

THORATEC CORP
Form S-4/A
June 16, 2009

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As filed with the Securities and Exchange Commission on June 16, 2009

Registration No. 333-159034

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1
TO

Form S-4

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933
Thoratec Corporation

(Exact name of Registrant as specified in its charter)

California

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

3845

*(Primary Standard Industrial
Classification Code Number)*

94-2340464

*(I.R.S. Employer
Identification Number)*

**6035 Stoneridge Drive
Pleasanton, California 94588
(925) 847-8600**

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

**David A. Lehman, Esq.
Senior Vice President and General Counsel
Thoratec Corporation
6035 Stoneridge Drive
Pleasanton, California 94588**

(925) 847-8600

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

with copies to:

Charles K. Ruck, Esq.
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650 Town Center Drive, 20th Floor
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David McIntyre
Chief Financial Officer and
Chief Operating Officer
HeartWare International, Inc.
205 Newbury Street
Framingham, Massachusetts 01701
(508) 739-0950

Clare O Brien, Esq.
Robert M. Katz, Esq.
Shearman & Sterling LLP
599 Lexington Avenue
New York, New York 10022
(212) 848-4000

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable following the effectiveness of this Registration Statement and upon the effective time of the merger described in the enclosed document.

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

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

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

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

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

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

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The information in this proxy statement/prospectus is not complete and may be changed. Thoratec Corporation may not sell the securities offered by this proxy statement/prospectus until the registration statement filed with the Securities and Exchange Commission, of which this proxy statement/prospectus is a part, is effective. This proxy statement/prospectus is not an offer to sell the securities described in this proxy statement/prospectus and is not soliciting an offer to buy in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY SUBJECT TO COMPLETION DATED JUNE 16, 2009

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

Dear Stockholder:

On February 12, 2009, the board of directors of HeartWare International, Inc., or HeartWare, and the board of directors of Thoratec Corporation, or Thoratec, approved a merger of HeartWare and a wholly-owned subsidiary of Thoratec. Before the merger can be completed, the stockholders of HeartWare must vote to adopt the Agreement and Plan of Merger, which we refer to as the merger agreement, dated as of February 12, 2009, by and among HeartWare, Thoratec, Thomas Merger Sub I, Inc., a direct wholly owned subsidiary of Thoratec, which we refer to as Merger Subsidiary, and Thomas Merger Sub II, Inc., another direct wholly owned subsidiary of Thoratec, which we refer to as Merger Subsidiary Two.

Pursuant to the merger agreement, Merger Subsidiary will merge with and into HeartWare, with HeartWare surviving the merger as a wholly owned subsidiary of Thoratec, which we refer to as the merger. Provided that certain tax-related conditions are satisfied, HeartWare, as the surviving corporation in the merger, will merge with and into Merger Subsidiary Two with Merger Subsidiary Two surviving the merger as a subsidiary of Thoratec, which we refer to as the second merger. The merger and second merger are referred to collectively in this proxy statement/prospectus as the mergers.

As a result of the merger, each share of HeartWare common stock will be converted into the right to receive \$14.30 in cash and 0.6054 of a share of Thoratec common stock. Holders of HeartWare CHESSE Depository Interests, which we refer to as HeartWare CDIs and are traded on the Australian Securities Exchange and which represent 1/35 of a share of HeartWare common stock, will be entitled to receive in exchange for each of their HeartWare CDIs a combination of approximately \$0.4085 in cash and approximately 0.01729 of a share of Thoratec common stock. In addition, if the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date is less than or equal to \$18.38, then HeartWare will have an option to terminate the merger agreement unless, subject to certain adjustments provided for in the merger agreement, Thoratec increases the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 70% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If that same volume weighted average price is equal to or exceeds \$34.13 (130% of the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration), then Thoratec may reduce the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 130% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). Each HeartWare CDI is exchangeable at the option of the holder of the HeartWare CDI into shares of HeartWare common stock at the ratio of one (1) share of common stock

for every thirty-five (35) HeartWare CDIs held by such holder and as a result of the merger, holders of HeartWare CDIs will be entitled to receive 1/35 of the merger consideration described above for each HeartWare CDI held by such holder.

If certain tax-related conditions are satisfied, the transaction will be structured to qualify as a reorganization for U.S. federal income tax purposes, pursuant to which the amount of gain, if any, recognized by a U.S. holder of HeartWare common stock in the merger shall not exceed the cash portion of the merger consideration received. In addition, HeartWare has sought a ruling from Australian tax authorities to confirm that a holder of shares of HeartWare common stock that is a resident of Australia for Australian tax purposes may choose to apply scrip-for-scrip roll-over relief to disregard any capital gain that results to it from the cancellation of its HeartWare common stock to the extent that the capital gain is attributable to the stock portion of the merger consideration it receives under the merger contemplated by the merger agreement.

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The market prices of Thoratec common stock, HeartWare common stock and HeartWare CDIs will fluctuate before the merger. You should obtain current stock price quotations for Thoratec common stock, HeartWare common stock and HeartWare CDIs. HeartWare common stock is quoted on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs are quoted on the Australian Securities Exchange or ASX under the symbol HIN . Thoratec common stock is quoted on The NASDAQ Global Select Market under the symbol THOR .

At a special meeting of HeartWare stockholders, HeartWare stockholders will be asked to vote on the adoption of the merger agreement and certain other matters. The adoption of the merger agreement requires the affirmative vote of the holders of a majority of the outstanding shares of HeartWare common stock entitled to vote. Holders of HeartWare CDIs have a right to direct CHESSE Depository Nominees Pty Limited, the stockholder of record and which we refer to as CDN, on how it should vote its shares and are being requested to give directions to CDN to vote in accordance with the instructions set forth in this proxy statement/prospectus.

The HeartWare board of directors recommends that HeartWare stockholders vote FOR the proposal to adopt the merger agreement and FOR the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies.

This document describes the special meeting, the merger, the documents related to the merger and other related matters. Please carefully read this entire document, including all of its annexes. **In particular, we encourage you to read the section entitled *Risk Factors* beginning on page 25 for a discussion of the risks relating to the proposed merger.** You can also obtain information about Thoratec and HeartWare from documents that each of us has filed with the U.S. Securities and Exchange Commission, or the SEC.

DOUGLAS GODSHALL
President and Chief Executive Officer
HeartWare International, Inc.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Thoratec common stock to be issued in connection with the merger or made any determination with regard to the adequacy or accuracy of this proxy statement/prospectus. Any representation to the contrary is a criminal offense.

This proxy statement/prospectus is dated , 2009, and is first being mailed or otherwise delivered to HeartWare stockholders on or about , 2009.

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

To the stockholders of HeartWare International, Inc.:

A special meeting of stockholders of HeartWare will be held on , 2009, at , U.S. Eastern time (, Australia Eastern Standard Time on , 2009), at , for the following purposes:

to consider and vote upon a proposal to adopt the Agreement and Plan of Merger, dated as of February 12, 2009, by and among HeartWare, Thoratec, Merger Subsidiary, a direct wholly owned subsidiary of Thoratec, and Merger Subsidiary Two, a direct wholly owned subsidiary of Thoratec; and

to consider and vote upon a proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the HeartWare special meeting to adopt the merger agreement.

Only stockholders who owned shares of HeartWare common stock at the close of business, U.S. Eastern time, on , 2009 (, Australia Eastern Standard Time on , 2009), the record date for the HeartWare special meeting, are entitled to notice of, and to attend and vote at, the HeartWare special meeting and any adjournment or postponement of the HeartWare special meeting.

Holders of HeartWare CDIs are entitled to receive notice of, and may attend the HeartWare special meeting, but cannot vote their HeartWare CDIs at the special meeting. Each HeartWare CDI holder has the right to direct CDN, the stockholder of record, on how it should vote on each proposal.

We cannot complete the merger unless the merger agreement is adopted by the affirmative vote of the holders of a majority of the outstanding shares of HeartWare common stock entitled to vote at the HeartWare special meeting. HeartWare stockholders have dissenters' rights under Delaware law in connection with the merger. The proxy statement/prospectus accompanying this notice explains the merger, the merger agreement and HeartWare stockholders' dissenters' rights and provides specific information concerning the HeartWare special meeting. Please review the proxy statement/prospectus carefully.

The HeartWare board of directors has approved and declared the advisability of the merger agreement and has determined that the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of HeartWare and its stockholders and recommends that you vote FOR the proposal to adopt the merger agreement and FOR the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies.

Your vote is important. Whether or not you plan to attend the HeartWare special meeting, if you are a holder of HeartWare common stock, please complete, sign and date the enclosed proxy card and return it promptly in the enclosed postage-paid return envelope as soon as possible. If you hold your shares through a bank, broker or other holder of record, you must vote your shares in accordance with the voting instruction form received from your bank, broker or other holder of record. If you are a holder of HeartWare CDIs, please complete, sign and date the enclosed CDI Voting Instruction Form and return it promptly in the enclosed postage-paid return envelope to CDN as soon as possible.

If you plan to attend the HeartWare special meeting in person, we ask that you notify HeartWare's Company Secretary by sending an e-mail to enquiries@heartware.com.au.

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Please do not send any HeartWare stock certificates at this time.

By order of the board of directors,

David McIntyre
Chief Financial Officer, Chief Operating Officer and Company Secretary

Framingham, Massachusetts
, 2009

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REFERENCES TO ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates by reference important business and financial information about HeartWare and Thoratec from documents filed with the SEC that are not included in or delivered with this proxy statement/prospectus. This information is available to you without charge upon your written or oral request. You may obtain the documents incorporated by reference in this proxy statement/prospectus, other than certain exhibits to those documents, by requesting them in writing or by telephone from the appropriate company at the following addresses and telephone numbers:

THORATEC CORPORATION
6035 Stoneridge Drive
Pleasanton, California 94588
Attention: Investor Relations
Telephone: 925-847-8600
E-mail: ir@thoratec.com

HEARTWARE INTERNATIONAL, INC.
205 Newbury Street
Framingham, Massachusetts 01701
Attention: Mr. David McIntyre
Telephone: 305-818-4123
E-mail: enquiries@heartware.com.au

Investors may also consult HeartWare's or Thoratec's websites for more information concerning the merger described in this proxy statement/prospectus. HeartWare's website is www.heartware.com.au. Thoratec's website is www.thoratec.com. Information included on any of these websites is not incorporated by reference into this proxy statement/prospectus.

