, each of HeartWare and Thoratec received a request for additional information, or a second request, from the Federal Trade Commission, and each of HeartWare and Thoratec are in the process of responding to the information request. The Company cannot be certain when, or if, the conditions to the mergers will be satisfied or waived, or that the mergers will be completed.

3. Accounting Standards*Recently Issued Accounting Standards*

In April 2009, the FASB issued FSP FAS 115-2 and FSP FAS 124-2, *Recognition and Presentation of Other-Than-Temporary Impairment*, which is intended to provide greater clarity to investors about the credit and non-credit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. FSP FAS 115-2 and FSP FAS 124-2 applies to fixed maturity securities only and requires separate display of losses related to credit deterioration and losses related to other market factors. When an entity does not intend to sell the security and it is more-likely-than-not that an entity will not have to sell the security before recovery of its cost basis, if there is an impairment, it must recognize the credit loss component of the impairment in earnings and the remaining portion in other comprehensive income. In addition, upon adoption of FSP FAS 115-2 and FSP FAS 124-2, an entity will be required to record a cumulative-effect adjustment as of the beginning of the period of adoption to reclassify the noncredit component of a previously recognized

other-than-temporary impairment from retained earnings to accumulated other comprehensive income. FSP FAS 115-2 and FSP FAS 124-2 will be effective for the Company in the second quarter ending July 4, 2009. The Company is currently evaluating the impact of adopting FSP FAS 115-2 and FSP FAS 124-2.

In April 2009, the FASB issued FSP FAS 157-4, *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly*, which provides additional authoritative guidance to assist both issuers and users of financial statements in determining whether a market is active or inactive, and whether a transaction is distressed. FSP FAS 157-4 will be effective for the Company for the second quarter ending July 4, 2009. The Company is currently evaluating the impact of adopting FSP FAS 157-4.

Table of Contents

In April 2009, the FASB issued FSP FAS 107-1 and Accounting Principles Bulletin (APB) No. 28-1, *Interim Disclosures about Fair Value of Financial Instruments*, which requires disclosures about fair value of financial instruments for interim reporting periods as well as in annual financial statements. FSP FAS 107-1 and APB No. 28-1 will be effective for the Company for the second quarter ending July 4, 2009. The Company is currently evaluating the disclosure requirements of adopting FSP FAS 107-1 and APB No. 28-1.

In May 2008, the FASB issued FSP APB 14-1 that alters the accounting treatment for convertible debt instruments that allow for either mandatory or optional cash settlements upon conversion. FSP APB 14-1 will impact the accounting associated with the Company's senior subordinated convertible notes recorded at a book value of \$143.8 million. FSP APB 14-1 requires the issuer to recognize additional (non-cash) interest expense based on the market rate for similar debt instruments without the conversion feature. On January 4, 2009 the Company adopted FSP APB 14-1. See Note 13 Long-Term Debt for the accounting treatment associated with the adoption of this standard.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities*, which is intended to help investors better understand how derivative instruments and hedging activities affect an entity's financial position, financial performance and cash flows through enhanced disclosure requirements. The main requirement is to disclose the objectives and strategies for using derivative instruments by their underlying risk as well as a tabular format of the fair values of the derivative instruments and their gains and losses. On January 4, 2009, the Company adopted SFAS No. 161. See Note 8, Foreign Exchange Instruments for the disclosure associated with the adoption of this standard.

In February 2008, the FASB issued SFAS No. 157-2, *Effective Date of FASB Statement No. 157*. With the issuance of SFAS No. 157-2, the FASB agreed to: (a) defer the effective date of SFAS No. 157, *Fair Value Measurements*, for one year for certain nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), and (b) remove certain leasing transactions from the scope of SFAS No. 157. The deferral is intended to provide the FASB time to consider the effect of certain implementation issues that have arisen from the application of SFAS No. 157 to the assets and liabilities. On January 4, 2009 the Company adopted SFAS No. 157-2 related to fair value of nonfinancial assets and this standard did not have a material impact on the Company's condensed consolidated financial statements. See Note 7 Fair Value Measurements for further details.

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations*, which requires the acquiring entity in a business combination to record all assets acquired and liabilities assumed at their respective acquisition-date fair values, changes the recognition of assets acquired and liabilities assumed arising from contingencies, changes the recognition and measurement of contingent consideration, and requires the expensing of acquisition-related costs as incurred. In April 2009, the FASB issued FSP SFAS No. 141(R)-1, *Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies*, which amends the guidance in SFAS No. 141(R) to require contingent assets acquired and liabilities assumed in a business combination to be recognized at fair value on the acquisition date if fair value can be reasonably estimated during the measurement period. If fair value cannot be reasonably estimated during the measurement period, the contingent asset or liability would be recognized in accordance with SFAS No. 5, *Accounting for Contingencies*, and FASB Interpretation (FIN) No. 14, *Reasonable Estimation of the Amount of a Loss*. The Company adopted the provisions of SFAS No. 141(R) and SFAS No. 141(R)-1 for business combinations commencing in 2009, such as the proposed acquisition of HeartWare, which is expected to close in the second half of 2009. See Note 2, Business Combination for further details.

4. Cash and cash equivalents

Cash and cash equivalents are defined as short-term, highly liquid investments with original maturities of 90 days or less at the date of purchase.

5. Restricted cash and cash equivalents

On February 12, 2009, the Company entered into a definitive merger agreement with HeartWare, a company listed on the NASDAQ Global Market and the Australian stock exchange under which the Company will acquire HeartWare. See Note 2 Business Combination for further details.

Table of Contents

Pursuant to the loan agreement entered into concurrently with the execution and delivery of the merger agreement, the Company deposited \$20.0 million into an escrow account on February 13, 2009. Beginning on May 1, 2009, HeartWare may borrow up to an aggregate of \$12.0 million and beginning on July 31, 2009, HeartWare may borrow up to an aggregate of \$20.0 million, under certain conditions provided in the loan agreement. In the event that all of the conditions to closing the merger have been satisfied (other than those conditions that, by their terms, are not capable of being satisfied until the closing, and the condition that relates to the expiration or termination of the applicable waiting period under the HSR Act) and the Company exercises an option under the merger agreement to extend the outside date for the completion of the merger until January 31, 2010, HeartWare may borrow up to an additional \$8.0 million, which the Company must deposit into the escrow account at the time it exercises its extension option. The maximum aggregate amount that HeartWare may borrow under the loan agreement shall not exceed \$28.0 million. The loan to HeartWare will bear interest at a rate per annum equal to 10%.

6. Investments in Available-for-Sale Securities

The Company's investment portfolio is comprised of short-term and long-term investments. Investments classified as short-term available-for-sale consist primarily of municipal bonds, and U.S. government obligations with callable bond features. Investments classified as long-term available-for-sale consist of auction rate securities, whose underlying assets are student loans.

The Company's investments in available-for-sale securities are recorded at estimated fair value on its financial statements, and the temporary differences between cost and estimated fair value are presented as a separate component of accumulated other comprehensive income.

As of April 4, 2009, the Company had unrealized gains from the Company's investment in municipal bonds of \$1.4 million and unrealized losses from its auction rate securities of \$7.2 million.

The aggregate market value, cost basis and gross unrealized gains and losses of available-for-sale investments as of April 4, 2009 and as of January 3, 2009 by major security type are as follows:

| | Amortized cost | Gross unrealized gains (losses) (in thousands) | Fair value |
|-------------------------|-------------------|--|---------------|
| April 4, 2009: | | | |
| Short-term investments: | | | |
| Municipal bonds | \$ 108,072 | \$ 1,433 | \$ 109,505 |
| Long-term investments: | | | |
| Auction rate securities | \$ 37,100 | \$ (7,172) | \$ 29,928 |
| January 3, 2009: | | | |
| Short-term investments: | | | |
| Municipal bonds | \$ 139,931 | \$ 1,667 | \$ 141,598 |
| Long-term investments: | | | |
| Auction rate securities | \$ 37,200 | \$ (7,241) | \$ 29,959 |

As of April 4, 2009 the Company owned approximately \$37.1 million of auction rate securities. The assets underlying these investments are student loans which are rated Aaa/A or better, and backed by the U.S. government under the Federal Family Education Loan Program or private insurers. Historically, these securities have provided liquidity through a Dutch auction process that resets the applicable interest rate periodically every seven to 365 days. Beginning in February of 2008, these auctions began to fail. The principal amount of these auction rate securities will not be accessible until future auctions for these securities are successful, a secondary market is established, or these

securities are called for redemption. Therefore, the Company's auction rate securities are classified as long-term and are valued at \$29.9 million using significant unobservable inputs.

As a result of these auction failures, these auction rate securities do not have a readily determinable market value. To estimate their fair values at April 4, 2009, the Company's management used a discounted cash flow model based on estimated interest rates, the present value of future principal and interest payments are discounted at rates considered to reflect current market conditions, and the credit quality of the underlying securities. Specifically, the Company's management estimated the future cash flows over a five year period, and applied a credit default rate to reflect the risk in the marketplace for these investments that has arisen due to the lack of an active market. As a result of feedback from outside consultants, and government activities including recent settlement agreements, management's assumption on the expected recovery was modified to five years beginning at January 3, 2009 and this assumption continues to be applicable at April 4, 2009. Because of the inherent subjectivity in valuing these securities, the Company's management also considered independent valuations obtained for each of the Company's auction rate securities in estimating fair values.

Table of Contents

The Company's management reviewed impairments associated with its marketable securities to determine the classification of the impairment as temporary or other-than-temporary in accordance with FSP FAS 115-1 and FSP FAS 124-1, *The Meaning of Other-Than-Temporary-Impairment and Its Application to Certain Investments*. A temporary impairment charge results in an unrealized loss being recorded in other comprehensive income, a component of shareholders' equity. Such an unrealized loss does not reduce net income for the applicable accounting period because the loss is not viewed as other-than-temporary. As of April 4, 2009, the Company's management believed that all impairments related to auction rate securities investments are temporary. The factors evaluated to differentiate between temporary and other-than-temporary include the Company's projected future cash flows, credit ratings, and assessment of the credit quality of the underlying collateral. The recent auction failures may limit the Company's future ability to liquidate these investments. The Company intends and has the ability to hold these auction rate securities until the market recovers to par or until maturity. If the issuers of the auction rate securities are unable to successfully complete future auctions and their credit ratings deteriorate, the Company may in the future be required to record an impairment charge on these investments. It could conceivably take until the final maturity of the underlying notes (up to 30 years) to realize the investments' recorded value.

7. Fair Value Measurements

The Company adopted SFAS No. 157 on December 30, 2007 which requires the measurement of fair value for certain of the Company's financial assets and financial liabilities on a recurring basis. Additionally, on January 4, 2009, in accordance with the provisions SFAS No. 157-2, the Company now applies SFAS No. 157 to financial and nonfinancial assets and liabilities. SFAS No. 157-2 delayed the effective date of SFAS No. 157 for nonfinancial assets and liabilities, except for certain items that are recognized or disclosed at fair value in the financial statements on a recurring basis. The Company valued its financial and nonfinancial assets and liabilities based on the observability inputs used in the valuation of such assets and liabilities, using the following fair value hierarchy. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial and nonfinancial assets and liabilities carried or disclosed at fair value were classified and disclosed in one of the following three categories:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Directly or indirectly observable market based inputs used in models or other valuation methodologies.

Level 3: Unobservable inputs that are not corroborated by market data which require significant management judgment or estimation.

Table of Contents

The following table represents the fair value hierarchy for the Company's financial assets and financial liabilities measured at fair value on a recurring basis:

| | | | April 4, 2009 | | |
|--|--|------------------|---|---|---|
| | Assets and liabilities at carrying value | Total fair value | Quoted prices in active markets for identical assets (Level 1) (in thousands) | Significant other observable inputs (Level 2) | Significant unobservable inputs (Level 3) |
| Assets | | | | | |
| Short-term investments municipal bonds | \$ 109,505 | \$ 109,505 | \$ | \$ 109,505 | \$ |
| Long-term investments auction rate securities | 29,928 | 29,928 | | | 29,928 |
| Convertible debenture with Levitronix LLC | 5,792 | 4,200 | | | 4,200 |
| Liabilities | | | | | |
| Mark to market on foreign exchange instruments (Note 8) | 66 | 66 | | 66 | |
| Make-whole provision (Note 13) | 71 | 71 | | | 71 |
| Senior subordinated convertible notes (fair value for purposes of disclosure in Note 13) | 126,025 | 205,612 | | 205,612 | |
| | | | January 3, 2009 | | |
| | Assets and liabilities at carrying value | Total fair value | Quoted prices in active markets for identical assets (Level 1) (in thousands) | Significant other observable inputs (Level 2) | Significant unobservable inputs (Level 3) |
| Assets | | | | | |
| Short term investments municipal bonds | \$ 141,598 | \$ 141,598 | \$ | \$ 141,598 | \$ |
| Long term investments auction rate securities | 29,959 | 29,959 | | | 29,959 |
| Convertible debenture with Levitronix LLC | 5,711 | 4,200 | | | 4,200 |
| Liabilities | | | | | |
| Mark to market on foreign exchange instruments (Note 8) | 73 | 73 | | 73 | |
| Make-whole provision (Note 13) | 46 | 46 | | | 46 |

Senior subordinated convertible notes (fair value for purposes of disclosure in Note 13)

124,115

215,880

215,880

Assets measured at fair value on a recurring basis using significant unobservable Level 3 inputs consist of securities with an auction reset feature (auction rate securities) whose underlying assets are student loans issued by various tax-exempt state agencies, most of which are supported by federal government guarantees and some of which are supported by private insurers. In addition, the Company is using significant unobservable Level 3 inputs for its disclosure of the fair value of its convertible debenture with Levitronix LLC (Levitronix) disclosed in Note 12 Other Assets.