If you would like to request documents, please do so by , 2009 in order to receive them before the HeartWare special meeting.

You should rely only on the information contained or incorporated by reference into this proxy statement/prospectus. No one has been authorized to provide you with information that is different from that contained in, or incorporated by reference into, this proxy statement/prospectus. This proxy statement/prospectus is dated , 2009. You should not assume that the information contained in, or incorporated by reference into, this proxy statement/prospectus is accurate as of any date other than that date, except to the extent that such information is contained in an additional document filed with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, between the date of this proxy statement/prospectus and the date of the HeartWare special meeting and is incorporated by reference herein. Neither the mailing of this proxy statement/prospectus to HeartWare stockholders nor the issuance by Thoratec of Thoratec common shares in connection with the merger will create any implication to the contrary.

For more information about the information incorporated by reference into this proxy statement/prospectus and where to obtain copies of documents incorporated by reference into this proxy statement/prospectus, see *Where You Can Find More Information* on page 124.

This proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Information contained in this proxy statement/prospectus regarding Thoratec has been provided by Thoratec and information contained in this proxy statement/prospectus regarding HeartWare has been provided by HeartWare.

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QUESTIONS AND ANSWERS ABOUT THE MERGER

The following are some questions that you, as a stockholder of HeartWare or a holder of HeartWare CDIs, may have regarding the merger and the special meeting of stockholders of HeartWare and brief answers to those questions. We urge you to carefully read the remainder of this proxy statement/prospectus because the information in this section does not provide all the information that might be important to you with respect to the adoption of the merger agreement and the other matters being considered at the HeartWare special meeting of stockholders or the issuance of Thoratec common stock in connection with the merger. Additional important information is also contained in the annexes to, and the documents incorporated by reference in, this proxy statement/prospectus.

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

A: Thoratec has agreed to acquire HeartWare under the terms of the merger agreement. Please see the section entitled *The Merger Agreement* beginning on page 80 of this proxy statement/prospectus for a more detailed summary of the terms and conditions contained in the merger agreement. A copy of the merger agreement is attached to this proxy statement/prospectus as Annex A.

In order to complete the merger, HeartWare stockholders must adopt the merger agreement and all other conditions to the consummation of the merger must be satisfied or waived. HeartWare will hold a special meeting of its stockholders, which we refer to as the HeartWare special meeting, to obtain the required approval of HeartWare stockholders to adopt the merger agreement.

Q: What are HeartWare stockholders being asked to vote on?

A: HeartWare stockholders are being asked to consider and vote on the adoption of the merger agreement and the adjournment of the special meeting to a later date, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the meeting to adopt the merger agreement.

Q: What vote is required to adopt the merger agreement?

A: The adoption of the merger agreement requires the affirmative vote of a majority of the outstanding shares of HeartWare common stock, including shares of HeartWare common stock represented by HeartWare CDIs, entitled to vote at the HeartWare special meeting. In connection with the transactions contemplated by the merger agreement, all but one of the directors on HeartWare's board of directors and certain executive officers of HeartWare, who collectively beneficially own, as of the HeartWare record date, approximately % of the total outstanding shares of HeartWare common stock, and Apple Tree Partners I, L.P., who beneficially owns, as of the HeartWare record date, approximately % of the total outstanding shares of HeartWare common stock have entered into separate support agreements dated as of February 12, 2009, to, among other things, vote their respective shares of HeartWare common stock, **FOR** the adoption of the merger agreement with Thoratec, subject to the terms and conditions of the support agreements. Please see the section entitled *The Support Agreements* beginning on page 106 of this proxy statement/prospectus for a more detailed summary of the terms and conditions contained in the support agreements. Copies of the form of support agreements are attached to this proxy statement/prospectus as Annex D and Annex E.

Q: What vote is required to adopt the proposal to adjourn the special meeting to a later time, if necessary or appropriate, to solicit additional proxies?

A: Assuming a quorum is present at the HeartWare special meeting, the adoption of the proposal to adjourn the special meeting to a later time, if necessary or appropriate, to solicit additional proxies requires the affirmative vote of a majority of shares of HeartWare common stock represented in person or by proxy at the special meeting and entitled to vote thereon.

Q: What will happen in the proposed mergers?

A: Pursuant to the terms of the merger agreement, Merger Subsidiary will merge with and into HeartWare, with HeartWare surviving the merger as a wholly owned subsidiary of Thoratec. Provided that certain tax-related conditions are met as more fully described in the section entitled *The Merger Agreement - Conditions to the Obligations of Each Party to Consummate the Second Merger* beginning on page 96 of this proxy statement/prospectus, then immediately after the merger, HeartWare, as the surviving corporation in the merger, will

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merge with and into Merger Subsidiary Two with Merger Subsidiary Two surviving the second merger as a wholly owned subsidiary of Thoratec.

Q: What will HeartWare stockholders receive in the merger?

A: As a result of the merger, shares owned by holders of HeartWare common stock, including shares of HeartWare common stock represented by HeartWare CDIs, will be converted into the right to receive in exchange for each full share of HeartWare common stock, \$14.30 in cash and 0.6054 of a share of Thoratec common stock.

In addition, if the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date is equal to or less than \$18.38, then HeartWare will have an option to terminate the merger agreement unless, subject to certain adjustments provided for in the merger agreement, Thoratec increases the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 70% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If that same volume weighted average price is equal to or exceeds \$34.13 (130% of the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration), then Thoratec may reduce the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 130% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration).

Each HeartWare CDI is exchangeable at the option of the HeartWare CDI holder into shares of HeartWare common stock at the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs, and, as a result of the merger, holders of HeartWare CDIs will be entitled to receive 1/35 of the merger consideration described above for each HeartWare CDI held by such holder.

Q: What will happen if the value of the stock portion of the merger consideration payable at the effective time of the merger is equal to or less than 70% of the value of the aggregate Thoratec stock consideration as of February 12, 2009 (the date of execution of the merger agreement)?

A: Depending on the facts and circumstances then existing, the HeartWare board of directors may or may not determine to exercise HeartWare's right to terminate the merger agreement as described above. If the HeartWare board of directors determines not to exercise HeartWare's right to terminate the merger agreement, the HeartWare stockholders may receive Thoratec common stock as consideration in the merger with a per share value of less than \$18.38, or 70% of the value of the stock consideration used to determine the merger consideration at signing. If the HeartWare board of directors determines, based on the facts and circumstances existing at the time, not to exercise its right to terminate the merger agreement, HeartWare does not intend to resolicit the votes of its stockholders regarding their adoption of the merger agreement. **Accordingly, in determining whether to vote to adopt the merger agreement, HeartWare stockholders should be mindful that the per share value of the Thoratec common stock they receive in the merger could, as of the effective time of the merger, be less than \$18.38, with the result that the value of the aggregate merger consideration payable for each share of HeartWare common stock, as of the effective time of the merger, could be less than \$25.43 per share, i.e. \$18.38 multiplied by the 0.6054 shares of Thoratec common stock payable in the merger plus \$14.30 in cash, (as compared to a value of \$30.19 per share of HeartWare common stock as of February 12, 2009, the date of execution of the merger agreement).**

Q: What will holders of HeartWare CDIs receive in the merger?

A: Each HeartWare CDI is exchangeable at the option of the holder of the HeartWare CDI into shares of HeartWare common stock at the ratio of one (1) share of common stock for every thirty-five (35) HeartWare CDIs held by such holder and, as a result of the merger, holders of HeartWare CDIs will be entitled to receive 1/35 of the merger consideration described above for each HeartWare CDI held by such holder. Holders of HeartWare CDIs who do not convert their CDIs into shares of HeartWare common stock prior to the closing date of the merger will receive their merger consideration through Computershare Investor Services Pty Ltd, which we refer to as Computershare on behalf of CDN.

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Q: Does the HeartWare board of directors support the merger?

A: Yes. The HeartWare board of directors, by unanimous vote of those present at a meeting duly called, has approved and declared the advisability of the merger agreement and has determined that the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of HeartWare and its stockholders and recommends that you vote **FOR** the proposal to adopt the merger agreement. You should read the section entitled, *HeartWare's Reasons for the Merger and Recommendation of the HeartWare Board of Directors* beginning on page 55. The HeartWare board of directors also recommends that you vote **FOR** the adoption of the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies to facilitate the adoption of the merger agreement.

Q: Are there risks involved in undertaking the merger?

A: Yes. In evaluating the merger, HeartWare stockholders should carefully consider the factors discussed in the section of this proxy statement/prospectus entitled *Risk Factors* beginning on page 25 and other information about HeartWare and Thoratec included in the documents incorporated by reference in this proxy statement/prospectus.

Q: Where and when is the HeartWare special meeting?

A: The HeartWare special meeting will be held on , 2009, at , U.S. Eastern time (, Australia Eastern Standard Time on , 2009), at .

Q: Who can vote their shares of HeartWare common stock in connection with the HeartWare special meeting?

A: HeartWare stockholders can vote their shares in connection with the HeartWare special meeting if they owned HeartWare shares of common stock at the close of business, U.S. Eastern time, on , 2009 (, Australia Eastern Standard Time on , 2009), the record date for the HeartWare special meeting. As of the close of business on that day, shares of HeartWare common stock were outstanding, including shares represented by HeartWare CDIs.

Q: What do holders of shares of HeartWare common stock need to do now?

A: If you are a HeartWare stockholder, after you have carefully read this proxy statement/prospectus, including the annexes and the other documents referred to in this proxy statement/prospectus and have decided how you wish to vote your shares, please submit a proxy to vote your shares promptly as described below. You have one (1) vote for each share of HeartWare common stock you own as of the record date and a proportionate vote for any fractional shares so held.