Table of Contents

The following table provides a reconciliation of the beginning and ending balances for the assets and liabilities measured at fair value using significant unobservable inputs (Level 3):

| | Fair Value Measurement Using Significant Unobservable Inputs (Level 3) | | |
|---|--|---|-----------------------------------|
| | Auction Rate Securities | Other Long Term Assets (in thousands) | Other Long Term Liabilities |
| Balance at January 3, 2009 | \$ 29,959 | \$ 4,200 | \$ 46 |
| Settlement at par | (100) | | |
| Unrealized holding loss, included in interest income and other | | | 25 |
| Unrealized holding gain, included in other comprehensive income | 69 | | |
| Balance at April 4, 2009 | \$ 29,928 | \$ 4,200 | \$ 71 |

The Company's management will continue to monitor the market for auction rate securities and consider its impact (if any) on the fair value of the Company's investments. If the current market conditions deteriorate further, or the anticipated recovery in fair values does not occur, the Company may be required to record additional unrealized losses in other comprehensive income or other-than-temporary impairment charges to the condensed consolidated statements of operations in future periods.

8. Foreign Exchange Instruments

The Company utilizes foreign currency forward exchange contracts and options to mitigate against future movements in foreign exchange rates that affect certain existing and forecasted foreign currency denominated sales and purchase transactions (primarily assets and liabilities on its U.K. subsidiary's consolidated balance sheet that are not denominated in U.K. pounds). The Company does not use derivative financial instruments for speculative or trading purposes. The Company routinely hedges its exposures to certain foreign currencies with various financial institutions in an effort to minimize the impact of certain currency exchange rate fluctuations. If a financial counter-party to any of the Company's hedging arrangement experiences financial difficulties or is otherwise unable to honor the terms of the foreign currency forward contract, the Company may experience material financial losses.

On January 4, 2009, the Company adopted SFAS No. 161, which requires the disclosure about the Company's objective of using derivative instruments for its forward foreign currency contracts, which qualify as derivatives under SFAS No. 133, *Accounting for Derivative Instrument and Hedging Activities*, and do not qualify for hedge accounting. The impacts of the outstanding foreign currency contracts, with a maximum maturity of three months were as follows:

| | Notional Amount Three Months Ended | |
|----------|---------------------------------------|-------------------|
| | April 4, 2009 | March 29, 2008 |
| Purchase | \$ 9,231 | \$ 6,510 |
| Sales | 11,342 | 12,587 |

As of April 4, 2009, the Company had forward contracts to sell euros with a notional value of \$8.6 million and to purchase U.K. pounds with a notional value of £6.4 million, and as of March 29, 2008, the Company had forward

contracts to sell euros with a notional value of 8.2 million and to purchase U.K. pounds with a notional value of £3.3 million. As of April 4, 2009, the Company's forward contracts had an average exchange rate of one U.S. dollar to 0.7539 euros and one U.S. dollar to 0.6933 U.K. pounds. The forward contracts are valued based on exchange rates derived from an independent source of market participant assumptions and compiled from the best information available. As of April 4, 2009, the estimated fair value of these foreign currency contracts were \$0.1 million, recorded in Prepaid expenses and other assets.

Table of Contents

The Company's realized change in fair value of the forward currency contracts is included in Interest income and other and offsets the foreign currency exchange gains and losses in the condensed consolidated statements of operations as follows:

| | Three Months Ended | |
|--|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | (in thousands) | |
| Foreign currency exchange gain (loss) on foreign currency contracts | \$ 448 | \$(1,040) |
| Foreign currency exchange (loss) gain on foreign translation adjustments | (311) | 1,108 |

9. Inventories

Inventories consisted of the following:

| | April 4, 2009 | January 3, 2009 |
|-----------------|--------------------------|----------------------------|
| | (in thousands) | |
| Finished goods | \$ 22,368 | \$ 24,373 |
| Work in process | 11,022 | 9,174 |
| Raw materials | 32,254 | 27,826 |
| Total | \$ 65,644 | \$ 61,373 |

10. Property, Plant and Equipment, net

Property, plant and equipment, net, consisted of the following:

| | April 4, 2009 | January 3, 2009 |
|--------------------------------------|--------------------------|----------------------------|
| | (in thousands) | |
| Land, building and improvements | \$ 16,135 | \$ 16,135 |
| Equipment and capitalized software | 69,126 | 68,029 |
| Furniture and leasehold improvements | 29,381 | 27,424 |
| Total | 114,642 | 111,588 |
| Less accumulated depreciation | (63,398) | (61,450) |
| Total | \$ 51,244 | \$ 50,138 |

Depreciation expense for the three months ended April 4, 2009 was \$2.6 million and for the three months ended March 29, 2008 was \$2.4 million.

11. Goodwill and Purchased Intangible Assets

The carrying amount of goodwill was \$99.3 million as of April 4, 2009 and as of January 3, 2009. The components of goodwill at April 4, 2009 were \$95.0 million attributable to the Cardiovascular division and \$4.3 million to the ITC acquisition of the outstanding common shares of privately held A-VOX Systems, Inc. (Avox).

The changes in the carrying amount of goodwill were as follows:

| | April 4, 2009 | January 3, 2009 |
|---|--------------------------|----------------------------|
| | (in thousands) | |
| Balance at the beginning of the fiscal period | \$ 99,287 | \$ 98,368 |

| | | | |
|---|-----------|----|--------|
| Adjustment for the acquisition related to the Cardiovascular division | | | 919 |
| Balance as of the end of the fiscal period | \$ 99,287 | \$ | 99,287 |

Table of Contents

In February 2001, the Company merged with Thermo Cardiosystems, Inc. (TCA). Prior to the merger with TCA (the Merger), TCA was a subsidiary of Thermo Electron Corporation (TCI). The components of identifiable intangible assets related to the Merger include: patents and trademarks, core technology (Thoralon, the Company s proprietary bio-material), and developed technology (patent technology, other than core technology, acquired in the Merger). The components of intangible assets related to the October 2006 Avox acquisition includes: patents and trademarks, developed technology and customer and distributor relationships and other. The combined components are included in purchased intangibles on the condensed consolidated balance sheets as follows:

| | Gross Carrying Amount | April 4, 2009 Accumulated Amortization (in thousands) | Net Carrying Amount |
|--|--------------------------------------|--|------------------------------------|
| Patents and trademarks | \$ 38,515 | \$ (29,369) | \$ 9,146 |
| Core technology | 37,485 | (14,258) | 23,227 |
| Developed technology | 125,742 | (52,935) | 72,807 |
| Customer and distributor relationships and other | 897 | (425) | 472 |
| Total purchased intangible assets | \$ 202,639 | \$ (96,987) | \$ 105,652 |

| | Gross Carrying Amount | January 3, 2009 Accumulated Amortization (in thousands) | Net Carrying Amount |
|--|--------------------------------------|--|------------------------------------|
| Patents and trademarks | \$ 38,515 | \$ (28,803) | \$ 9,712 |
| Core technology | 37,485 | (13,765) | 23,720 |
| Developed technology | 125,742 | (51,098) | 74,644 |
| Customer and distributor relationships and other | 897 | (389) | 508 |
| Total purchased intangible assets | \$ 202,639 | \$ (94,055) | \$ 108,584 |

Amortization expense related to purchased intangible assets was \$2.9 million and \$3.3 million for the three months ended April 4, 2009 and March 29, 2008, respectively. The Company s amortization expense is expected to be approximately \$10.2 million in 2009, declining to \$8.7 million by 2013. This decline in amortization expense is due to certain intangibles being fully amortized during 2009. Patents and trademarks have useful lives ranging from one to fifteen years, core and developed technology assets have useful lives ranging from two to thirteen years and customer and distributor relationships and other have useful lives ranging one to six years.

12. Other Assets

On August 23, 2006, the Company purchased a \$5.0 million convertible debenture from Levitronix, a company with which it has a distribution arrangement to sell Levitronix products. The convertible debenture is a long-term note receivable with an annual interest rate of 5.7%, to be accrued monthly and at the option of Levitronix, paid in cash or in-kind semi-annually on February 23 and August 23 until its maturity on August 23, 2013. The Company may convert the debenture at any time at its option into membership interests of Levitronix at a conversion price of \$4.2857, which may be adjusted as a result of certain corporate events. This conversion feature is not an embedded derivative under SFAS No. 133 because the membership interests of the issuer are not readily convertible to cash. If the Company had converted the debenture as of April 4, 2009, its ownership in Levitronix would have been less than 5%.

As of April 4, 2009, the convertible debenture of \$5.0 million plus accrued interest of \$0.8 million was included in Other long-term assets on the Company's condensed consolidated balance sheets. The fair value of the convertible debenture, based on a discounted cash flows valuation approach, was \$4.2 million.

13. Long-Term Debt

In 2004, the Company completed the sale of \$143.8 million initial principal amount of senior subordinated convertible notes due in 2034. The convertible notes were sold to Qualified Institutional Buyers pursuant to the exemption from the registration requirements of the Securities Act of 1933, as amended, provided by Rule 144A thereunder. A portion of the proceeds were used to repurchase 4.2 million shares of the Company's outstanding common stock for \$60 million. The balance of the proceeds has been and will be used for general corporate purposes, which may include additional stock repurchases, strategic investments or acquisitions. The principal amount of the convertible notes at maturity is \$247.4 million offset by the original issue discount of \$103.7 million and net debt issuance costs of \$4.3 million, equaling net proceeds of \$139.4 million.

Table of Contents

On January 4, 2009, the Company adopted FSP APB 14-1, which applies to certain convertible debt instruments that may be settled in cash or other assets, or partially in cash, upon conversion. The senior subordinated convertible notes fall within the scope of FSP APB 14-1 because their terms include partial cash settlement. Pursuant to FSP APB 14-1, the Company is required to account for the liability and equity components of the senior subordinated convertible notes separately in a manner that reflects the Company's nonconvertible debt borrowing rate when interest expense is subsequently recognized. FSP APB 14-1 requires retrospective application as of May 16, 2004. Accordingly, the accompanying prior period condensed consolidated financial statements have been adjusted to reflect the adoption of FSP APB 14-1. The Company estimated the fair value of the senior subordinated convertible notes without the conversion feature as of the date of issuance (liability component). The estimated fair value of the liability component was approximately \$95.1 million and was determined using a discounted cash flow approach. Key inputs used to estimate the fair value of the liability component included the following:

The Company's estimated non-convertible borrowing rate as of May 16, 2004 the date the senior subordinated convertible notes were issued;

The amount and timing of cash flows; and

The expected life.

The excess of the proceeds received over the estimated fair value of the liability component totaling \$48.5 million was allocated to the conversion feature (equity component) and a corresponding offset was recognized as a discount to reduce the net carrying value of the senior subordinated convertible notes. The discount is being amortized to interest expense over a seven-year period ending May 16, 2011 (the expected life of the liability component) using the effective interest method. Additionally, FSP APB 14-1 requires transactions costs to be allocated on the same percentage as the liability and equity components. The adoption of FSP APB 14-1 will result in a portion of the deferred debt issuance costs allocated to the liability component to be amortized using the effective interest method until May 16, 2011, and the equity component to be included in additional paid-in capital. The deferred debt issuance costs are amortized using the effective interest method until May 16, 2011 at which point the Company may redeem the debt.