Q: How do I vote if I am a holder of record of HeartWare common stock?

A: If you are a holder of record of HeartWare common stock, after you have carefully read this document and have decided how you wish to vote your shares of common stock, please vote as soon as possible by:

completing, signing and dating each HeartWare proxy card you receive and returning it in the enclosed postage-prepaid envelope by mail; or

voting in person by appearing at the special meeting.

Mailing in your proxy card will not prevent you from attending the special meeting. You are encouraged to submit a proxy by mail even if you plan to attend the special meeting in person to ensure that your shares of HeartWare common stock are represented at the special meeting.

If you return your signed proxy card, but do not mark the boxes showing how you wish to vote, your shares will be voted **FOR** the proposal to adopt the merger agreement and **FOR** the adoption of the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies.

If you would like to attend the HeartWare special meeting, see *Can I attend the HeartWare special meeting and vote my shares in person?* below.

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Q: How do I vote if my shares are held by a brokerage firm, bank, trust or other nominee?

A: If you are a stockholder who holds shares of HeartWare common stock through a brokerage account or other nominee, such as a bank or trust, after you have carefully read this document and have decided how you wish to vote your shares, please submit a proxy for your shares promptly. If you hold your shares of HeartWare common stock through a brokerage account or another nominee, such as a bank or trust, then the brokerage firm, bank, trust or other nominee is considered to be the stockholder of record with respect to those shares of common stock. However, you are still considered to be the beneficial owner of those shares, with your shares being held in street name. Street name holders generally cannot vote their shares directly and must instead direct their brokerage firm, bank, trust or other nominee on how to vote their shares. Your brokerage firm, bank, trust or other nominee will only be permitted to vote your shares for you at the special meeting for the proposal to adopt the merger agreement if you instruct it on how to vote in accordance with the instruction form included with these materials and forwarded to you by your brokerage firm, bank, trust or other nominee. Submitting your proxy card or directing your brokerage firm, bank, trust or other nominee to vote your shares will ensure that your shares are represented and voted at the HeartWare special meeting. Without instructions, your shares will not be voted on the proposal to adopt the merger agreement, which will have the effect described below under the question, *What if I abstain from voting or fail to instruct my brokerage firm, bank, trust or other nominee on how to vote?*

In addition, because any shares you may hold in street name will be deemed to be held by a different stockholder than any shares you hold of record, shares held in street name will not be combined for voting purposes with shares you hold of record. To be sure your shares are voted, you should instruct your brokerage firm, bank, trust or other nominee to vote your shares. Shares held by a corporation or business entity must be voted by an authorized officer of the entity.

Q: How do I vote if my shares are held in the form of HeartWare CDIs?

A: If you are a holder of HeartWare CDIs, you may attend the special meeting but cannot vote your HeartWare CDIs in person at the special meeting. In order to vote your shares in person, you must have converted your HeartWare CDIs into HeartWare common stock before the record date for the HeartWare special meeting. If you wish to convert your HeartWare CDIs, you should contact Computershare as soon as possible to find out how to convert your HeartWare CDIs into shares of HeartWare common stock and how long the conversion process will take.

If you are a holder of HeartWare CDIs and you do not wish to convert your HeartWare CDIs into shares of HeartWare common stock, you have a right to direct CDN, the stockholder of record, on how it should vote the shares of HeartWare common stock underlying your HeartWare CDIs in relation to each proposal. After you have carefully read this document and have decided how you wish to direct CDN to cast proxy votes with respect to the shares of HeartWare common stock underlying your HeartWare CDIs, please submit your voting instructions as soon as possible by submitting instructions to CDN to vote the underlying shares on your behalf at the meeting on each proposal according to your directions by:

returning by mail the enclosed CDI Voting Instruction Form (instructions on how to fill out the form are set out on the back of the form or on Computershare's website at www.computershare.com.au) to Computershare, using the enclosed postage-prepaid envelope or by mailing it to Computershare Investor Services Pty Ltd, GPO Box 242 Melbourne Victoria 3001 Australia or by faxing it to Computershare to (within Australia) 1800 783 447 or (outside Australia) +61 3 9473 2555; or

submitting your voting instructions via Computershare's website at www.computershare.com.au. You will need your Holder Identification Number or Security Holder Reference Number, which is shown on the enclosed CDI

Voting Instruction Form. You will be taken to have signed the CDI Voting Instruction Form if you submit your instructions in accordance with the directions on the website.

If you are a holder of HeartWare CDIs, CDN cannot vote your HeartWare CDIs without instructions from you. You should instruct CDN how to vote your shares by following the directions on the CDI Voting Instruction Form. Without instructions, your HeartWare CDIs will not be voted, which will have the effect described below under the question *What if I abstain from voting or fail to instruct CDN on how to vote my HeartWare CDIs?* below.

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Q: What is the last day for holders of HeartWare CDIs to submit voting instructions to Computershare?

A: If you are a holder of HeartWare CDIs directing CDN to vote the underlying shares of HeartWare common stock on your behalf, the latest time for receipt of CDI Voting Instruction Forms (and any necessary supporting documents) via mail and voting instructions via Internet is , U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009).

Q: Why is my vote as a HeartWare stockholder important?

A: If you do not vote by proxy or vote in person at the HeartWare special meeting, it will be more difficult for HeartWare to obtain the necessary quorum to hold its special meeting. In addition, your failure to vote, whether by proxy or in person, will have the same effect as a vote **AGAINST** adoption of the merger agreement. The merger agreement must be adopted by the affirmative vote of the holders of a majority of the outstanding shares of HeartWare common stock (including shares represented by HeartWare CDIs) entitled to vote at the special meeting. **The HeartWare board of directors recommends that you vote FOR the proposal to adopt the merger agreement.**

Q: What constitutes a quorum for the special meeting?

A: The presence, in person or by proxy, of stockholders representing a majority of the shares of HeartWare common stock entitled to vote at the special meeting, including shares represented by HeartWare CDIs, will constitute a quorum for the special meeting. If you are a stockholder of record and you submit a properly executed proxy card or vote in person at the special meeting, then your shares will be counted as part of the quorum. Abstentions and broker non-votes will be treated as present at the HeartWare special meeting for purposes of determining the presence or absence of a quorum. All shares of HeartWare common stock held by stockholders (including shares represented by HeartWare CDIs) that are present in person or represented by proxy and entitled to vote at the special meeting, regardless of how such shares are voted or whether such stockholders abstain from voting, will be counted in determining the presence of a quorum.

If CDN has received directions to vote shares of HeartWare common stock underlying HeartWare CDIs in accordance with the procedures set out in this proxy statement/prospectus and on the CDI Voting Instruction Form, regardless of whether the directions are to vote the shares **FOR** , **AGAINST** or to abstain from voting, those shares of HeartWare common stock will be counted in determining the presence of a quorum. If you fail to instruct CDN to vote the shares of HeartWare common stock underlying your HeartWare CDIs, the shares of HeartWare common stock underlying your HeartWare CDIs will not be treated as present at the HeartWare special meeting for purposes of determining the presence or absence of a quorum.

Q: What if I abstain from voting or fail to instruct my brokerage firm, bank, trust or other nominee on how to vote my shares of HeartWare common stock?

A: If you fail to instruct your brokerage firm, bank, trust or other nominee to vote your shares, the nominee will not be able to vote your shares on the proposal to adopt the merger agreement. Because the adoption of the merger agreement requires an affirmative vote of a majority of the outstanding shares of HeartWare common stock for approval, your abstention from voting or your failure to provide your nominee with voting instructions will have the same effect as a vote **AGAINST** the proposal to adopt the merger agreement. Because your brokerage firm, bank, trust or other nominee does have discretionary authority to vote on the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies, your broker or other nominee may vote your shares in its discretion on this proposal. If your broker or other nominee affirmatively abstains from voting your

shares in its discretion on this proposal, it will have the same effect as a vote **AGAINST** the proposal to adjourn the special meeting.

Q: What if I abstain from voting or fail to instruct CDN on how to vote my HeartWare CDIs?

A: If you are a holder of HeartWare CDIs, CDN cannot vote the shares of HeartWare common stock underlying your HeartWare CDIs on your behalf without instructions from you. You should instruct CDN as to how to vote the underlying shares, following the directions CDN provides to you. Please check the CDI Voting Instruction Form used by CDN. Without instructions, CDN cannot vote on your behalf. If you instruct CDN to abstain from voting the shares of HeartWare common stock underlying your HeartWare CDIs, or you fail to instruct

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CDN to vote the underlying shares of HeartWare common stock with respect to the proposal to adopt the merger agreement, your direction to abstain from voting on the proposal or failure to instruct CDN will have the same effect as a vote **AGAINST** the proposal to adopt the merger agreement. In addition, if you instruct CDN to abstain from voting on the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, in order to solicit additional proxies, or you fail to instruct CDN to vote on this proposal, your instruction to CDN to abstain from voting or your failure to instruct CDN will have the same effect as a vote **AGAINST** the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, in order to solicit additional proxies.

Q: How are votes counted?

A: Votes will be counted by the inspector of election appointed for the special meeting, who will separately count **FOR** and **AGAINST** votes and abstentions. Because the adoption of the merger agreement requires the affirmative vote of a majority of the outstanding shares of HeartWare common stock, your failure to vote, your failure to provide voting instructions to your broker or nominee or your abstention from voting will have the same effect as a vote against the adoption of the merger agreement. Because the adoption of the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies, requires the affirmative vote of a majority of the shares of HeartWare common stock represented in person or by proxy at the special meeting, abstentions will count as a vote against the proposal and the failure to vote your shares will not affect the outcome of the proposal.

CDN, on behalf of the holders of HeartWare CDIs, will vote the underlying shares of HeartWare common stock represented by the HeartWare CDIs on an aggregate basis by (i) determining the total number of HeartWare CDIs **FOR** each proposal, (ii) determining the total number of HeartWare CDIs **AGAINST** each proposal, (iii) determining the total number of HeartWare CDIs abstaining from voting on each proposal, (iv) applying the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs and (v) submitting the resultant number of shares of HeartWare common stock **FOR** each proposal and **AGAINST** each proposal and the number of shares abstaining from voting on each proposal, as appropriate.

Q: Can I attend the HeartWare special meeting and vote my shares in person?

A: All holders of HeartWare common stock, including stockholders of record and stockholders who hold their shares through brokerage firms, banks, trusts or other nominees or any other holder of record, and holders of HeartWare CDIs are invited to attend the HeartWare special meeting. If you are not a stockholder of record, you must obtain a proxy, executed in your favor, from the record holder of your shares, such as a brokerage firm, bank, trust or other nominee, to be able to vote in person at the HeartWare special meeting. If you plan to attend the HeartWare special meeting, you must hold your shares in your own name or have a letter from the record holder of your shares confirming your ownership and you must bring a form of personal photo identification with you in order to be admitted. HeartWare reserves the right to refuse admittance to anyone without proper proof of share ownership or without proper photo identification.

Holders of HeartWare CDIs are entitled to attend the HeartWare special meeting but cannot vote their HeartWare CDIs in person at the HeartWare special meeting. In order to vote their shares in person, holders of HeartWare CDIs must have converted their HeartWare CDIs into HeartWare common stock before the record date for the HeartWare special meeting. If you wish to convert your HeartWare CDIs into HeartWare common stock you should contact Computershare as soon as possible to find out how to convert your HeartWare CDIs into shares of HeartWare common stock and how long the conversion process will take and follow the instructions under the question, *How do I vote if my shares are held in the form of HeartWare CDIs?* above.

Q:

Will HeartWare be required to submit the merger agreement to its stockholders even if the HeartWare board of directors has withdrawn, modified or qualified its recommendation?

A: Yes. Unless the merger agreement is terminated before the HeartWare special meeting, HeartWare is required to submit the merger agreement to its stockholders even if the HeartWare board of directors has withdrawn, modified or qualified its recommendation, consistent with the terms of the merger agreement.

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Q: What is the purpose of the second merger, if it occurs?

A: As described below, if certain tax-related conditions are satisfied, the transactions contemplated by the merger agreement will be structured to qualify as a reorganization for U.S. federal income tax purposes. If the transactions are intended to qualify as a reorganization for U.S. federal income tax purposes, the merger of Merger Subsidiary into HeartWare will be followed by a second merger of HeartWare into Merger Subsidiary Two, with Merger Subsidiary Two surviving this second merger as a wholly owned subsidiary of Thoratec. The purpose of employing this two-merger structure is to follow the approach of applicable IRS pronouncements to provide protection against the risk of corporate-level tax to Thoratec and HeartWare in the event the mergers do not qualify as a reorganization .

Q: Will I be subject to U.S. federal income tax on the Thoratec common stock and cash that I receive?

A: For HeartWare stockholders that are U.S. persons (as defined in the section entitled, *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71), if certain tax-related conditions (described later in this document) are satisfied, the transactions contemplated by the merger agreement will be structured to qualify as a reorganization for U.S. federal income tax purposes. If such transactions qualify as a reorganization, you will recognize gain, but not loss, equal to the lesser of (i) the amount of cash you received in the merger and (ii) an amount equal to the excess, if any, of (x) the sum of the amount of cash and the fair market value of the Thoratec common stock you received in the merger over (y) the aggregate tax basis in your HeartWare common stock surrendered.

If the applicable conditions (described later in this document) are not satisfied, or the Internal Revenue Service, which we refer to as the IRS, successfully challenges the treatment of the mergers as a reorganization, the transactions contemplated by the merger agreement will be fully taxable to you for U.S. federal income tax purposes. In this case, you will recognize all of your gain or loss from the exchange of your HeartWare common stock for cash and Thoratec common stock in the merger.

Assuming a value per share of \$24.77 of Thoratec common stock, which was the per share closing price on June 5, 2009, and subject to the discussion under *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71, the transactions contemplated by the merger agreement would be structured to qualify as a reorganization for U.S. federal income tax purposes.

We will notify you via a press release announcing the consummation of the merger as to whether or not the acquisition of HeartWare by Thoratec has been structured to qualify as a reorganization .

You are urged to carefully read the discussion under *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71, and to consult your tax advisor on the consequences of participation in the transactions contemplated by the merger agreement.

Q: If I am a HeartWare stockholder, can I change or revoke my vote?

A: Yes. Regardless of the method you used to cast your vote, if you are a holder of record of shares, you may change your vote by signing and returning a new proxy card with a later date by 11:59 p.m., U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009) or by attending the HeartWare special meeting and voting by ballot at the special meeting.

If you are a HeartWare stockholder of record of shares and wish to revoke rather than change your vote, you must send a written, signed revocation to HeartWare International, Inc., 205 Newbury Street, Framingham, Massachusetts 01701, which must be received by 11:59 p.m., U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009). You must include your control number.

If you hold your shares in street name and wish to change or revoke your vote, please refer to the information on the voting instruction form included with these materials and forwarded to you by your brokerage firm, bank, trust or other nominee to see your voting options.

Any holder of HeartWare common stock entitled to vote in person at the HeartWare special meeting may vote in person regardless of whether a proxy has been previously given, but the mere presence of a stockholder at the special meeting will not constitute revocation of a previously given proxy.

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Q: If I am a HeartWare CDI holder, can I change or revoke my direction to vote?

A: If you are a holder of HeartWare CDIs and have completed and returned your CDI Voting Instruction Form, you may change or revoke the directions contained therein by a written notice of change or revocation to Computershare by no later than , U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009).

Q: If I am a HeartWare stockholder with shares represented by stock certificates, should I send in my HeartWare stock certificates now?

A: No. You should not send in your HeartWare stock certificates at this time. After the merger, Thoratec will send you instructions for exchanging your shares of HeartWare common stock for the merger consideration. If your shares are held in street name by your brokerage firm, bank, trust or other nominee, you will receive instructions from your brokerage firm, bank, trust or other nominee as to how to affect the surrender of your street name shares in exchange for the merger consideration. Please do not send in your stock certificates with your proxy card. Similarly, if you are a holder of HeartWare CDIs, you should not send your holding statement(s) with your CDI Voting Instruction Form. After the merger, Thoratec will send CDN instructions for exchanging its shares of HeartWare common stock for the merger consideration and Computershare will arrange for the merger consideration to be sent to HeartWare CDI holders on behalf of CDN.

Q: When do you expect to complete the merger?

A: HeartWare and Thoratec are working to complete the merger as promptly as practicable. If HeartWare stockholders adopt the merger agreement and we receive the required regulatory approvals described below in *The Merger Regulatory Matters* beginning on page 76, HeartWare currently expects that the merger will be completed during the second half of 2009. However, it is possible that factors outside our control, including the review of the merger by the Federal Trade Commission, which we refer to as the FTC, or under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, which we refer to as the HSR Act, could require us to complete the merger at a later time or may result in us not completing the merger at all.

For a description of certain matters that could delay or prevent the completion of the merger, please refer to *Risk Factors*, beginning on page 25.

Q: Will the shares of Thoratec common stock to be issued as part of the merger consideration be listed on The NASDAQ Stock Market and ASX?

A: Pursuant to the terms of the merger agreement, Thoratec will use its reasonable best efforts to cause the shares of Thoratec common stock to be issued in connection with the merger to be approved for listing on The NASDAQ Stock Market upon the occurrence of the effective time of the merger, subject to official notice of issuance.

The shares of Thoratec common stock will not be listed on ASX.

Q: What happens if I sell my shares of HeartWare common stock or HeartWare CDIs before the special meeting?

A: The record date for stockholders entitled to vote at the special meeting is earlier than the date of the special meeting and the expected closing date of the merger. If you hold shares of HeartWare common stock or HeartWare CDIs on the record date for the special meeting but you transfer your shares of HeartWare common stock or your HeartWare CDIs after the record date but before the special meeting, you will, unless special

arrangements are made, retain your right to vote, or in the case of HeartWare CDIs, your right to give directions to vote, at the special meeting but will transfer the right to receive the merger consideration to the person to whom you transfer your shares or HeartWare CDIs. In addition, if you sell your shares prior to the special meeting or prior to the effective time of the merger, you will not be eligible to exercise your dissenters' rights in respect of the merger.

Q: Can I dissent and require appraisal of my shares?

A: Yes. HeartWare stockholders are entitled to dissenters' rights under Section 262 of the General Corporation Law of the State of Delaware, which we refer to as the Delaware General Corporation Law, provided that they

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satisfy the special criteria and conditions set forth in Section 262 of the Delaware General Corporation Law. You must have been a holder of HeartWare common stock as of the record date for the HeartWare special meeting in order to have dissenters' rights in connection with the merger.

Holders of HeartWare CDIs are not entitled to exercise dissenters' rights in connection with the merger. Accordingly, holders of HeartWare CDIs must have converted their HeartWare CDIs into shares of HeartWare common stock prior to the record date for the HeartWare special meeting in order to have dissenters' rights in connection with the merger.

For more information regarding dissenters' rights, see *The Merger Dissenters Rights* beginning on page 76. In addition, a copy of Section 262 of the Delaware General Corporation Law is attached as Annex G to this proxy statement/prospectus.

Q: Where can I find more information about HeartWare?

A: You can obtain more information about HeartWare from the various sources described under *Where You Can Find More Information* beginning on page 124.

Q: Whom should I call with questions?

A: For additional questions about the merger, assistance in submitting proxies or voting shares of HeartWare common stock, or additional copies of this proxy statement/prospectus or the enclosed proxy card, HeartWare stockholders should contact HeartWare's Company Secretary, Mr. David McIntyre, at (305) 818-4123 or send an e-mail to enquiries@heartware.com.au.

If your brokerage firm, bank, trust or other nominee holds your shares in street name, you should also call your brokerage firm, bank, trust or other nominee for additional information.

Holders of HeartWare CDIs with questions regarding voting procedures should contact Computershare at (within Australia) 1300 850 505 or (outside Australia) +61 3 9415 4000.