The adoption of FSP APB 14-1 increased interest expense associated with the Company's senior subordinated convertible notes by adding a non-cash component to amortize a debt discount calculated based on the difference between the cash coupon rate (2.375% per year) of the senior subordinated convertible notes and the effective interest rate on debt borrowing (9% per year). The impact of the adoption of FSP APB 14-1 on the results of operations for the three months ended April 4, 2009 and March 29, 2008 consisted of the following:

| | Three Months Ended April 4, 2009 | |
|--|---|---|
| | Excluding impact of FSP APB 14-1 | Incremental impact of adoption of FSP APB 14-1 |
| | | As reported |
| | (in thousands, except per share amounts) | |
| Net income (loss) before interest and amortization expense (net of tax) | \$ 7,361 | \$ 7,361 |

| | | | |
|---|----------|----|-----------------|
| Interest and amortization expense (net of tax): | | | |
| Interest expense | (853) | \$ | (1,910) (2,763) |
| Amortization of debt issuance costs | (155) | | 52 (103) |
| Income tax benefit | 398 | | 734 1,132 |
| Impact on net income | (610) | \$ | (1,124) (1,734) |
| Net income | \$ 6,751 | | \$ 5,627 |
| Net income per share: | | | |
| Basic and diluted | \$ 0.11 | | \$ 0.10 |

Table of Contents

| | Three Months Ended March 29, 2008 | | |
|--|---|--|------------------------|
| | Incremental impact | | |
| | Excluding impact of FSP APB 14-1 | of adoption of FSP APB 14-1 | As adjusted |
| | (in thousands, except per share amounts) | | |
| Net income (loss) before interest and amortization expense (net of tax) | \$ 959 | | \$ 959 |
| Interest and amortization expense (net of tax): | | | |
| Interest expense | (853) | \$ (1,750) | (2,603) |
| Amortization of debt issuance costs | (155) | 52 | (103) |
| Income tax benefit | 398 | 671 | 1,069 |
| Impact on net income (loss) | (610) | \$ (1,027) | (1,637) |
| Net income (loss) | \$ 349 | | \$ (678) |
| Net income (loss) per share: | | | |
| Basic and diluted | \$ 0.01 | | \$ (0.01) |

The impact of the adoption of FSP ABP 14-1 on the opening balance sheets consisted of the following:

| | Net Increase (Decrease) | | | | |
|--|--------------------------------|------------------------------------|---------------------------------------|---|----------------|
| | Long-term debt | Debt issuance costs | Deferred tax liability | Additional paid-in capital | Deficit |
| | (in thousands) | | | | |
| Allocation of long-term debt proceeds and issuance costs to equity component on issuance date | \$ (48,508) | \$ (1,462) | \$ 18,584 | \$ 28,462 | \$ |
| Cumulative retrospective impact from amortization of discount on liability component and debt issuance costs | 21,718 | 754 | (8,282) | | 12,682 |
| Cumulative retrospective impact as of December 29, 2007 | (26,790) | (708) | 10,302 | 28,462 | 12,682 |
| Retrospective impact from amortization of discount on liability component and debt issuance costs during the period | 7,155 | 209 | (2,745) | | 4,201 |
| | \$ (19,635) | \$ (499) | \$ 7,557 | \$ 28,462 | \$ 16,883 |

Cumulative retrospective impact as of January 3, 2009

| | Long-term debt | Debt issuance costs | Deferred tax liability (in thousands) | Additional paid-in capital | Deficit |
|---|---------------------------|------------------------------------|--|---|----------------|
| January 3, 2009, balance as previously reported | \$ 143,750 | \$ 1,475 | \$ 31,285 | \$ 500,195 | \$ 39,751 |
| Cumulative retrospective impact as of January 3, 2009 | (19,635) | (499) | 7,557 | 28,462 | 16,883 |
| January 3, 2009, as adjusted | \$ 124,115 | \$ 976 | \$ 38,842 | \$ 528,657 | \$ 56,634 |

As of April 4, 2009 and January 3, 2009, long-term debt and equity component (recorded in additional paid-in-capital, net of income tax benefit) associated with FSP APB 14-1 consisted of the following:

| | April 4, 2009 | January 3, 2009 |
|---|--------------------------|----------------------------|
| | (in thousands) | |
| Long-term debt | | |
| Principal amount | \$ 143,750 | \$ 143,750 |
| Unamortized discount | (17,725) | (19,635) |
| Net carrying amount | \$ 126,025 | \$ 124,115 |
| Equity component, net of income tax benefit | \$ 28,462 | \$ 28,462 |

The senior subordinated convertible notes were issued at an issue price of \$580.98 per note, which is 58.098% of the principal amount at maturity of the notes. The senior subordinated convertible notes bear interest at a rate of 1.3798% per year on the principal amount at maturity, payable semi-annually in arrears in cash on May 16 and November 16 of each year, from November 16, 2004 until May 16, 2011. Beginning on May 16, 2011, the original issue discount will accrue daily at a rate of 2.375% per year on a semi-annual bond equivalent basis and, on the maturity date, a holder will receive \$1,000 per note. As a result, the aggregate principal amount of the notes at maturity will be \$247.4 million.

Table of Contents

Holders of the senior subordinated convertible notes may convert their convertible notes into shares of the Company's common stock at a conversion rate of 29.4652 shares per \$1,000 principal amount of senior subordinated convertible notes, which represents a conversion price of \$19.72 per share, subject to adjustments upon the occurrence of certain events as set forth in the indenture. Holders have been and are able to convert their convertible notes at any point after the close of business on September 30, 2004 if, as of the last day of the preceding calendar quarter, the closing price of the Company's common stock for at least 20 trading days in a period of 30 consecutive trading days ending on the last trading day of such preceding calendar quarter is more than 120% of the accreted conversion price per share of its common stock. Commencing October 1, 2008, this market price conversion feature was satisfied, such that holders of the senior subordinated convertible notes may convert their notes through the final maturity date of the notes into shares of the Company's common stock at a conversion rate of 29.462 shares per \$1,000 principal amount of senior subordinated convertible notes, subject to adjustments as provided in the indenture. If holders elect conversion, the Company may, at its option, deliver shares of common stock, pay a holder in cash, or deliver a combination of shares and cash, as determined pursuant to the terms of the notes. As of April 4, 2009, no notes had been converted or called.

Holders may require the Company to repurchase all or a portion of their senior subordinated convertible notes on each of May 16, 2011, 2014, 2019, 2024 and 2029 at a repurchase price equal to 100% of the issue price, plus accrued original issue discount, if any. In addition, if the Company experiences a change in control or a termination of trading of its common stock each holder may require the Company to purchase all or a portion of such holder's notes at the same price, plus, in certain circumstances, to pay a make-whole premium. This premium is considered an embedded derivative under SFAS No. 133 and has been bifurcated from the senior subordinated convertible notes and recorded at its estimated fair value, \$70,000 at April 4, 2009. There are significant variables and assumptions used in valuing the make-whole provision including, but not limited to, the Company's stock price, volatility of the Company's stock, the probability of the Company being acquired and the probability of the type of consideration used by a potential acquirer.

The Company may redeem either in whole or in part, any of the senior subordinated convertible notes at any time beginning May 16, 2011, by giving the holders at least 30 days notice, at a redemption price equal to the sum of the issue price and the accrued original issue discount. If the holders converted the senior subordinated convertible notes into shares of the Company's stock as of April 4, 2009, the if-converted value would be \$199.5 million, based on the Company's stock price of \$27.15 per share on April 3, 2009, which amount is greater than the original value \$143.8 million by \$55.7 million. This if-converted value is \$47.9 million less than the \$247.4 million face amount at maturity in 2034.

The senior subordinated convertible notes are subordinated to all of the Company's senior indebtedness and structurally subordinated to all indebtedness of its subsidiaries. Therefore, in the event of a bankruptcy, liquidation or dissolution of the Company or one or more of its subsidiaries and acceleration of or payment default on its senior indebtedness, holders of the convertible notes will not receive any payment until holders of any senior indebtedness the Company may have outstanding have been paid in full.

The aggregate fair value of the senior subordinated convertible notes at April 4, 2009 was \$205.6 million.

Table of Contents**14. Share-Based Compensation**

Share-based compensation expense is measured based on the grant-date fair value of the share-based awards. The Company recognizes share-based compensation expense for the portion of the award that will ultimately be expected to vest over the requisite service period for those awards with graded vesting and service conditions. The Company develops an estimate of the number of share-based awards which will ultimately vest, primarily based on historical experience. The estimated forfeiture rate is re-assessed periodically throughout the requisite service period. Such estimates are revised if they differ materially from actual forfeitures. As required, the forfeiture estimates will be adjusted to reflect actual forfeitures when an award vests.

Share-based compensation included in the condensed consolidated statements of operations consists of the following:

| | Three Months Ended | |
|---|---------------------------|------------------|
| | April | March 29, |
| | 4, | 2008 |
| | 2009 | |
| | (in thousands) | |
| Cost of Goods Sold | \$ 511 | \$ 442 |
| Selling, general and administrative | 2,406 | 1,674 |
| Research and development | 1,119 | 747 |
| | | |
| Total share based compensation expense before taxes | 4,036 | 2,863 |
| Tax benefit for share-based compensation expense | 1,122 | 632 |
| | | |
| Total share-based compensation (net of taxes) | \$ 2,914 | \$ 2,231 |

For the three months ended April 4, 2009 and March 29, 2008, share-based compensation expense of \$0.4 million and \$0.6 million, respectively, was capitalized to inventory.

The Company receives a tax deduction for certain stock option exercises during the period the options are exercised, generally for the excess of the fair market value of the options at the date of exercise over the exercise prices of the options. Prior to the adoption of SFAS No. 123(R) *Share-Based Payment*, the Company reported all tax benefits resulting from the exercise of stock options as operating cash flows in its condensed consolidated statements of cash flows. In accordance with SFAS No. 123(R), beginning in 2006, the Company's condensed consolidated statements of cash flows presentation reports the excess tax benefits from the exercise of stock options as financing cash flows of \$1.0 million and \$28,000 for the three months ended April 4, 2009 and March 29, 2008, respectively.

Cash proceeds from the exercise of stock options were \$1.0 million and cash proceeds from the Company's employee stock purchase plan were none for the three months ended April 4, 2009. Cash proceeds from the exercise of stock options were \$0.1 million and cash proceeds from the Company's employee stock purchase plan were none for the three months ended March 29, 2008. Additionally, for the three months ended April 4, 2009, the Company purchased \$2.9 million of restricted stock for payment of income tax withholding due upon vesting. For the three months ended March 29, 2008, the Company purchased \$1.0 million of restricted stock for payment of income tax withholding due upon vesting.

Equity Plan

In April 2006, the Board of Directors approved the 2006 Incentive Stock Plan (2006 Plan), in May 2006 the 2006 Plan was amended by the Board of Directors and such amendment was approved by the Company's shareholders and in May 2008 the 2006 Plan was amended by the Board of Directors and such amendment was approved by the Company's shareholders. The 2006 Plan allows the Company to grant to employees and directors of, and consultants to, the Company up to a total of 5.4 million shares of stock awards. Each share issued from and after May 20, 2008 as restricted stock bonuses, restricted stock units, phantom stock units, performance share bonuses, or performance share units reduces the number of shares available for issuance under the 2006 Plan by one and seventy-four hundredths

(1.74) shares, and each share issued as stock options, restricted stock purchases or stock appreciation rights reduces the shares available for issuance under the 2006 Plan on a share-for-share basis. During the three months ended April 4, 2009, approximately 326,000 options were granted under the 2006 Plan at an exercise price equal to the fair market value on the date of grant, and approximately 407,000 shares of restricted stock and restricted stock units were granted under the 2006 Plan. As of April 4, 2009, 2.5 million shares remained available for grant under the 2006 Plan.

Table of Contents**Stock Options**

Upon approval in May 2006, the 2006 Plan replaced the Company's previous common stock option plans and equity incentive plans. At April 4, 2009, the Company had options outstanding under the 2006 Plan and the replaced plans. Options under the 2006 Plan may be granted by the Board of Directors at the fair market value on the date of grant and generally become fully exercisable within four years after the grant date and expire between five and ten years from the date of grant. Vesting on options granted to officers will be accelerated in certain circumstances following a change in control of the Company.

The fair value of each option is estimated at the date of grant using the Black-Scholes option pricing model with the following assumptions:

| | Three Months Ended | |
|-------------------------|---------------------------|-----------------------|
| | April 4, 2009 | March 29, 2008 |
| Risk-free interest rate | 2.30% | 3.25% |
| Expected volatility | 53% | 40% |
| Expected option life | 4.91 to 6.02 years | 5.09 to 6.07 years |
| Dividends | None | None |

The risk-free interest rate is based on the United States Treasury yield curve in effect at the time of grant. The expected term of options represents the period of time that options are expected to be outstanding. The Company uses separate assumptions for groups of employees (for example, officers) that have similar historical exercise behavior. The range above reflects the expected option impact of these separate groups. The Company bases the expected volatility on historical trends, because it has determined that the historical volatility trends are reflective of market conditions.