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SUMMARY

This summary highlights selected information contained in this proxy statement/prospectus. This summary may not contain all of the information that might be important to you with respect to the adoption of the merger agreement and the issuance of Thoratec common stock. You should carefully read this entire proxy statement/prospectus and the other documents to which we refer you, including in particular the copies of the merger agreement, the loan agreement, the investor's rights agreement, the forms of support agreements, the opinion of J.P. Morgan Securities Inc., which we refer to as J.P. Morgan, and Section 262 of the Delaware General Corporation Law that are attached as annexes to this proxy statement/prospectus or as exhibits to the registration statement on Form S-4, of which this proxy statement/prospectus forms a part, filed by Thoratec with the SEC. In addition, we encourage you to read the information incorporated by reference into this proxy statement/prospectus, which includes important business and financial information about Thoratec and HeartWare that has been filed with the SEC. You may obtain the information incorporated by reference into this proxy statement/prospectus without charge by following the instructions in the section entitled "Where You Can Find More Information" beginning on page 124. We have included page references parenthetically to direct you to a more complete description of the topics presented in this summary. You should also note that all dollar amounts referred to in this proxy statement/prospectus are in U.S. dollars unless otherwise specifically indicated.

General

The Companies (page 36)

Thoratec Corporation
6035 Stoneridge Drive
Pleasanton, California 94588
(925) 897-8600

Thoratec Corporation, a California corporation, is a world leader in therapies to address advanced heart failure and point-of-care diagnostics, and its business is comprised of two operating divisions: Cardiovascular and International Technidyne Corporation, or ITC, a wholly owned subsidiary. For advanced heart failure, Thoratec's Cardiovascular division develops, manufactures and markets proprietary medical devices used for mechanical circulatory support. Thoratec's ITC division develops, manufactures and markets point-of-care diagnostic test systems for hospital point-of-care and alternate site point-of-care markets and incision products.

Thoratec was incorporated in California in March 1976 under the former name of Thoratec Laboratories Corporation. On February 14, 2001, Thoratec changed its name to Thoratec Corporation. Thoratec common stock is traded on The NASDAQ Global Select Market under the symbol "THOR". Additional information about Thoratec and its subsidiaries is included in documents incorporated by reference in this document. See *Where You Can Find More Information* beginning on page 124.

Thomas Merger Sub I, Inc. and Thomas Merger Sub II, Inc.
6035 Stoneridge Drive
Pleasanton, California 94588
(925) 897-8600

Thomas Merger Sub I, Inc. and Thomas Merger Sub II, Inc. are each wholly owned subsidiaries of Thoratec and were each incorporated in Delaware in February 2009 solely for the purpose of facilitating the mergers. Neither Merger

Subsidiary nor Merger Subsidiary Two has carried on any activities to date, except for activities incidental to its formation and activities undertaken in connection with the transactions contemplated by the merger agreement.

HeartWare International, Inc.
205 Newbury Street
Framingham, Massachusetts 01701
(508) 739-0950

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HeartWare International, Inc., a Delaware corporation, is a medical device company that develops and manufactures miniaturized implantable heart pumps to treat patients suffering from advanced heart failure. Its first product, the HeartWare Ventricular Assist System, or the HVAS, is designed to provide circulatory support for patients with advanced heart failure. The HVAS has received regulatory approval for commercial sales in Europe and it is the subject of an ongoing clinical trial investigation by the U.S. Food and Drug Administration, or the FDA. HeartWare's operating subsidiary, HeartWare, Inc., is a Delaware corporation which was incorporated on April 8, 2003 under the name Perpetual Medical, Inc.

HeartWare common stock is traded on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs are traded on ASX under the symbol HIN. Additional information about HeartWare and its subsidiaries is included in documents incorporated by reference in this document. See *Where You Can Find More Information* beginning on page 124.

The Mergers (page 80)

On February 12, 2009, Thoratec, HeartWare, Merger Subsidiary and Merger Subsidiary Two entered into the merger agreement, which is the legal document governing the mergers. Pursuant to the terms of the merger agreement, which is governed by Delaware law, Merger Subsidiary will merge with and into HeartWare, with HeartWare surviving the merger as a wholly owned subsidiary of Thoratec. If the value of the stock portion of the merger consideration to be received by HeartWare stockholders is at least 41% of the aggregate merger consideration at closing (in each case, as determined pursuant to the merger agreement), then immediately following the merger, HeartWare, as the surviving corporation in the merger, will merge with and into Merger Subsidiary Two, with Merger Subsidiary Two surviving the second merger as a wholly owned subsidiary of Thoratec. Upon completion of the mergers, HeartWare common stock will no longer be publicly traded.

What HeartWare Stockholders Will Receive in the Merger (page 81)

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, which we refer to as the merger consideration. However, if the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date is equal to or less than \$18.38, then HeartWare will have an option to terminate the merger agreement unless, subject to certain adjustments provided for in the merger agreement, Thoratec increases the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 70% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If that same volume weighted average price is equal to or exceeds \$34.13, then Thoratec may reduce the number of shares payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 130% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration).

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 (4) 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.

Each HeartWare CDI is exchangeable at the option of the holder of the HeartWare CDI into shares of HeartWare common stock at the ratio of one (1) share of common stock for every thirty-five (35) HeartWare CDIs held by such holder and, as a result of the merger, holders of HeartWare CDIs will be entitled to receive 1/35 of the merger consideration described above for each HeartWare CDI held by such holder. Holders of HeartWare CDIs who do not convert their CDIs into shares of HeartWare common stock prior to the closing date of the merger will receive their merger consideration through Computershare on behalf of CDN.

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Thoratec will not issue any fractional shares of Thoratec common stock in the merger. Each HeartWare stockholder who would otherwise have been entitled to receive a fractional share of Thoratec common stock will instead receive an amount in cash based on such holder's proportionate interest in the net proceeds from the sale or sales in the open market by the exchange agent on behalf of such holder of the aggregate fractional shares of Thoratec common stock that such holder otherwise would be entitled to receive.

Treatment of Options and Other Equity-Based Awards (page 84)

The merger agreement provides that, at or immediately prior to the effective time of the merger, the terms of each then outstanding vested option to purchase shares of HeartWare common stock granted or issued under incentive option agreements or similar arrangements with directors, employees or consultants of HeartWare or under the HeartWare International, Inc. Incentive Option Terms: Non-Executive Directors or the HeartWare International, Inc. 2008 Stock Incentive Plan, which we refer to collectively as HeartWare incentive options, and each outstanding option to purchase shares of HeartWare common stock issued under the HeartWare International, Inc. Employee Stock Option Plan, which we refer to as the HeartWare employee stock option plan, whether or not exercisable or vested, that is outstanding immediately prior to the effective time will be cancelled and will be converted into a right to receive a cash payment, without interest, equal to (i) the excess, if any, of \$30.19 over the applicable exercise price per share of HeartWare common stock of such cancelled option multiplied by (ii) the number of shares of HeartWare common stock such holder would have purchased had such holder exercised such cancelled option in full immediately prior to the effective time.

At the effective time of the merger, each then outstanding unvested HeartWare incentive option shall cease to represent the right to acquire shares of HeartWare common stock and will be converted into, and deemed to constitute, an option to acquire, on the same terms and conditions as were applicable under such unvested HeartWare incentive option, a number of shares of Thoratec common stock equal to the product of (i) the number of shares of HeartWare common stock represented by such unvested HeartWare incentive option and (ii) 1.1499, and such new option to acquire Thoratec common stock will have an exercise price per share equal to (x) the per share exercise price specified in such unvested HeartWare incentive option divided by (y) 1.1499. The 1.1499 exchange ratio for each outstanding unvested HeartWare incentive option is subject to the same volume weighted average price adjustments to the stock portion of the merger consideration described in the section entitled, *What HeartWare Stockholders Will Receive in the Merger* above.

The terms of each right of any kind, contingent or accrued, to receive shares of HeartWare common stock or benefits measured by the value of a number of shares of HeartWare common stock, and each other award of any kind consisting of shares of HeartWare common stock, issued under the HeartWare International, Inc. Restricted Stock Unit Plan, the HeartWare International, Inc. 2008 Stock Incentive Plan or the HeartWare employee stock option plan (including restricted stock, restricted stock units, deferred stock units and dividend equivalents), which we refer to collectively as HeartWare stock-based awards, will be adjusted as necessary to provide that at, or immediately prior to, the effective time, each such HeartWare stock-based award, whether or not exercisable or vested, that is outstanding immediately prior to the effective time, will be cancelled and will be converted into the right to receive a cash payment, without interest, equal to \$30.19 multiplied by the number of shares of HeartWare common stock the holder of such HeartWare stock-based award would have received had such HeartWare stock-based award been fully earned, vested and exercisable and had been exercised or settled immediately prior to the effective time.

For a more complete description of the treatment of options and other equity-based awards, see *The Merger Agreement Treatment of Options and Other Equity-Based Awards* .

Dissenters' Rights (page 76)

Dissenters' rights are statutory rights that enable stockholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to stockholders in connection with the extraordinary transaction. HeartWare stockholders will have dissenters' rights in connection with the merger. If any dissenting HeartWare stockholder demands to be paid the fair value of its dissenting shares, such dissenting shares will not be converted into or exchangeable for the right to receive the merger consideration, and the

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dissenting stockholder will instead be entitled to be paid the fair value of such dissenting shares, as determined by the Delaware Court of Chancery, in accordance with Section 262 of the Delaware General Corporation Law, unless and until such dissenting stockholder (a) withdraws (in accordance with the Delaware General Corporation Law) or (b) effectively loses the right to dissent and receive the fair value of such dissenting shares under Section 262 of the Delaware General Corporation Law. If any dissenting stockholder effectively withdraws or otherwise loses its right to dissent, then as of the later of the occurrence of such event or the closing of the merger, the dissenting shares held by such dissenting stockholder will be cancelled and converted into solely the right to receive the merger consideration, without interest.

You must have been a holder of HeartWare common stock as of the record date for the HeartWare special meeting in order to have dissenters' rights in connection with the merger. Holders of HeartWare CDIs are not entitled to exercise dissenters' rights in connection with the merger and therefore must have converted their HeartWare CDIs into shares of HeartWare common stock prior to the record date for the HeartWare special meeting in order to have dissenters' rights in connection with the merger.

For a more complete description of dissenters' rights associated with the mergers, see *The Merger Dissenters Rights* beginning on page 76.

Material U.S. Federal Income Tax Consequences (page 71)

If certain tax-related conditions contained in the merger agreement (described below) are satisfied, the transaction will be structured to qualify as a reorganization for U.S. federal income tax purposes. If the mergers, taken together, qualify as a reorganization, you will recognize gain, but not loss, equal to the lesser of (i) the amount of cash you receive in the merger and (ii) an amount equal to the excess, if any, of (x) the sum of the amount of cash and the fair market value of the Thoratec common stock you receive in the merger over (y) the aggregate tax basis in your HeartWare common stock surrendered.

These conditions to the transaction being structured to qualify as a reorganization for U.S. federal income tax purposes include: (i) the value of the Thoratec common stock (measured immediately prior to the merger based on the trading values of Thoratec common stock during the last trading session closing before the effective time of the merger) received by HeartWare stockholders being equal to at least 41% of the value of the aggregate merger consideration (as determined pursuant to the merger agreement), and (ii) the delivery of tax opinions by Shearman & Sterling LLP, which we refer to as Shearman, to HeartWare, and Latham & Watkins LLP, which we refer to as Latham, to Thoratec to the effect that the mergers, taken together, will constitute a reorganization for U.S. federal income tax purposes.

The trading value of Thoratec common stock will fluctuate and thus we cannot assure you that these conditions will be satisfied. If these conditions are not satisfied, or the IRS successfully challenges the treatment of the mergers, taken together, as a reorganization, the merger will not qualify as a reorganization for U.S. federal income tax purposes and will be treated as a fully taxable transaction. In such an event, you will recognize and be subject to tax on all of your gain with respect to the disposition of your HeartWare common stock in the merger, including to the extent your HeartWare common stock is exchanged for Thoratec common stock.

Assuming a value per share of \$24.77 of Thoratec common stock, which was the per share closing price on June 5, 2009, and subject to the discussion under *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71, the transactions contemplated by the merger agreement would be structured to qualify as a reorganization for U.S. federal income tax purposes.

We will notify you via a press release announcing the consummation of the merger as to whether or not the acquisition of HeartWare by Thoratec has been structured to qualify as a reorganization .

THE U.S. FEDERAL INCOME TAX CONSEQUENCES DESCRIBED ABOVE MAY NOT APPLY TO ALL HEARTWARE STOCKHOLDERS, INCLUDING CERTAIN HEARTWARE STOCKHOLDERS SPECIFICALLY REFERRED TO ON PAGES 71 THROUGH 75. YOUR TAX CONSEQUENCES, INCLUDING ANY STATE, LOCAL AND NON-U.S. TAX CONSEQUENCES, WILL DEPEND ON YOUR OWN SITUATION. YOU SHOULD CONSULT YOUR TAX ADVISOR TO DETERMINE THE PARTICULAR TAX CONSEQUENCES OF PARTICIPATION IN THE TRANSACTIONS CONTEMPLATED BY THE MERGER AGREEMENT.

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Recommendation of the HeartWare Board of Directors (page 55)

The HeartWare board of directors has, by unanimous vote of those present at a meeting duly called, approved and declared the advisability of the merger agreement and has determined that the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of HeartWare and its stockholders and recommends that you vote **FOR** the proposal to adopt the merger agreement.

To review the background of, and HeartWare's reasons for, the merger, as well as certain risks related to the merger, see pages 49 through 55, pages 55 through 58 and pages 25 through 31, respectively.

Opinion of HeartWare's Financial Advisor

At the meeting of the HeartWare board of directors on February 12, 2009, J.P. Morgan rendered its oral opinion, subsequently confirmed in writing, to the HeartWare board of directors that, as of such date, and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in its opinion, the merger consideration to be paid to the holders of shares of HeartWare common stock in the merger was fair, from a financial point of view, to such holders.

The full text of the written opinion of J.P. Morgan dated February 12, 2009, which sets forth, among other things, the assumptions made, procedures followed, matters considered, and qualifications and limitations on the review undertaken in connection with its opinion, is included as Annex F to this proxy statement/prospectus and is incorporated herein by reference. J.P. Morgan provided its opinion for the information of the HeartWare board of directors in connection with and for the purposes of the evaluation of the transactions contemplated by the merger agreement. J.P. Morgan's written opinion addresses only the consideration to be paid to the holders of shares of HeartWare common stock in the merger, and does not address any other matter. J.P. Morgan's opinion does not constitute a recommendation to any stockholder of HeartWare as to how such stockholder should vote with respect to any matter.

Interests of HeartWare Directors and Executive Officers in the Mergers (page 65)

In considering the recommendation of the HeartWare board of directors with respect to the merger, HeartWare stockholders should be aware that certain executive officers and non-employee directors of HeartWare have certain interests in the merger that may be different from, or in addition to, the interests of HeartWare stockholders generally. The HeartWare board of directors was aware of these interests and considered them, among other matters, when approving the merger agreement and recommending that the HeartWare stockholders vote to adopt the merger agreement. These interests include the following:

at the effective time of the merger, each then outstanding vested HeartWare incentive option and each outstanding option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan, whether vested or unvested, will be cancelled and will convert into a right to receive the cash payment described above under the section entitled, *Treatment of Options and other Equity-Based Awards* and on page 84. Based upon the number of unvested options to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan outstanding as of the HeartWare record date, such unvested options held by the HeartWare non-employee directors and executive officers relating to shares of HeartWare common stock will be cancelled and will be converted into aggregate cash payments of \$;

at the effective time of the merger, each then outstanding unvested HeartWare incentive option will be converted into an option to acquire, on the same terms and conditions, an equivalent number of shares of

Thoratec common stock as converted as described above under the section entitled, *Treatment of Options and other Equity-Based Awards* and on page 84. Based upon the number of such outstanding unvested HeartWare incentive options as of the HeartWare record date, these options will be converted into options to acquire an aggregate of approximately shares of Thoratec common stock at an average exercise price of \$;

each HeartWare stock-based award (other than options granted or issued under (i) incentive option agreements or similar arrangements with directors and executive officers and (ii) the HeartWare employee stock option plan) will be cancelled and will convert into the right to receive the cash payment described above under the section entitled, *Treatment of Options and other Equity-Based Awards* and on page 84. Based upon the number of such restricted stock units as of the HeartWare record date, such units held by the

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HeartWare executive officers and non-employee directors relating to will be cancelled and will be converted into aggregate cash payments of \$;

three (3) of HeartWare s executive officers have each entered into a retention bonus agreement that requires Thoratec to make certain payments to them upon the occurrence of certain events;

two (2) of HeartWare s executive officers have accepted offer letters with Thoratec that will be effective at the effective time of the merger. Additionally, these executive officers have each entered into a separation benefits agreement with Thoratec that becomes effective on the effective time of the merger, which supersedes such executive officer s employment agreement with HeartWare. This agreement requires Thoratec to make certain payments and provide certain benefits if the executive officer s employment is involuntarily terminated by Thoratec without cause or by the executive for good reason as defined in the agreement; and

subject to certain conditions, HeartWare will also be permitted to award additional cash retention bonuses to other HeartWare employees, payable on or following the effective time of the merger. The maximum aggregate amount payable (inclusive of any and all payments, reimbursements and tax gross ups) pursuant to such bonuses and the three (3) retention bonus agreements described above will be \$8.0 million.

For a more complete description of the interests of HeartWare s directors and executive officers in the merger, see *The Merger Interests of HeartWare Directors and Executive Officers in the Mergers* .

Comparison of Rights of Shareholders of Thoratec and Stockholders of HeartWare (page 109)

HeartWare stockholders, whose rights are currently governed by the Certificate of Incorporation of HeartWare, Bylaws of HeartWare and Delaware law, will, upon completion of the merger, become shareholders of Thoratec and their rights will be governed by the Amended and Restated Articles of Incorporation of Thoratec, the Amended and Restated By-laws of Thoratec and California law.

For a more complete description of the comparison of rights of shareholders of Thoratec and stockholders of HeartWare, see *Comparison of Rights of Shareholders of Thoratec and Stockholders of HeartWare* .

The Merger Agreement

Conditions to the Completion of the Mergers (pages 95 through 96)

Currently the companies expect to complete the mergers in the second half of 2009. As more fully described in this document and in 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 HSR Act and the absence of legal impediments to the consummation of the merger. See *The Merger Regulatory Matters* for a description of the request for additional information regarding HeartWare and Thoratec from the FTC. As more fully described in this document and in the merger agreement, a copy of which is attached to this proxy statement/prospectus as Annex A, the completion of the second merger depends on the satisfaction of certain tax-related conditions.

We cannot be certain when, or if, the conditions to the mergers will be satisfied or waived, or that the mergers will be completed.

For a more complete description of the conditions to completion of the mergers, see *The Merger Agreement Conditions to the Obligations of Each Party to Consummate the Merger*, *Conditions to the Obligations of Thoratec and Merger Subsidiary to Consummate the Merger*, *Conditions to the Obligations of HeartWare to Consummate the Merger* and *Conditions to the Obligations of Each Party to Consummate the Second Merger* .

Termination of the Merger Agreement; Termination Fee (pages 97 through 99)

The merger agreement contains provisions addressing the circumstances under which HeartWare or Thoratec may terminate the merger agreement. In addition, the merger agreement provides that, in certain circumstances, HeartWare may be required to pay Thoratec a termination fee of \$11.3 million or, in certain other circumstances, \$5.0 million.

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For a more complete description, see *The Merger Agreement Termination* and *Termination Fee* .