At April 4, 2009, there was \$5.6 million of unrecognized compensation expense related to stock options, which expense the Company expects to recognize over a weighted average period of 1.57 years. The aggregate intrinsic value of in-the-money options outstanding, based on the closing price of the Company's common stock on April 3, 2009, the last trading day in the three months ended April 4, 2009, of \$27.15, was \$46.0 million, and the aggregate intrinsic value of options exercisable was \$36.1 million. The intrinsic value of options vested and expected to vest was \$44.8 million, for the three months ended April 4, 2009. The intrinsic value of options exercised was \$0.9 million for the three months ended April 4, 2009. The aggregate fair value of the options granted during the three months ended April 4, 2009 was \$3.9 million.

Stock option activity is summarized as follows:

| | Number of Options (in thousands) | Weighted Average Exercise Price Per Share | Weighted Average Remaining Contract Life (years) |
|--|---|--|---|
| Outstanding options at January 3, 2009 | 4,259 | \$ 16.37 | 5.98 |
| Granted | 326 | 23.92 | |
| Exercised | (73) | 14.12 | |
| Forfeited or expired | (16) | 31.63 | |
| Outstanding options at April 4, 2009 | 4,496 | \$ 16.94 | 6.05 |
| Outstanding options exercisable at April 4, 2009 | 3,203 | \$ 15.92 | 5.14 |
| Outstanding options vested at April 4, 2009 and expected to vest | 4,323 | \$ 16.83 | 5.94 |

The weighted average grant-date fair value of options granted during the first quarter of 2009 was \$11.99 per share.

20

Table of Contents**Restricted Stock**

The 2006 Plan allows for the issuance of restricted stock awards and restricted stock units, which awards or units may not be sold or otherwise transferred until certain restrictions have lapsed. The unearned share-based compensation related to these awards is being amortized to compensation expense over the period of the restrictions, generally four years. The expense for these awards was determined based on the market price of the Company's shares on the date of grant applied to the total number of shares that were granted.

Share-based compensation expense related to these restricted stock grants was \$1.6 million for the three months ended April 4, 2009, which expense the Company expects to recognize over a weighted average period of 2.33 years. As of April 4, 2009, the Company had \$9.0 million of unrecognized compensation expense related to these restricted stock awards. There were no restricted stock awards granted during the first quarter of 2009.

Restricted stock activity is summarized as follows:

| | Number of Shares (in thousands) | Weighted Average Grant Date Fair Value |
|--|--|---|
| Outstanding unvested restricted stock at January 3, 2009 | 983 | \$ 16.83 |
| Granted | | |
| Vested | (258) | 17.05 |
| Forfeited or expired | (11) | 16.69 |
| Outstanding unvested restricted stock at April 4, 2009 | 714 | \$ 16.76 |

Restricted Stock Units

As of April 4, 2009, the Company had \$7.4 million of unrecognized compensation expense related to these restricted stock units, which expense the Company expects to recognize over a weighted average period of 3.81 years. The aggregate intrinsic value of the units outstanding, based on the Company's stock price on April 4, 2009, was \$11.1 million. In the first of quarter of 2009, the Company issued restricted stock units to U.S and non-U.S. employees.

Restricted stock unit activity is summarized as follows:

| | Number of Units (in thousands) | Weighted Average Grant Date Fair Value | Weighted Average Remaining Contract Life (in years) |
|--------------------------------------|---|---|--|
| Outstanding units at January 3, 2009 | 28 | \$ 16.66 | 2.46 |
| Granted | 408 | 24.01 | |
| Released | (25) | 22.65 | |
| Forfeited or expired | (3) | 23.93 | |
| Outstanding units at April 4, 2009 | 408 | \$ 23.59 | 3.81 |

Table of Contents**Employee Stock Purchase Plan**

In May 2002, the Company's shareholders approved the Company's Employee Stock Purchase Plan (ESPP) under which 500,000 shares of common stock were reserved for issuance. In addition, the ESPP provides for an annual, automatic increase of up to 250,000 shares in the total number of shares available for issuance thereunder on March 1st of each year, unless the Company's Board of Directors specifies a smaller increase or no increase. Under this provision, an additional 250,000 shares were reserved for issuance under the ESPP on each of March 1, 2006, March 1, 2008 and March 1, 2009; the Company's Board of Directors specified no increase as of March 1, 2007. Eligible employees may purchase a limited number of shares, over a six month period, of the Company's common stock at 85% of the lower of the market value on the offering date or the market value on the purchase date. During the three months ended April 4, 2009, no shares of common stock were issued under the ESPP. As of April 4, 2009, approximately 432,000 shares remained available for issuance under this plan.

The estimated subscription date fair value of the current offering under the ESPP is approximately \$0.5 million using the Black-Scholes option pricing model and the following assumptions:

| | |
|-------------------------|------------|
| Risk-free interest rate | 1.07% |
| Expected volatility | 60% |
| Expected option life | 0.50 years |
| Dividends | None |

As of April 4, 2009, there was approximately \$0.1 million of unrecognized compensation expense related to ESPP subscriptions that began on November 1, 2008, which amount the Company expects to recognize during the second quarter of 2009.

15. Income Taxes

The Company's effective income tax rates were 26.7% and 33.7% for the three months ended April 4, 2009 and March 29, 2008, respectively. The comparative numbers have been adjusted for the retrospective application of FSP APB14-1, see Note 13, Long-Term Debt.

For the three months ended April 4, 2009, the Company recorded a discrete benefit of approximately \$0.9 million to reflect the effect of a change in California tax law which will permit the Company to make a beneficial apportionment election beginning in 2011. This election will impact the California state rate for certain of the Company's existing long-term deferred tax assets and liabilities which are anticipated to reverse subsequent to 2011. As a result of the enactment of this tax law, the Company has included the effect of its re-measurement of certain deferred tax assets and liabilities in the first quarter of 2009.

The tax years 2005 through 2008 remain subject to audit by certain jurisdictions in which the Company is subject to taxation with the exception of California and New Jersey, which remain subject to audit from tax years 2004 to 2008, and the U.K. which remains subject to audit from tax years 2007 through 2008. However, because the Company had net operating losses and credits carried forward in several jurisdictions including U.S. federal and California, certain items attributed to closed years remain subject to adjustment by the relevant tax authority through an adjustment to tax attributes carried forward to open years. The Company is currently under audit by the states of California and Massachusetts for its 2003 and 2004 tax years. Although the ultimate outcome and the timing of the conclusion of this examination is unknown, the Company believes that adequate amounts have been provided for any adjustments that may result from the current examination and that the final outcome will not have a material adverse effect on the Company's condensed consolidated statements of operations.

As of April 4, 2009 and January 3, 2009, the Company reported a net deferred tax liability of approximately \$26.4 million and \$29.1 million, respectively, comprised principally of temporary differences between the financial statement and income tax bases of intangible assets, and subordinated convertible notes.

The Company adopted FIN 48 on December 31, 2006. Under FIN 48, *Accounting for Uncertainty in Income Taxes, an interpretation of SFAS No. 109*, tax positions are evaluated for recognition using a more-likely-than-not recognition threshold, and those tax positions eligible for recognition are measured as the largest amount of tax benefit that is greater than fifty percent likely of being realized upon the effective settlement with a taxing authority that has full knowledge of all relevant information. Unrecognized tax benefits increased by approximately \$0.2 million during

the three months ended April 4, 2009 primarily as a result of positions taken in 2005 and 2006 and decreased by \$4,000 due to changes in prior year unrecognized benefits primarily as a result of foreign exchange rate fluctuations. The Company believes it is reasonably possible that unrecognized tax benefits will increase by approximately \$0.9 million within the next twelve months as a result of tax positions which may be taken on tax returns yet to be filed. Conversely, it is reasonably possible unrecognized tax benefits will decrease by approximately \$1.5 million, primarily as a result of the settlement of outstanding audits.

Table of Contents**16. Net Income (Loss) Per Share**

Basic and diluted net income (loss) per share was calculated as follows:

| | Three Months Ended | |
|---|--|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | | As adjusted (1) |
| | (in thousands, except per share data) | |
| Net income (loss) | \$ 5,627 | \$ (678) |
| Weighted average number of common shares-basic | 56,384 | 54,222 |
| Dilutive effect of stock-based compensation plans | 1,354 | |
| Weighted average number of common shares-diluted | 57,738 | 54,222 |
| Net income (loss) per common share | | |
| Basic | \$ 0.10 | \$ (0.01) |
| Diluted | \$ 0.10 | \$ (0.01) |

(1) Adjusted for the retrospective adoption of FSP APB 14-1. See Note 13, Long-Term Debt.

Basic net income (loss) per share is computed by dividing net income (loss) per share by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

| | Three Months Ended | |
|---|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | (in thousands) | |
| Options to purchase shares not included in the computation of diluted income (loss) per share because their inclusion would be antidilutive | 164 | 3,067 |

The computation of diluted net income (loss) per share for the three months ended April 4, 2009 and March 29, 2008 excludes the effect of assuming the conversion of the Company's senior subordinated convertible notes, which are convertible at \$19.72 per share into 7.3 million shares of common stock, because the effect would have been antidilutive for those periods.

Table of Contents**17. Enterprise and Related Geographic Information**

The Company organizes and manages its business by functional operating entities. The functional entities operate in two segments: Cardiovascular and ITC. The Cardiovascular segment designs, develops, manufactures and markets proprietary medical devices used for circulatory support and vascular graft applications. The ITC segment designs, develops, manufactures and markets proprietary point-of-care diagnostic test systems and incision devices.

Business Segments:

| | Three Months Ended | |
|---|---------------------------|----------------------------|
| | April 4, 2009 | March 29, 2008 |
| | | As adjusted (1) |
| | (in thousands) | |
| Product sales: | | |
| Cardiovascular | \$ 64,629 | \$ 40,221 |
| ITC | 24,837 | 24,206 |
| Total product sales | \$ 89,466 | \$ 64,427 |
| Income (loss) before income taxes: | | |
| Cardiovascular (a)(c) | \$ 18,526 | \$ 1,826 |
| ITC (a)(c) | (1,065) | 805 |
| Corporate (b)(c) | (7,906) | (3,245) |
| Total operating income (loss) | 9,555 | (614) |
| Other income and (expense): | | |
| Interest expense and other | (2,866) | (2,587) |
| Interest income and other | 988 | 2,178 |
| Income (loss) before income tax (expense) benefit | \$ 7,677 | \$ (1,023) |
| | | |
| | April 4, 2009 | January 3, 2009 |
| | | As adjusted (1) |
| | (in thousands) | |
| Total assets: | | |
| Cardiovascular | \$ 328,404 | \$ 321,605 |
| ITC | 60,937 | 61,552 |
| Corporate (b) | 299,262 | 300,930 |
| Total assets | \$ 688,603 | \$ 684,087 |

(1) Adjusted
for the
retrospective
adoption of FSP

APB 14-1. See
Note 13,
Long-Term
Debt.

- (a) Includes amortization expense of \$2.7 million for the three months ended April 4, 2009 and \$3.1 million for the three months ended March 29, 2008, related to the Cardiovascular segment. The ITC segment also includes amortization expense of \$0.2 million for each of the three months ended April 4, 2009 and March 29, 2008.
- (b) Represents unallocated costs or assets, not specifically identified to any particular business segment.
- (c) Includes share-based compensation expense of \$2.3 million, \$1.1 million and \$0.6 million for Cardiovascular, ITC and Corporate, respectively, for the three months

ended April 4,
2009 and
\$1.3 million,
\$0.8 million and
\$0.8 million for
Cardiovascular,
ITC and
Corporate,
respectively, for
the three months
ended
March 29, 2008.

Table of Contents

Geographic Areas:

The geographic composition of the Company's product sales was as follows:

| | Three Months Ended | |
|---------------------|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | (in thousands) | |
| Domestic | \$ 67,425 | \$ 45,374 |
| International | 22,041 | 19,053 |
| Total product sales | \$ 89,466 | \$ 64,427 |

Table of Contents**ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS****Forward-Looking Statements**

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements can be identified by the words expects, projects, hopes, believes, intends, should, estimate, will, may, anticipates, plans, could and other similar words. Actual results, events or performance could differ materially from these forward-looking statements based on a variety of factors, many of which are beyond our control.

Therefore, readers are cautioned not to put undue reliance on these statements. Factors that could cause actual results or conditions to differ from those anticipated by these and other forward-looking statements include those more fully described in the Risk Factors section of our 2008 Annual Report on Form 10-K (the 2008 Annual Report) and in other documents we file with the Securities and Exchange Commission (SEC). These forward-looking statements speak only as of the date hereof. We are not under any obligation, and we expressly disclaim any obligation, to publicly release any revisions or updates to these forward-looking statements that may be made to reflect events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events.