Regulatory Matters (page 76)

Both HeartWare and Thoratec have agreed to use reasonable best efforts to obtain all regulatory approvals required to complete the transactions contemplated by the merger agreement and both Thoratec and HeartWare have agreed to use their respective reasonable best efforts to take all actions necessary to cause the termination of any waiting period under the HSR Act to be satisfied as soon as practicable. 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 FTC, and each of HeartWare and Thoratec are in the process of responding to the information request. Although the companies do not know of any reason as to why they cannot obtain these regulatory approvals in a timely manner, they cannot be certain when or if they will obtain them.

For a more complete description of these regulatory matters, see *The Merger Regulatory Matters* .

The Support Agreements (pages 106 through 107)

As a condition to its entering into the merger agreement, Thoratec required certain stockholders of HeartWare to each enter into a support agreement with Thoratec with respect to all of the shares of HeartWare common stock and HeartWare CDIs beneficially owned by such stockholders on the date thereof, along with all such shares purchased or beneficially acquired after the execution of the support agreements and, pursuant to the support agreements, such stockholders have agreed to vote such shares of HeartWare common stock and HeartWare CDIs held by them in favor of the adoption of the merger agreement and, subject to certain exceptions, have agreed not to dispose of their shares prior to the date of the HeartWare special meeting.

For a more complete description of the support agreements, see *The Support Agreements* .

The Loan Documents

The Loan Agreement (pages 100 through 104)

Concurrent with the execution and delivery of the merger agreement, Thoratec entered into a loan agreement with HeartWare and all of HeartWare's subsidiaries, as guarantors, pursuant to which Thoratec agreed to deposit up to an aggregate of \$28.0 million into an escrow account and to loan such funds through one or more term loans to HeartWare, subject to the terms and conditions set forth in the loan agreement, in order to fund the ongoing operations of HeartWare through the anticipated closing of the merger.

Thoratec has deposited \$20.0 million into the escrow account, although HeartWare could not borrow any funds prior to May 1, 2009. Beginning as of May 1, 2009, HeartWare may borrow up to an aggregate of \$12.0 million of funds and, beginning on July 31, 2009, HeartWare may borrow up to an aggregate of \$20.0 million of funds. 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 Thoratec 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 Thoratec 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.

In the event that the merger agreement is terminated in accordance with its terms, Thoratec may convert the outstanding principal amount of the loans to HeartWare, including any accrued and unpaid interest, as well as any amounts remaining in the escrow account that have not been loaned to HeartWare, in whole or in part, into shares of HeartWare common stock based on a conversion rate equal to (i) \$21.5355 per share of HeartWare common stock in the event the mergers are not consummated as a result of a termination of the merger agreement by either HeartWare or Thoratec due to a competing acquisition proposal that the HeartWare board of directors determines is a superior proposal in accordance with the terms of the merger agreement or (ii) \$35.00 Australian dollars per share of HeartWare common stock in the event the merger agreement is terminated for any other reason, in each case subject to adjustment as provided in the loan agreement.

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The outstanding loans to HeartWare under the loan agreement accrue interest at the rate of 10% per annum and are due and payable, together with accrued and unpaid interest, on the earlier of (i) November 1, 2011, (ii) the date on which all of the loans and all of the amounts held in the escrow account have been converted into HeartWare's common stock in accordance with the loan agreement and (iii) the date on which all of the loans become due and payable in full in accordance with the loan agreement.

For a more complete description of the loan agreement, see *The Loan Agreement*.

The Investor's Rights Agreement (pages 105 through 106)

Concurrent with the execution of the loan agreement, HeartWare and Thoratec entered into an investor's rights agreement pursuant to which HeartWare has agreed to provide certain registration rights with respect to any HeartWare common stock issued upon the conversion of the loans or any amounts held in the escrow account, as further described under the heading *The Loan Agreement - Conversion of Loans*.

For a more complete description of the investor's rights agreement, see *The Investor's Rights Agreement*.

The HeartWare Special Meeting

Date, Time and Place

The special meeting of HeartWare stockholders will be held on _____, 2009, at _____, U.S. Eastern time (_____, Australia Eastern Standard Time on _____, 2009), at _____. At the HeartWare special meeting, HeartWare stockholders will be asked to consider and vote upon the adoption of the merger agreement and the adjournment of the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the HeartWare special meeting to adopt the merger agreement.

Record Date; Voting Power; Quorum (page 31)

Holders of record of HeartWare common stock are entitled to vote at the HeartWare special meeting if they owned shares of HeartWare common stock as of the close of business, U.S. Eastern time on _____, 2009 (_____, Australia Eastern Standard Time on _____, 2009), the HeartWare record date.

As of the HeartWare record date, there were _____ shares of HeartWare common stock entitled to vote at the HeartWare special meeting. Stockholders will have one vote at the HeartWare special meeting for each share of HeartWare common stock that they owned on the HeartWare record date and a proportionate vote for any fractional shares so held. CDN, on behalf of the holders of HeartWare CDIs, will vote the underlying shares of HeartWare common stock represented by the HeartWare CDIs on an aggregate basis by (i) determining the total number of HeartWare CDIs **FOR** each proposal, (ii) determining the total number of HeartWare CDIs **AGAINST** each proposal, (iii) determining the total number of HeartWare CDIs abstaining from voting on each proposal, (iv) applying the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs and (v) submitting the resultant number of shares of HeartWare common stock **FOR** each proposal and **AGAINST** each proposal and the number of shares abstaining from voting on each proposal, as appropriate.

As of the HeartWare record date, there were _____ HeartWare CDIs entitled to give directions to vote at the HeartWare special meeting. Each HeartWare CDI is exchangeable at the option of the HeartWare CDI holder into shares of HeartWare common stock at the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs.

A majority of shares of HeartWare common stock issued, outstanding and entitled to vote constitutes a quorum for the purpose of considering the proposals. In the event that a quorum is not present at the special meeting, the meeting may be adjourned by the affirmative vote of a majority of shares present or represented at the special meeting, in order to solicit additional proxies.

Vote Required (page 32)

Adoption of the merger agreement requires the affirmative vote of the holders of a majority of the outstanding shares of HeartWare common stock entitled to vote in connection with the HeartWare special meeting. Because approval is based on the affirmative vote of a majority of outstanding shares entitled to vote, a HeartWare

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stockholder's failure to vote, failure to provide its broker or other nominee with voting instructions on how to vote its shares or a HeartWare stockholder's abstention from voting will have the same effect as a vote **AGAINST** the adoption of the merger agreement.

Approval of the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies requires the affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the HeartWare special meeting. Because approval of such proposal to adjourn is based on the affirmative vote of a majority of shares present or represented, abstentions from voting will have the same effect as a vote **AGAINST** this proposal and the failure by a HeartWare stockholder to vote its shares will not affect the outcome of this proposal. Brokers or other nominees holding shares of HeartWare common stock in street name will have the authority to vote the shares in their discretion on the proposal. If any such broker or nominee abstains from voting, such abstention will have the same effect as a vote **AGAINST** this proposal. CDN cannot vote the underlying shares on behalf of holders of HeartWare CDIs without instructions from such holders. An instruction to CDN to abstain on this proposal will have the same effect as a vote **AGAINST** this proposal.

Shares Owned by HeartWare Directors and Executive Officers (page 33)

As of the HeartWare record date, directors and executive officers of HeartWare were entitled to vote shares of HeartWare common stock, which represented approximately % of the outstanding shares of HeartWare common stock at that date.

As of the HeartWare record date, directors and executive officers of HeartWare were entitled to give directions to vote HeartWare CDIs, which represented approximately % of the outstanding shares of HeartWare common stock at that date. Each HeartWare CDI is exchangeable at the option of the HeartWare CDI holder, into shares of HeartWare common stock at the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs.

See *The Merger Interests of HeartWare Directors and Executive Officers in the Mergers* .

Table of Contents**Comparative Market Prices**

HeartWare common stock is quoted on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs are quoted on ASX under the symbol HIN. Thoratec common stock is quoted on The NASDAQ Global Select Market under the symbol THOR. The following table presents the closing sale prices of HeartWare common stock, HeartWare CDIs and Thoratec common stock, as reported on their respective exchanges on:

February 12, 2009, the last full trading day prior to the public announcement of the merger agreement; and
 , 2009, the last full trading day prior to the date of this proxy statement/prospectus.

The table also presents the equivalent value of the merger consideration proposed for each share of HeartWare common stock, which was calculated by multiplying the closing price of Thoratec common stock on those dates by the exchange ratio of 0.6054 and adding \$14.30 (which represents the cash component of the merger consideration).

	HeartWare		Thoratec Common Stock	Equivalent Value of One Share of HeartWare Common Stock
	Common Stock	HeartWare CDIs		
February 12, 2009	\$N/A(1)	AUD\$0.665	\$26.37	\$30.26
, 2009	\$	AUD\$	\$	\$

(1) Shares of HeartWare common stock commenced trading on The NASDAQ Global Market on February 24, 2009.

These prices will fluctuate prior to the merger. HeartWare stockholders are urged to obtain current market quotations for the shares of Thoratec common stock prior to voting or providing a proxy with respect to the proposal to adopt the merger agreement.

Table of Contents**Comparative Per Share Information**

The following table sets forth for the periods presented certain per share data of Thoratec and HeartWare on a historical basis, and an unaudited pro forma combined basis, which gives effect to the merger, as if it had been completed on April 4, 2009 for the book value per share data and on December 30, 2007 for the net income (loss) and the cash dividends declared per share data.

The historical per share data of Thoratec has been derived from, and should be read in conjunction with, the historical consolidated financial statements of Thoratec incorporated by reference in this proxy statement/prospectus and the historical per share data of HeartWare has been derived from, and should be read in conjunction with, the historical consolidated financial statements of HeartWare incorporated by reference in this proxy statement/prospectus. See *Where You Can Find More Information* beginning on page 124 of this proxy statement/prospectus. The unaudited pro forma per share data has been derived from, and should be read in conjunction with, the unaudited pro forma condensed combined financial statements included elsewhere in this proxy statement/prospectus. See *Unaudited Pro Forma Condensed Combined Financial Statements* beginning on page 37 of this proxy statement/prospectus. The unaudited pro forma combined equivalent data was calculated by multiplying the corresponding unaudited pro forma combined data by an assumed exchange ratio of 0.6054.