The following presentation of management's discussion and analysis of our financial condition and results of operations should be read together with our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

OVERVIEW

Thoratec Corporation (we, our, us, or the Company) is the world leader in mechanical circulatory support with a product portfolio to treat the full range of clinical needs for advanced heart failure patients. We develop, manufacture and market proprietary medical devices used for circulatory support. We also develop, manufacture and market point-of-care diagnostic test systems and skin incision products. Our business is comprised of two operating divisions: Cardiovascular and International Technidyne Corporation (ITC), a wholly owned subsidiary.

For advanced heart failure (HF), our Cardiovascular division develops, manufactures and markets proprietary medical devices used for mechanical circulatory support (MCS). Our primary product lines are our ventricular assist devices (VADs): the Thoratec Paracorporeal Ventricular Assist Device (PVAD), the Thoratec Implantable Ventricular Assist Device (IVAD), the HeartMate Left Ventricular Assist System (HeartMate XVE), and the HeartMate II Left Ventricular Assist System (HeartMate II). We refer to the PVAD and the IVAD collectively as the Thoratec product line and we refer to the HeartMate XVE and the HeartMate II collectively as the HeartMate product line. The PVAD, IVAD, HeartMate XVE and HeartMate II are approved by the U.S Food and Drug Administration (FDA) and Conformite Europeene (CE) Mark approved in Europe. In addition, for acute HF we market the CentriMag Blood Pumping System (CentriMag), which is manufactured by Levitronix LLC (Levitronix) and distributed by us in the U.S. under a distribution agreement with Levitronix. We also manufacture a vascular access graft for renal dialysis.

VADs supplement the pumping function of the heart in patients with advanced HF. In most cases, a cannula connects the left ventricle of the heart to a blood pump. Blood flows from the left ventricle to the pump chamber via the cannula, powered by an electric or air driven mechanism that drives the blood through another cannula into the aorta. From the aorta, the blood then circulates throughout the body. Mechanical or tissue valves enable unidirectional flow in some devices. Currently, the power source remains outside the body for all FDA-approved VADs.

Our ITC division develops, manufactures and markets two product lines: point-of-care diagnostic test systems for hospital point-of-care and alternate site point-of-care markets, including diagnostic test systems that monitor blood coagulation while a patient is being administered certain anticoagulants, and that monitor blood gas/electrolytes, oxygenation and chemistry status; and incision products including devices used to obtain a patient's blood sample for diagnostic testing and screening for platelet function.

Table of Contents

Our Business Model

Our business is comprised of two operating divisions: Cardiovascular and ITC.

The product line of our Cardiovascular division is:

Circulatory Support Products. Our mechanical circulatory support products include the PVAD, IVAD, HeartMate XVE, HeartMate II and CentriMag for acute, intermediate and long-term mechanical circulatory support for patients with advanced HF. We also manufacture and sell small diameter grafts using our proprietary materials to address the vascular access market for hemodialysis.

The product lines of our ITC division are:

Point-of-Care Diagnostics. Our point-of-care products include diagnostic test systems that monitor blood coagulation while a patient is being administered certain anticoagulants, as well as monitor blood gas/electrolytes, oxygenation and chemistry status.

Incision. Our incision products include devices used to obtain a patient's blood sample for diagnostic testing and screening for platelet function.

Cardiovascular Division

VADs supplement the pumping function of the heart in patients with severe HF. In most cases, a cannula connects the left ventricle of the heart to a blood pump. Blood flows from the left ventricle to the pump chamber via the cannula, powered by an electric or air driven mechanism that drives the blood through another cannula into the aorta. From the aorta, the blood then circulates throughout the body. Mechanical or tissue valves enable unidirectional flow in some devices. Currently, the power source remains outside the body for all FDA-approved VADs.

Certain VADs are implanted internally, while others are placed outside the body. Some external devices are placed immediately adjacent to the body (paracorporeal), while other external VADs are positioned at a distance from the body (extracorporeal).

In addition to our MCS devices, we sell vascular access graft products used in hemodialysis for patients with late-stage renal disease.

Our product portfolio of implantable and external MCS devices and graft products is described below.

The Paracorporeal Ventricular Assist Device

The PVAD is an external, pulsatile, ventricular assist device, FDA approved for bridge-to-transplantation (BTT), including home discharge, and post-cardiotomy myocardial recovery and provides left, right and biventricular MCS. The PVAD is a paracorporeal device that is less invasive than implantable VADs since only the cannula is implanted. The paracorporeal nature of the PVAD has several benefits including shorter implantation times (approximately two hours) and the ability to use the device in smaller patients.

A pneumatic power source drives the PVAD. It is designed for short-to-intermediate duration use of a few weeks to several months, although this device has supported numerous patients for nine to eighteen months. Offering left, right or biventricular support, the PVAD and the IVAD, described below, are the only biventricular support systems approved for use as BTT. This characteristic is significant because approximately 50% of BTT patients treated with the PVAD and the IVAD require right as well as left-sided ventricular assistance. The PVAD and the IVAD are also the only devices approved for both BTT and recovery following cardiac surgery. The PVAD incorporates our proprietary biomaterial, Thoralon, which has excellent tissue and blood compatibility and is resistant to blood clots.

Table of Contents*The Implantable Ventricular Assist Device*

The IVAD is an implantable, pulsatile, ventricular assist device FDA approved for BTT, including home discharge, and post-cardiotomy myocardial recovery and provides left, right or biventricular MCS. The IVAD maintains the same blood flow path, valves and blood pumping mechanism as the PVAD, but has an outer housing made of a titanium alloy that makes it suitable for implantation.

We received CE Mark approval to market the IVAD in Europe in July 2003 and FDA approval for the U.S. market in August 2004. The IVAD was approved in Canada in November 2004.

The HeartMate XVE

The HeartMate XVE is an implantable, pulsatile, left ventricular assist device for intermediate and longer-term MCS and is the only device approved in the U.S., Europe and Canada for long-term support of patients ineligible for heart transplantation. Patients with a HeartMate XVE do not require anticoagulation drugs, other than aspirin, because of the product's incorporation of proprietary textured surfaces and tissue valves. The system is comprised of the blood pump and a wearable controller and batteries providing a high degree of patient freedom and mobility.

The HeartMate VE initially received FDA approval in September 1998 for BTT and in November 2002 for long-term support for patients suffering from advance stage HF who are not eligible for heart transplantation (Destination Therapy or DT). The enhanced version of the product, called the HeartMate XVE, received FDA approval in December 2001 for BTT. In April 2003, the HeartMate XVE received FDA approval for DT.

The HeartMate II

The HeartMate II is an implantable, electrically powered, continuous flow, left ventricular assist device consisting of a miniature rotary blood pump designed to provide intermediate and long-term MCS. The HeartMate II is designed to improve survival and quality of life and to provide five to ten years of circulatory support for a broad range of advanced HF patients. Significantly smaller than the HeartMate XVE and with only one moving part, the HeartMate II is simpler and designed to operate more quietly than pulsatile devices. In April 2008, we received FDA approval for the HeartMate II for BTT. In addition, the HeartMate II is in a Phase II pivotal trial in the U.S. for DT. In December 2008, we announced that the HeartMate II had demonstrated superiority in a pre-specified interim analysis to the HeartMate XVE, the control device in the DT pivotal study. This allowed us to gain FDA approval to end randomization in the ongoing continuous access protocol (CAP) phase of the DT study. In April 2009, we filed a pre-market approval (PMA) supplement with the FDA seeking to add the intended use of DT for the HeartMate II LVAS. The PMA filing includes data on a pivotal study cohort of 200 randomized patients, including two-year data on the first 167 patients enrolled. The filing also provides data on adjunctive cohorts totaling an additional 409 patients, including those who had been originally supported by an XVE who then elected to receive a HeartMate II, based on the need for device replacement, and patients enrolled under CAP. We intend to file an amendment to the PMA supplement submission with complete two-year data on all 200 randomized patients at the end of June 2009. The device received CE Mark approval in November 2005, allowing for its commercial sale in Europe.

The CentriMag

The CentriMag is manufactured by Levitronix and is based on their magnetically levitated bearingless motor technology. We entered into a distribution agreement with Levitronix in August 2007, with an initial term effective through December 2011, to distribute the CentriMag in the U.S. The CentriMag is 510(k) cleared by the FDA for use up to six hours in patients requiring short-term extracorporeal circulatory support during cardiac surgery. Additionally, CentriMag is approved under a FDA humanitarian device exemption to be used as a right ventricular assist device for periods of support up to 30 days in patients in cardiogenic shock due to acute right ventricular failure. Levitronix has recently commenced a U.S. pivotal trial to demonstrate safety and effectiveness of the CentriMag for periods of support up to thirty days. Levitronix has CE Mark approval in Europe to market the product to provide support for up to thirty days.

Table of Contents*Vascular Graft Products*

The Vectra Vascular Access Graft was approved for sale in the U.S. in December 2000 and in Europe in January 1998. It is designed for use as a shunt between an artery and a vein, primarily to provide access to the bloodstream for renal hemodialysis patients requiring frequent needle punctures during treatment.

Acquisition of HeartWare International Inc.

On February 12, 2009, Thoratec and HeartWare International Inc. (HeartWare), a medical device company focused on developing the world's smallest implantable pumps for the treatment of advanced heart failure, entered a definitive merger agreement. Under the merger agreement, at the effective time of the merger, each share of HeartWare common stock, including shares of common stock represented by HeartWare CDIs, will be converted into the right to receive \$14.30 in cash, without interest, and 0.6054 of a share of Thoratec common stock, subject to certain adjustments provided for in the merger agreement. Based on the number of shares of HeartWare common stock and shares issuable upon exercise of stock options and other stock-based awards outstanding as of February 12, 2009, and a price of \$26.25 per Thoratec common share (the volume weighted average closing price of Thoratec common shares on The NASDAQ Stock Market for the four trading days preceding the execution of the merger agreement), HeartWare stockholders would receive Thoratec common shares having a market value of approximately \$141.0 million in the merger and an aggregate of approximately \$141.0 million in cash, reflecting a price of \$30.19 per share of HeartWare common stock or \$0.86 for each HeartWare CDI (based upon the assumed US/AUS exchange rate of 1.5265 provided in the merger agreement).

The HeartWare board of directors and the Thoratec board of directors have approved the merger agreement. The completion of the merger depends on a number of conditions being satisfied or, where legally permissible, waived. These conditions include, among others, receipt of the requisite approval of HeartWare stockholders, the expiration or termination of the required waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the HSR Act) and the absence of legal impediments to the consummation of the merger. HeartWare and Thoratec have completed the initial filing of applications and notifications to obtain the expiration or termination of the waiting period under the HSR Act. On March 26, 2009, each of HeartWare and Thoratec received a request for additional information, or a second request, from the Federal Trade Commission, and each of HeartWare and Thoratec are in the process of responding to the information request. We cannot be certain when, or if, the conditions to the mergers will be satisfied or waived, or that the mergers will be completed.

ITC Division

Our product portfolio of point-of-care diagnostic test systems and incision products includes the following:

Hospital point-of-care*The HEMOCHRON Whole Blood Coagulation System*

The HEMOCHRON Whole Blood Coagulation System (HEMOCHRON) is used to quantitatively monitor a patient's coagulation status while the patient is being administered anticoagulants. It may be used in various hospital settings. For instance, it is used in the cardiovascular operating room and cardiac catheterization lab to monitor the drug Heparin, and in an anticoagulation clinic to monitor the drug warfarin. The system consists of a small portable instrument and disposable test cuvettes or tubes and delivers results in minutes.

The IRMA TRUpoint Blood Analysis System

The IRMA TRUpoint Blood Analysis System (IRMA) is used to quantitatively monitor a patient's blood gas, electrolyte and chemistry status. This instrument is a self-contained, portable system which uses disposable test cartridges and delivers results in minutes.

Table of Contents

The AVOXimeter Whole Blood Co-Oximeter/Oximeter System

The AVOXimeter Whole Blood Co-Oximeter/Oximeter System (AVOXimeter) is used to assess a patient's oxygenation status and is commonly used in the cardiac catheterization lab, the intensive care unit (ICU), the neonatal intensive care unit (NICU) and the emergency department. This portable instrument uses small, single-use test cuvettes and delivers results in less than ten seconds.

Our integrated data management system connects the HEMOCHRON, IRMA and AVOXimeter products.

Alternate site point-of-care

The ProTime Microcoagulation System

The ProTime Microcoagulation System (ProTime) is designed to safely monitor blood clotting activity in patients on anticoagulation therapy, specifically warfarin. The system can be prescribed for patient use at home or can be used in the physician's office or clinic. The system consists of a portable, quantitative instrument and disposable test cuvettes and delivers results in minutes.

The Hgb Pro Professional Hemoglobin Testing System

The Hgb Pro Professional Hemoglobin Testing System (Hgb Pro) is used by professionals, mainly in the physician's office, to test for anemia. Hgb Pro delivers quick results from a small blood sample placed on a disposable test strip inserted into a hand-held test meter.

The ProTime and Hgb Pro products are sold into the alternate site non-hospital point-of-care segment of the market comprised of physicians' offices, long-term care facilities, clinics, visiting nurse associations and home healthcare companies.

Incision Products

The Tenderfoot Heel Incision Device (Tenderfoot), the Tenderlett Finger Incision Device (Tenderlett) and the Surgicutt Bleeding Time Device (Surgicutt) are used by medical professionals to obtain a patient's blood sample for diagnostic testing. The Tenderfoot is a heel stick used for infant testing, the Tenderlett is used for finger incisions and the Surgicutt is used to perform screening tests to determine platelet function. These devices feature permanently retracting blades for safe incision with minimal pain, as compared to traditional lancets, which puncture the skin.

These products are sold to both the hospital point-of-care and alternate site point-of-care segments of the market. These products offer certain advantages, command a premium over the competition and are sold in the higher end of the market.

Critical Accounting Policies and Estimates

We have identified the policies and estimates below as critical to our business operations and the understanding of our results of operations. The impact of, and any associated risks related to, these policies and estimates on our business operations are discussed below. Preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities. There can be no assurance that actual results will not differ from those estimates and assumptions.

Table of Contents**Revenue Recognition**

We recognize revenue from product sales for our Cardiovascular and ITC business divisions when evidence of an arrangement exists, title has passed (generally upon shipment) or services have been rendered, the selling price is fixed or determinable and collectability is reasonably assured. Sales to distributors are recorded when title transfers upon shipment. A reserve for sales returns is recorded for sales through the distributor applying reasonable estimates of product returns based upon historical experience.

We recognize sales of certain Cardiovascular division products to first-time customers when we have determined that the customer has the ability to use the products. These sales frequently include the sale of products and training services under multiple element arrangements. Training is not considered essential to the functionality of the products. The amount of revenue under these arrangements allocated to training is based upon fair market value of the training, which is typically performed on our behalf by third party providers. Under this method, the total value of the arrangement is allocated to the training and the Cardiovascular division products based on the relative fair market value of the training and products.

In determining when to recognize revenue, management makes decisions on such matters as the fair values of the product and training elements when sold together, customer credit worthiness and warranty reserves. If any of these decisions proves incorrect, the carrying value of these assets and liabilities on our condensed consolidated balance sheets or the recorded product sales could be significantly different, which could have a material adverse effect on our results of operations for any fiscal period.

Reserves

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make payments owed to us for product sales and training services. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

The majority of our products are covered by up to a two-year limited manufacturer's warranty from the date of shipment or installation. Estimated contractual warranty obligations are recorded when the related sales are recognized and any additional amounts are recorded when such costs are probable and can be reasonably estimated, at which time they are included in Cost of product sales in our condensed consolidated statements of operations. In determining the warranty reserve estimate, management makes judgments and estimates on such matters as repair costs and probability of warranty obligations. The change in accrued warranty expense is summarized in the following table:

| | Balance Beginning of Period | Cost of Warranty Claims | Accruals of Product Warranties | Balance End of Period |
|-----------------------------------|--|--|---|--------------------------------------|
| | (in thousands) | | | |
| Three months ended April 4, 2009 | \$1,071 | \$(882) | \$1,072 | \$1,261 |
| Three months ended March 29, 2008 | \$1,006 | \$(589) | \$ 549 | \$ 966 |

Estimated excess and obsolete inventory reserves are recorded when inventory levels exceed projected sales volume for a certain period of time. In determining the excess obsolete reserve, management makes judgments and estimates on matters such as forecasted sales volume. If sales volume differs from projections, adjustments to these reserves may be required.

Management must make judgments to determine the amount of reserves to accrue. If any of these decisions proves incorrect, our condensed consolidated financial statements could be materially and adversely affected.

Table of Contents***Income Taxes***

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of tax credits, benefits and deductions, such as tax benefits from our non-U.S. operations and in the calculation of certain tax assets and liabilities, which arise from differences in the timing of revenue and expense for tax and financial statement purposes.

We record a valuation allowance to reduce our deferred income tax assets to the amount that is more-likely-than-not to be realized. In evaluating our ability to recover our deferred income tax assets we consider all available positive and negative evidence, including our operating results, ongoing tax planning and forecasts of future taxable income on a jurisdiction by jurisdiction basis. In the event we were to determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we would make an adjustment to the valuation allowance which would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made.

We believe we have provided adequate reserves for uncertain tax positions for anticipated audit adjustments by U.S. federal, state and local, as well as foreign, tax authorities based on our estimate of whether, and the extent to which, additional taxes, interest and penalties may be due. If events occur which indicate payment of these amounts is unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the accrued liabilities are no longer warranted. If our estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result.

Evaluation of Purchased Intangibles and Goodwill for Impairment

In accordance with Statement of Financial Accounting Standards (SFAS) No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, we periodically evaluate the carrying value of long-lived assets to be held and used, including intangible assets subject to amortization, when events or circumstances warrant such a review. The carrying value of a long-lived asset to be held and used is considered impaired when the anticipated separately-identifiable undiscounted cash flows from such an asset are less than the carrying value of the asset. In that event, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the long-lived asset. Fair value is determined primarily using the anticipated cash flows discounted at a rate commensurate with the risk involved. Management must make estimates of these future cash flows, if necessary, and the approximate discount rate, and if any of these estimates proves incorrect, the carrying value of these assets on our condensed consolidated balance sheets could become significantly impaired.

In accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*, such assets with indefinite lives are not amortized but are subject to annual impairment tests. If there is an apparent impairment, a new fair value would be determined. If the new fair value is less than the carrying amount, an impairment loss would be recognized.

Valuation of Share-Based Awards

We account for share-based compensation expense in accordance with the fair value recognition provisions of SFAS No. 123(R), *Share-Based Payment*. Under SFAS No. 123(R), share-based compensation expense is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. Determining the fair value of option awards at the grant date requires judgment, including estimating the expected term of stock options, the expected volatility of our stock, expected forfeitures and expected dividends. The computation of the expected volatility assumption used in the Black-Scholes option pricing model for option grants is based on historical volatility. When establishing the expected life assumption, we review annual historical employee exercise behavior of option grants with similar vesting periods. In addition, judgment is also required in estimating the amount of share-based awards that are expected to be forfeited. If actual results differ significantly from these estimates, share-based compensation expense and our results of operations could be materially affected.

Table of Contents***Fair Value Measurements***

We adopted the provisions of SFAS No. 157, *Fair Value Measurements*, on December 30, 2007. SFAS No. 157 defines fair value as the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date.

In determining fair value, we use various approaches, including market, income and/or cost approaches, and each of these approaches requires certain inputs. SFAS No. 157 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of us. Unobservable inputs are inputs that reflect our assumptions as compared to the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the reliability of inputs as follows:

Level 1-Valuations based on quoted prices in active markets for identical assets or liabilities that we have the ability to access. Assets and liabilities utilizing Level 1 inputs include broker-dealer quote securities that can be traded in an active market. We used Level 1 assumptions for cash and cash equivalents. Since valuations are based on quoted prices that are readily and regularly available in an active market, a significant degree of judgment is not required.

Level 2-Valuations based on quoted prices of similar investments in active markets, of similar or identical investments in markets that are not active or model based valuations for which all significant inputs and value drivers are observable, directly or indirectly. Assets and liabilities utilizing Level 2 inputs primarily include municipal bonds and our senior subordinated convertible notes, except the make-whole provision, which uses Level 3 inputs, described below.

Level 3-Valuations based on inputs that are unobservable and significant to the overall fair value measurement. Assets and liabilities utilizing Level 3 inputs include certain auction rate securities, our Levitronix convertible debenture and the make-whole feature of our senior subordinated convertible notes. Given the current credit market illiquidity for auction rate securities, our estimates are subject to significant judgment by management.

Fair value is a market-based measure considered from the perspective of a market participant who holds the asset or owes the liability rather than an entity-specific measure. Therefore, even when market assumptions are not readily available, our own assumptions are developed to reflect those that market participants would use in pricing the asset or liability at the measurement date. See Note 7 to the condensed consolidated financial statements for further information about our financial assets that are accounted for at fair value.

Due to the uncertainty inherent in the valuation process, estimates of fair value may differ significantly from the values that would have been obtained had an active market for the securities existed, and the differences could be material. After determining the fair value of our available-for-sale securities, gains or losses on these investments are recorded to other comprehensive income, until either the investment is sold or we determine that the decline in value is other-than-temporary. Determining whether the decline in fair value is other-than-temporary requires management judgment based on the specific facts and circumstances of each investment. For investments in available-for-sale securities, these judgments primarily consider: the financial condition and liquidity of the issuer, the issuer's credit rating, and any specific events that may cause us to believe that the debt instrument will not mature and be paid in full; and our ability and intent to hold the investment to maturity. Given the current market conditions, these judgments could prove to be incorrect, and companies with relatively high credit ratings and solid financial conditions may not be able to fulfill their obligations. In addition, if we decide not to hold an investment until its value recovers, it may result in the recognition of other-than-temporary impairment.

Table of Contents**Results of Operations**

The following table sets forth selected condensed consolidated statements of operations data for the periods indicated as a percentage of total product sales:

| | Three Months Ended | | | |
|---|--|----------|---------------------------|----------|
| | (in thousand, except for percentage data) | | | |
| | April 4, 2009 | % | March 29, 2008 | % |
| | | | As adjusted (1) | |
| Product sales | \$ 89,466 | 100% | \$ 64,427 | 100% |
| Cost of product sales | 35,439 | 40 | 28,590 | 44 |
| Gross profit | 54,027 | 60 | 35,837 | 56 |
| Operating expenses: | | | | |
| Selling, general and administrative | 27,455 | 31 | 20,636 | 32 |
| Research and development | 14,086 | 16 | 12,519 | 19 |
| Amortization of purchased intangible assets | 2,931 | 3 | 3,296 | 6 |
| Total operating expenses | 44,472 | 50 | 36,451 | 57 |
| Income (loss) from operations | 9,555 | 10 | (614) | (1) |
| Other income and (expense): | | | | |
| Interest expense and other | (2,866) | (3) | (2,587) | (4) |
| Interest income and other | 988 | 1 | 2,178 | 3 |
| Loss before income tax benefit (expense) | 7,677 | 8 | (1,023) | (2) |
| Income tax benefit (expense) | (2,050) | (2) | 345 | 1 |
| Net income (loss) | \$ 5,627 | 6 | \$ (678) | (1) |

(1) Adjusted for the retrospective adoption of Financial Accounting Standards Board (FASB) Staff Position (FSP) APB 14-1, *Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion*

(Including
Partial Cash
Settlement). See
Note 13
Long-Term
Debt.

See Note 17 to our unaudited condensed consolidated financial statements in this Quarterly Report for data presented by business segment and geographic composition.

Three months ended April 4, 2009 and March 29, 2008

Product Sales

Product sales in the first quarter of 2009 increased by \$25.0 million or 39% as compared to the first quarter of 2008.

| | Three Months Ended | | % Change |
|---------------------|---------------------------|---------------------------|---------------------|
| | April 4, 2009 | March 29, 2008 | |
| | (in thousands) | | |
| Cardiovascular | \$ 64,629 | \$ 40,221 | 61% |
| ITC | 24,837 | 24,206 | 3 |
| Total product sales | \$ 89,466 | \$ 64,427 | 39% |

In the first quarter of 2009 as compared to the first quarter of 2008, Cardiovascular product sales increased by \$24.4 million primarily due to higher sales of our HeartMate product line following approval from the FDA for BTT in April 2008, partially offset by a decline in the Thoratec product line. ITC product sales increased by \$0.6 million, primarily due to higher sales to customers in pharmaceutical clinical trials, offset by a decrease in customers capital equipment purchasing activity due to the economic environment and competitive activity.

Sales originating outside of the U.S. and U.S. export sales accounted for approximately 25% and 30% of our total product sales in the first quarter of 2009 and 2008, respectively.

Table of Contents**Gross Profit**

Gross profit and gross margin are as follows:

| | Three Months Ended | |
|--------------------|---|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | (in thousands, except percentages) | |
| Total gross profit | \$ 54,027 | \$ 35,837 |
| Total gross margin | 60.4% | 55.6% |

In the first quarter of 2009 as compared to the first quarter of 2008, Cardiovascular gross margin percentage increased by 5.8% primarily due to an increase in average selling price associated with North America HeartMate II sales, and improved manufacturing variances driven by volume, partially offset by unfavorable foreign currency exchange and non pump mix. ITC division gross margin percentage decreased by 4.7% primarily due to geographic mix, competitive pricing pressure and unfavorable manufacturing variances.

Selling, General and Administrative

Selling, general and administrative expenses were \$27.5 million in the first quarter of 2009 as compared to \$20.6 million the first quarter of 2008.

| | Three Months Ended | | |
|---|---------------------------|---------------------------|---------------------|
| | April 4, 2009 | March 29, 2008 | |
| | (in thousands) | | % Change |
| Total selling, general and administration | \$ 27,455 | \$ 20,636 | 33% |

In the first quarter of 2009 as compared to the first quarter of 2008, Cardiovascular costs increased by \$1.8 million due to customer training and market development initiatives, including the users meeting. ITC costs increased by \$0.4 million, primarily due to higher bad debt expense, consulting fees and recruiting expenses. Corporate costs increased by \$4.6 million due to higher legal and consulting fees related to the acquisition of HeartWare.

Research and Development

Research and development expenses in the first quarter of 2009 were \$14.1 million, or 16% of product sales, compared to \$12.5 million, or 19% of product sales, in the first quarter of 2008.

| | Three Months Ended | | |
|--------------------------------------|---------------------------|---------------------------|---------------------|
| | April 4, 2009 | March 29, 2008 | |
| | (in thousands) | | % Change |
| Total research and development costs | \$ 14,086 | \$ 12,519 | 13% |

Research and development costs are largely project driven, and fluctuate based on the level of project activity planned and subsequently approved and conducted.

In the first quarter of 2009 as compared to the first quarter of 2008, Cardiovascular costs increased by \$1.3 million primarily due to increased research and development costs associated with the HeartMate product line peripheral enhancements and new product technology. ITC costs increased by \$0.3 million primarily due to higher consulting costs related to new product development.

Table of Contents**Amortization of Purchased Intangible Assets**

Amortization of purchased intangible assets in the first quarter of 2009 was \$2.9 million as compared to \$3.3 million in the first quarter of 2008. The \$0.4 million decrease in amortization expense resulted from certain intangibles assets at our Cardiovascular division being fully amortized during the first quarter of 2009.

Interest Expense

Interest expense was \$2.9 million in the first quarter of 2009 as compared to \$2.6 million in the first quarter of 2008 and primarily related to the subordinated convertible notes as follows:

| | Three Months Ended | | |
|--|---------------------------|--------------|---------------|
| | April | March | |
| | 4, | 29, | |
| | 2009 | 2008 | % |
| | (in thousands) | | Change |
| Interest expense | \$ 2,763 | \$ 2,484 | 11% |
| Amortization of debt issuance costs related to senior subordinated convertible notes | 103 | 103 | |
| Total interest expense | \$ 2,866 | \$ 2,587 | |

Interest expense in the first quarter of 2008 has been adjusted to reflect our adoption of FSP APB 14-1, applied retrospectively, which increases non-cash interest expense based on the market rate of 9% percent per annum as compared to the cash coupon rate of 2.375% and reduces the amortization of debt issuance costs related to the equity component as further discussed in Note 13, Long-Term Debt. Interest expense on the convertible debt is calculated using the interest rate method which increases interest expense over the term of the debt resulting in a higher expense in the first quarter of 2009 as compared to the first quarter of 2008.

Interest Income and Other

Interest income and other for the first quarter of 2009 was \$1.0 million as compared to \$2.2 million for the first quarter of 2008. The components of interest and other income are as follows:

| | Three Months Ended | | |
|---------------------------------|---------------------------|--------------|---------------|
| | April | March | |
| | 4, | 29, | |
| | 2009 | 2008 | % |
| | (in thousands) | | Change |
| Interest income | \$ 1,304 | \$ 2,141 | (39)% |
| Foreign currency, net | (502) | 68 | (838)% |
| Other | 186 | (31) | (684)% |
| Total interest income and other | \$ 988 | \$ 2,178 | |

Interest income for the first quarter of 2009 decreased by \$0.8 million from the first quarter of 2008, mainly due to the decline in market interest rates and the decision to hold cash in short-term investments which yield a lower return. Foreign currency decreased by \$0.6 million because of certain foreign currency transactions for inventory related to our foreign operations, not included in our foreign currency contracts.

Income Taxes

Our effective income tax rate was 26.7% for the first quarter of 2009 as compared to 33.7% for the first quarter of 2008. This 7.0% decrease in our effective tax rate was primarily due to a discrete benefit for \$0.9 million recorded in

the first quarter of 2009 attributable to a change in California tax law and the retrospective application of FSP APB 14-1 related to our senior subordinated convertible notes impact on our pre-tax earnings.

Table of Contents

Our effective tax rate is calculated based on the statutory tax rates imposed on projected annual pre-tax income or loss in various jurisdictions. Since relatively small changes in our forecasted profitability for 2009 can significantly affect our projected annual effective tax rate, we believe our quarterly tax rate will be dependent on our profitability and could fluctuate significantly.

Liquidity and Capital Resources**Cash, Cash Equivalents and Investments**

Cash and cash equivalents include highly liquid financial instruments that are readily convertible to cash and have maturities of 90 days or less from the date of purchase.

Cash and cash equivalents classified as restricted are funds held by a third party. Pursuant to the loan agreement entered into concurrently with the execution and delivery of the merger agreement with HeartWare, the Company deposited \$20.0 million into an escrow account on February 13, 2009. Beginning on May 1, 2009, HeartWare may borrow up to an aggregate of \$12.0 million and beginning on July 31, 2009, HeartWare may borrow up to an aggregate of \$20.0 million, under certain conditions provided in the loan agreement. In the event that all of the conditions to closing the merger have been satisfied (other than those conditions that, by their terms, are not capable of being satisfied until the closing, and the condition that relates to the expiration or termination of the applicable waiting period under the HSR Act) and the Company exercises an option under the merger agreement to extend the outside date for the completion of the merger until January 31, 2010, HeartWare may borrow up to an additional \$8.0 million, which the Company must deposit into the escrow account at the time it exercises its extension option. The maximum aggregate amount that HeartWare may borrow under the loan agreement shall not exceed \$28.0 million.

Investments classified as short-term consist of various financial instruments such as commercial paper, U.S. government agency obligations and corporate notes. Bonds with high credit quality with maturities of greater than 90 days when purchased are classified as available-for-sale. Investments classified as long-term consist of our investments in auction rate securities.

Following is a summary of our cash, cash equivalents and investments:

| | April 4, 2009 | March 29, 2008 |
|--|--------------------------|---------------------------|
| | (in thousands) | |
| Cash and cash equivalents | \$ 115,374 | \$ 80,134 |
| Restricted cash and cash equivalents | 20,000 | |
| Short-term investments | 109,505 | 108,397 |
| Long-term investments | 29,928 | 32,151 |
| Total cash, cash equivalents and investments | \$ 274,807 | \$ 220,682 |

We believe that cash and cash equivalents, short-term available-for-sale investments on hand and expected cash flows from operations, will be sufficient to fund our operations and capital requirements for at least the next twelve months.

As of April 4, 2009 we owned approximately \$37.1 million of auction rate securities. The assets underlying these investments are student loans which are rated Aaa/A or better, and backed by the U.S. government under the Federal Family Education Loan Program or private insurers. Historically, these securities have provided liquidity through a Dutch auction process that resets the applicable interest rate periodically every seven to 365 days. Beginning in February of 2008, these auctions began to fail. Although we have realized higher interest rates for many of these auction rate securities than the current market rates, the principal amount will not be accessible until future auctions for these securities are successful, a secondary market is established, or these securities are called for redemption. Therefore, our auction rate securities are classified as long-term and are valued at \$29.9 million using significant unobservable inputs.

Table of Contents

As a result of these auction failures, these auction rate securities do not have a readily determinable market value. To estimate their fair values at April 4, 2009, we used a discounted cash flow model based on estimated interest rates, the present value of future principal and interest payments discounted at rates considered to reflect current market conditions, and the credit quality of the underlying securities. Specifically, we estimated the future cash flows over a five year period, and applied a credit default rate to reflect the risk in the marketplace for these investments that has arisen due to the lack of an active market. Because of the inherent subjectivity in valuing these securities, we also considered independent valuations obtained for each of our auction rate securities in estimating fair values.

The following table provides a reconciliation of the beginning and ending balances for auction rate securities measured at fair value using significant unobservable inputs (Level 3):

| | Auction Rate Securities (in thousands) |
|---|---|
| Balance at January 3, 2009 | \$ 29,959 |
| Settlement at par | (100) |
| Unrealized holding loss, included in other comprehensive loss | 69 |
| Balance at April 4, 2009 | \$ 29,928 |

We continue to monitor the market for auction rate securities and consider its impact (if any) on the fair value of our investments. If the current market conditions deteriorate further, or the anticipated recovery in fair values does not occur, we may be required to record additional unrealized losses in other comprehensive income or other-than-temporary impairment charges to the condensed consolidated statements of operations in future periods.

We intend and have the ability to hold these auction rate securities until the market recovers, and the securities may recover to par or until maturity. We do not anticipate having to sell these securities in order to operate our business. We believe that, based on our current unrestricted cash, cash equivalents and short-term marketable security balances of \$225 million at April 4, 2009, the current lack of liquidity in the credit and capital markets will not have an impact on our liquidity, our cash flow or our ability to fund our operations. If the issuers of the auction rate securities are unable to successfully complete future auctions and their credit ratings deteriorate, we may in the future be required to record an other-than-temporary impairment charge on these investments. It could conceivably take until the final maturity of the underlying notes (up to 30 years) to realize our investments recorded value.

Long-term obligation

In 2004, we completed the sale of \$143.8 million initial principal amount of senior subordinated convertible notes due in 2034. The senior subordinated convertible notes were issued at an issue price of \$580.98 per note, which is 58.098% of the principal amount at maturity of the notes. The senior subordinated convertible notes bear interest at a rate of 1.3798% per year on the principal amount at maturity, payable semi-annually in arrears in cash on May 16 and November 16 of each year, from November 16, 2004 until May 16, 2011. The Company adopted FSP APB 14-1, applied retrospectively, which increases non-cash interest expense based on the market rate of 9% percent per annum as compared to the cash coupon rate of 2.375% as further discussed in Note 13, Long-Term Debt. Holders of the senior subordinated convertible notes may convert their convertible notes into shares of our common stock at a conversion rate of 29.4652 shares per \$1,000 principal amount of senior subordinated convertible notes, which represents a conversion price of \$19.72 per share, subject to adjustments upon the occurrence of certain events as set forth in the indenture. Holders have been and are able to convert their convertible notes at any point after the close of business on September 30, 2004 if, as of the last day of the preceding calendar quarter, the closing price of our common stock for at least 20 trading days in a period of 30 consecutive trading days ending on the last trading day of such preceding calendar quarter is more than 120% of the accreted conversion price per share of our common stock. Commencing October 1, 2008, this market price conversion feature was satisfied, such that holders of the senior

subordinated convertible notes may convert their notes through the final maturity date of the notes into shares of our common stock at a conversion rate of 29.462 shares per \$1,000 principal amount of senior subordinated convertible notes, subject to adjustments as provided in the indenture. If holders elect conversion, we may, at our option, deliver shares of common stock, pay a holder in cash, or deliver a combination of shares and cash, as determined pursuant to the terms of the notes.

Table of Contents**Cash Flow Activities**

Following is a summary of our cash flow activities:

| | April 4, 2009 | March 29, 2008 |
|--|------------------------------|---------------------------|
| | (in thousands) | |
| Net cash provided by operating activities | \$ 1,356 | \$ 9,716 |
| Net cash provided by investing activities | 7,622 | 50,653 |
| Net cash used in financing activities | (820) | (971) |
| Effect of exchange rate changes on cash and cash equivalents | 163 | 47 |
| Net increase in cash and cash equivalents | \$ 8,321 | \$ 59,445 |

Cash Provided by Operating Activities

For the three months ended April 4, 2009, cash provided by operating activities was \$1.4 million. This amount included net income of \$5.6 million increased by positive non-cash adjustments to net income of \$10.3 million primarily comprised of \$2.6 million related to depreciation, \$2.9 million related to amortization, \$1.1 million related to tax benefit related to stock options, \$4.0 million related to share-based compensation expense and non-cash interest of \$2.8 million. These positive cash contributions were partially offset by a decrease of \$1.0 million related to excess tax benefits from stock option exercises and a decrease of \$2.8 million in our net deferred tax liability. Changes in assets and liabilities used cash of \$14.5 million primarily due to the decrease in accrued compensation, the increase in receivables and inventory partially offset by an increase in accounts payable and other accrued liabilities.

Cash Provided by Investing Activities

For the three months ended April 4, 2009, cash provided by investing activities was \$7.6 million, due to sales and maturities of investments of \$31.3 million, partially offset by a transfer of \$20.0 million to an escrow account to be used by HeartWare in accordance with the loan agreement, and \$3.6 million purchases of property, plant and equipment. The purchased property, plant and equipment included \$2.6 million primarily for leasehold improvements related to the expansion of our manufacturing facility and purchases of management information systems equipment at our Cardiovascular division and \$1.0 million for facility expansion costs at our ITC division.

Cash Used In Financing Activities

For the three months ended April 4, 2009, cash used by financing activities was \$0.8 million, primarily was comprised of \$1.0 million from proceeds related to stock option exercises and \$1.1 million from excess tax benefits from stock option exercises, offset by \$2.9 million of restricted stock purchased for payment of income tax withholding due upon vesting.

Cash Intended for Potential Acquisitions

On February 12, 2009, we entered into a merger agreement pursuant to which we will acquire HeartWare, subject to customary conditions, including adoption of the merger agreement by HeartWare's stockholders, the absence of certain legal impediments to consummation of the merger and the expiration or termination of the required waiting period under the HSR Act. The aggregate value of the cash and equity consideration payable by us in the merger is approximately \$282.0 million of which approximately 50% will be paid in cash. The merger is expected to close in the second half of 2009.

Off Balance Sheet Arrangements

We maintain an Irrevocable Standby Letter of Credit as part of our workers' compensation insurance program. The Letter of Credit is not collateralized. The Letter of Credit automatically renews on June 30th of each year, unless terminated by one of the parties. At April 4, 2009, our Letter of Credit balance was approximately \$850,000.

Table of Contents**Contractual Obligations**

As of April 4, 2009, the liability for uncertain tax positions was \$9.8 million, including interest and penalties. Due to the high degree of uncertainty regarding the timing of potential future cash flows associated with these liabilities, we are unable to make a reasonably reliable estimate of the amount and period in which these liabilities might be paid.

During the three months ended April 4, 2009 there were no other material changes to our contractual obligations reported in our 2008 Annual Report on form 10-K, outside our normal course of business.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE OF MARKET RISK**Interest Rate Risk**

Our investment portfolio is made up of marketable investments in money market funds, auction rate securities, U.S. Treasury securities and debt instruments of government agencies, local municipalities, and high quality corporate issuers. All investments are carried at fair market value and are treated as available-for-sale. Investments with maturities beyond one year may be classified as short-term based on their highly liquid nature due to the frequency with which the interest rate is reset and because such marketable securities represent the investment of cash that is available for current operations. Our auction rate securities that are not liquid are classified as long-term. Our holdings of the securities of any one issuer, except government agencies, do not exceed 10% of the portfolio. If interest rates rise, the market value of our investments may decline, which could result in a loss if it were forced to sell an investment before its scheduled maturity. If interest rates were to rise or fall from current levels by 25 basis points and by 50 basis points, the change in our net unrealized gain or loss on investments would be \$0.2 million and \$0.4 million, respectively. We do not utilize derivative financial instruments to manage interest rate risks. Our senior subordinated convertible notes and the Levitronix convertible debenture do not bear interest rate risk as the notes were issued at a fixed rate of interest.

Foreign Currency Rate Fluctuations

We use forward foreign currency contracts to mitigate the gains and losses generated by the re-measurement of non-functional currency assets and liabilities (primarily assets and liabilities on its U.K. subsidiary's consolidated balance sheet that are not denominated in U.K. pounds). Our contracts typically have maturities of three months or less.

Our forward foreign currency contracts qualify as derivatives under SFAS No. 133 *Accounting for Derivative Instrument and Hedging Activities* and we valued these contracts at the estimated fair value at each balance sheet date. The change in fair value of the forward currency contracts is included in Interest income and other, and offsets the foreign currency exchange gains and losses in the condensed consolidated statements of operations. The impacts of these foreign currency contracts were as follows:

| | Three Months Ended | |
|--|---------------------------|---------------------------|
| | April 4, 2009 | March 29, 2008 |
| | (in thousands) | |
| Foreign currency exchange gain (loss) on foreign currency contracts | \$ 448 | \$(1,040) |
| Foreign currency exchange (loss) gain on foreign translation adjustments | (311) | 1,108 |

As of April 4, 2009, we had forward contracts to sell euros with a notional value of 8.6 million and to purchase U.K. pounds with a notional value of £6.4 million, and as of March 29, 2008 we had forward contracts to sell euros with a notional value of 8.2 million and to purchase U.K. pounds with a notional value of £3.3 million. As of April 4, 2009, our forward contracts had an average exchange rate of one U.S. dollar to 0.7539 euros and one U.S. dollar to 0.6933 U.K. pounds. The forward contracts are valued based on exchange rates derived from an independent source of market participant assumptions and compiled from the best information available. As of April 4, 2009, the estimated fair value of these foreign currency contracts were \$0.1 million, recorded in Prepaid expenses and other assets. The potential fair value loss for a hypothetical 10% adverse change in foreign currency exchange rates at April 4, 2009 would be approximately \$2.1 million.

Table of Contents**ITEM 4. CONTROLS AND PROCEDURES**

Attached as exhibits to this Form 10-Q are certifications of our Chief Executive Officer and Chief Financial Officer, which are required in accordance with Rule 13a-14 of the Securities Exchange Act of 1934, as amended (the Exchange Act). This Controls and Procedures section includes information concerning the controls and controls evaluation referred to in the certifications. Item 9A of our 2008 Annual Report on Form 10-K sets forth management's report on internal control over financial reporting as of January 3, 2009.

Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Exchange Act, as of April 4, 2009. The evaluation of our disclosure controls and procedures included a review of our processes and implementation and the effect on the information generated for use in this Quarterly Report on Form 10-Q. In the course of this evaluation, we sought to identify any significant deficiencies or material weaknesses in our disclosure controls and procedures, to determine whether we had identified any acts of fraud involving personnel who have a significant role in our disclosure controls and procedures, and to confirm that any necessary corrective action, including process improvements, was taken. This type of evaluation is done quarterly so that our conclusions concerning the effectiveness of these controls can be reported in our periodic reports filed with the SEC. The overall goals of these evaluation activities are to monitor our disclosure controls and procedures and to make modifications as necessary. We intend to maintain these disclosure controls and procedures, modifying them as circumstances warrant.

Based on that evaluation, our management, including the Chief Executive Officer and Chief Financial Officer, concluded that as of April 4, 2009 the Company's disclosure controls and procedures, as defined in Rule 13a-15(e) under the Exchange Act, were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive officer, as appropriate to allow timely decisions regarding required disclosures.

Changes to Internal Controls

There have been no changes in our internal controls over financial reporting during the quarter ended April 4, 2009 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Inherent Limitations on Controls and Procedures

Our management, including the Chief Executive Officer and the Chief Financial Officer, does not expect that our disclosure controls and procedures and our internal controls will prevent all error and all fraud. A control system, no matter how well designed and operated, can only provide reasonable assurances that the objectives of the control system are met. The design of a control system reflects resource constraints; the benefits of controls must be considered relative to their costs. Because there are inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been or will be detected. As these inherent limitations are known features of the financial reporting process, it is possible to design into the process safeguards to reduce, though not eliminate, these risks. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns occur because of simple error or mistake. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events. While our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives, there can be no assurance that any design will succeed in achieving its stated goals under all future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Table of Contents

We intend to review and evaluate the design and effectiveness of our disclosure controls and procedures on an ongoing basis and to improve our controls and procedures over time and to correct any deficiencies that we may discover in the future. While our Chief Executive Officer and Chief Financial Officer have concluded that, as of April 4, 2009, the design of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Exchange Act, was effective, future events affecting our business may cause us to significantly modify our disclosure controls and procedures.

PART II. OTHER INFORMATION**ITEM 1A. RISK FACTORS**

In addition to the other information set forth in this Quarterly Report, you should carefully consider the factors discussed in Part I, Item 1A. Risk Factors in our 2008 Annual Report, except as stated below, which could materially affect our business, financial condition or future results. The risks described in our 2008 Annual Report are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

The following risk factor reflects a material change to the Risk Factors set forth in our 2008 Annual Report on Form 10-K for the fiscal year ended January 3, 2009,

Since our physician and hospital customers depend on third party reimbursement, if third party payors fail to provide appropriate levels of coverage and reimbursement for our products, our results of operations will be harmed.

Significant uncertainty exists as to the reimbursement status of newly approved health care products such as VADs and vascular grafts. This uncertainty could delay or prevent adoption by hospitals of these products in volume. Government and other third party payors are increasingly attempting to contain health care costs. Payors are attempting to contain costs by, for example, limiting coverage and the level of reimbursement of new therapeutic products. Payors are also attempting to contain costs by refusing, in some cases, to provide any coverage for uses of approved products for disease indications other than those for which the FDA has granted marketing approval.

To date, a majority of private insurers with whom we have been involved and the CMS have determined to reimburse some portion of the cost of our VADs and our diagnostic and vascular graft products, but we cannot estimate what portion of such costs will be reimbursed, and our products may not continue to be approved for reimbursement. In addition, changes in the health care system may affect the reimbursability of future products. The new administration has set in motion a number of proposed initiatives to reform healthcare and contain costs, and we cannot predict how pending and future legislative and regulatory proposals would influence the manner in which medical devices, including ours, are purchased or covered and reimbursed. For example, the American Recovery and Reinvestment Act of 2009, also known as the stimulus package, includes \$1.1 billion in funding to study the comparative effectiveness of health care treatments and strategies. This funding will be used, among other things, to conduct, support or synthesize research that compares and evaluates the risk and benefits, clinical outcomes, effectiveness and appropriateness of medical products. Although Congress has indicated that this funding is intended to improve the quality of health care, it remains unclear how the research will impact coverage, reimbursement or other third-party payor policies. To the extent these or other reform measures impact the coverage and reimbursement of our current or future products, our revenues and results of operations could be adversely impacted.

ITEM 2: UNREGISTERED SALE OF EQUITY SECURITIES AND USE OF PROCEEDS

There were no unregistered sales of our equity securities during the three months ended April 4, 2009.

The following table sets forth certain information about our common stock repurchased during the three months ended April 4, 2009:

| | Total number of shares purchased | Approximate value of shares authorized to be |
|--------------|---|---|
| Total | | |

| | number of shares purchased (2) | Average price paid per share (in thousands, except per share data) | under publicly announced programs (1) | purchased under publicly announced programs |
|--|---|---|--|--|
| January 4, 2009 through January 31, 2009 | 6.4 | \$ 29.35 | | \$ |
| February 1, 2009 through February 28, 2009 | 102.3 | 25.01 | | |
| March 1, 2009 through April 4, 2009 | 6.3 | 23.14 | | |
| Total | 115.0 | \$ 25.15 | | \$ |

(1) Our share repurchase programs, which authorized us to repurchase up to a total of \$130 million of the Company's common shares, were announced on February 11, 2004 as a \$25 million program, on May 12, 2004 as a \$60 million program, on July 29, 2004 as a \$25 million program and on February 2, 2006 as a \$20 million program. These programs authorize us to acquire shares in the open market or in privately negotiated transactions and do not have an expiration date.

No shares were repurchased under these programs during the three months ended April 4, 2009. As April 4, 2009, we have \$10.1 million remaining under our share repurchase programs.

- (2) Shares purchased that were not part of our publicly announced repurchase programs represent the surrender value of shares of restricted stock used to pay income taxes due upon vesting, and do not reduce the dollar value that may yet be purchased under our publicly announced repurchase programs.

Table of Contents

ITEM 6. EXHIBITS

- 10.34 Thoratec Corporation Corporate Executive Incentive Plan FY 2009, effective for certain executive officer of the Company.
- 10.35 International Technidyne Corporation Executive Incentive Plan FY 2009, effective for certain executive officers of the Company.
- 31.1 Section 302 Certification of Chief Executive Officer.
- 31.2 Section 302 Certification of Chief Financial Officer.
- 32.1 Section 906 Certification of Chief Executive Officer.
- 32.2 Section 906 Certification of Chief Financial Officer.

Table of Contents

SIGNATURES

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

THORATEC CORPORATION

Date: May 14, 2009

/s/ Gerhard F. Burbach
Gerhard F. Burbach
Chief Executive Officer

Date: May 14, 2009

/s/ David V. Smith
David V. Smith
Chief Financial Officer

44