The unaudited combined pro forma information is presented for illustrative purposes only and is not necessarily indicative of the operating results or financial position that would have occurred if the merger had been consummated as of the assumed date, nor is it necessarily indicative of future operating results or the financial position of the combined companies. The pro forma adjustments are based upon available information and certain assumptions that management believes are reasonable. See *Unaudited Pro Forma Condensed Combined Financial Statements* beginning on page 37 of this proxy statement/prospectus.

	Thoratec Fiscal Year Ended January 3, 2009(1)	HeartWare Fiscal Year Ended December 31, 2008	Combined Pro Forma(2)	Pro Forma Combined Equivalent Data
Net income (loss) per share:				
Basic	\$ 0.33	\$ (3.00)	\$ (0.12)	\$ (0.07)
Diluted	\$ 0.33	\$ (3.00)	\$ (0.12)	\$ (0.07)
Cash dividends declared per share	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

(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)*.

(2) Because of different fiscal period ends, the unaudited pro forma condensed combined statement of operations data combines Thoratec's historical consolidated statement of operations for the fiscal year ended January 3, 2009

and HeartWare's historical consolidated statement of operations for the fiscal year ended December 31, 2008.

	Thoratec Three Months Ended April 4, 2009(1)	HeartWare Three Months Ended March 31, 2009(1)	Combined Pro Forma(1)(2)	Pro Forma Combined Equivalent Data
Net income (loss) per share:				
Basic	\$ 0.10	\$ (0.70)	\$ (0.02)	\$ (0.01)
Diluted	\$ 0.10	\$ (0.70)	\$ (0.02)	\$ (0.01)
Book value per share at period end	\$ 8.43	\$ 2.28	\$ 9.67	\$ 5.85
Cash dividends declared per share	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

- (1) Historical book value per share is computed by dividing shareholders' equity by the number of Thoratec or HeartWare common shares outstanding. Pro forma book value per share is computed by dividing pro forma shareholders' equity by the pro forma number of Thoratec common shares outstanding.
- (2) Because of different quarter period ends, the unaudited pro forma condensed combined statement of operations data combines Thoratec's historical condensed consolidated statement of operations for the three months ended April 4, 2009 and HeartWare's historical condensed consolidated statement of operations for the three months ended March 31, 2009.

Table of Contents**Selected Historical Consolidated Financial Data of Thoratec**

The following table sets forth Thoratec's consolidated financial data for the five (5) fiscal years in the period ended January 3, 2009, derived from Thoratec's audited consolidated financial statements. Thoratec reports on a fifty-two to fifty-three (52-53) week fiscal year, which ends on the Saturday closest to December 31. Accordingly, Thoratec's fiscal year will periodically contain more or fewer than 365 days. For example, fiscal year 2004 ended January 1, 2005, fiscal year 2005 ended December 31, 2005, fiscal year 2006 ended December 30, 2006, and fiscal year 2007 ended December 29, 2007. Thoratec's fiscal year 2008 contained 53 weeks and ended on January 3, 2009. In addition, the selected consolidated financial data as of and for the three months ended April 4, 2009 and March 29, 2008 was derived from Thoratec's unaudited condensed consolidated financial statements. These selected condensed consolidated interim financial data are not necessarily indicative of results to be expected for future interim periods or the entire fiscal year.

You should read this information together with *Management's Discussion and Analysis of Financial Condition and Results of Operations* and with the consolidated financial statements and notes to the consolidated financial statements for the fiscal year ended January 3, 2009 included in Thoratec's Form 8-K filed with the SEC on June 11, 2009 and in Thoratec's Form 10-Q for the quarterly period ended April 4, 2009 each of which is incorporated by reference in this proxy statement/prospectus. See *Where You Can Find More Information* beginning on page 124 of this proxy statement/prospectus.

	Three Months Ended		Fiscal Year Ended				
	April 4, 2009	March 29, 2008(3)	2008(1)(3)	2007(1)(3)	2006(1)(3)	2005(3)	2004(3)
	(In thousands, except per share amounts)						
Statement of Operations:							
Product sales	\$ 89,466	\$ 64,427	\$ 313,564	\$ 234,780	\$ 214,133	\$ 201,712	\$ 172,341
Gross profit	54,027	35,837	185,998	136,264	125,485	123,340	100,222
Amortization of goodwill and purchased intangible assets	2,931	3,296	13,183	12,582	12,055	11,204	11,724
In-process research and development					1,120		
Litigation, merger, restructuring and other costs					447	95	733
Net income (loss)	\$ 5,627	\$ (678)	\$ 18,331	\$ (603)	\$ 470	\$ 9,994	\$ 1,427
Basic net income (loss) per share	\$ 0.10	\$ (0.01)	\$ 0.33	\$ (0.01)	\$ 0.01	\$ 0.20	\$ 0.03
Diluted net income (loss) per share	\$ 0.10	\$ (0.01)	\$ 0.33	\$ (0.01)	\$ 0.01	\$ 0.20	\$ 0.03

Balance Sheet**Data:**

Cash and cash equivalents, including short term available-for-sale investments	\$ 224,879	\$ 248,651	\$ 218,350	\$ 194,478	\$ 210,936	\$ 145,859
Working capital	343,246	332,378	301,736	265,691	269,293	206,250
Total assets	688,603	684,085	613,009	590,215	572,792	516,708
Subordinated convertible debentures	126,025	124,115	116,959	110,407	104,406	98,912
Long-term deferred tax liability(2)	37,127	38,842	46,254	59,226	63,862	79,204
Total shareholders equity(2)	\$ 475,158	\$ 466,279	\$ 413,809	\$ 384,691	\$ 371,268	\$ 318,432

No cash dividends have been paid during the periods presented above.

- (1) On January 1, 2006, Thoratec adopted Statement of Financial Accounting Standards (SFAS) No. 123 (R) and included share-based compensation for employee stock-based awards in Thoratec s results of operations.
- (2) On December 31, 2006, Thoratec adopted Financial Accounting Standards Board (FASB) Interpretation No. 48 (FIN 48), *Accounting for Uncertainty in Income Taxes, an interpretation of SFAS No. 109*, and as a result Thoratec reported a cumulative effect adjustment of \$0.5 million, which increased Thoratec s December 31, 2006 Accumulated deficit balance offset by a Long-term deferred tax liability balance.
- (3) 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)*.

Table of Contents**Selected Unaudited Pro Forma Condensed Combined Financial Information**

The following selected unaudited pro forma condensed combined financial information combines the historical consolidated financial position and results of operations of Thoratec and of HeartWare, after giving effect to the proposed merger. The merger is expected to be accounted for using the acquisition method of accounting. Under the acquisition method of accounting, Thoratec will record all assets acquired and liabilities assumed at their respective acquisition-date fair values. The selected unaudited pro forma condensed combined balance sheet information gives effect to the merger as if it had occurred on April 4, 2009. The selected unaudited pro forma condensed combined statement of operations data for the three months ended April 4, 2009 and for the fiscal year ended January 3, 2009, give effect to the merger as if the merger had occurred on December 30, 2007. Because of different fiscal period ends, the selected unaudited pro forma condensed combined statement of operations data for fiscal 2008 combines Thoratec's historical consolidated statement of operations for the fiscal year ended January 3, 2009 and HeartWare's historical consolidated statement of operations for the fiscal year ended December 31, 2008. Because of different three month period ends, the selected unaudited pro forma condensed combined balance sheet information and statement of operations data as of and for the first quarter of 2009 combines Thoratec's historical consolidated balance sheet and statement of operations as of and for the three months ended April 4, 2009 and HeartWare's historical consolidated balance sheet and statement of operations as of and for the three months ended March 31, 2009. See *Unaudited Pro Forma Condensed Combined Financial Statements* beginning on page 37 of this proxy statement/prospectus.

	As of and for the Three Months Ended April 4, 2009	For the Fiscal Year Ended January 3, 2009
Pro Forma Condensed Combined Statements of Operations:		
Product sales	\$ 90,944	\$ 313,896
Gross profit	54,814	186,359
Amortization of purchased intangible assets	5,439	23,213
Net loss	(1,088)	(7,070)
Basic net loss per share	(0.02)	(0.12)
Diluted net loss per share	(0.02)	(0.12)
Pro Forma Condensed Combined Balance Sheet Data:		
Cash and cash equivalents and short-term available-for-sale investments	\$ 96,471	
Working capital	194,900	
Total assets	873,541	
Subordinated convertible debentures	126,025	
Long-term deferred tax liability	69,677	
Total shareholders' equity	597,729	

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Cautionary Statement Regarding Forward-Looking Statements

This proxy statement/prospectus and the documents incorporated by reference herein contain a number of forward-looking statements, including statements about the financial condition, results of operations, earnings outlook, prospects, business strategies, operating efficiencies or synergies, competitive positions, growth opportunities for existing products and the plans and objectives of management concerning Thoratec, HeartWare and the combined company and may include statements for the period following the completion of the mergers. We intend these forward-looking statements to be covered by the safe harbor provided by the Private Securities Litigation Reform Act of 1995. You can find many of these statements by looking for words such as plan, believe, expect, intend, anticipate, estimate, project, potential, possible or other similar expressions.

The forward-looking statements involve certain risks and uncertainties. The ability of either HeartWare or Thoratec to predict results or the actual effects of its plans and strategies, or those of the combined company, is subject to inherent uncertainty. Factors that may cause actual results or earnings to differ materially from such forward-looking statements include those beginning on page 25 under the section entitled *Risk Factors*, as well as, among others, the following:

those discussed and identified in public filings with the SEC made by HeartWare or Thoratec from time to time;

completion of the mergers is dependent on, among other things, receipt of HeartWare stockholder and regulatory approvals, the timing of which cannot be predicted with precision and which may not be received at all;

the mergers may be more expensive to complete than anticipated, including as a result of unexpected factors or events;

the integration of HeartWare's business and operations with those of Thoratec may take longer than anticipated, may be more costly than anticipated and may have unanticipated adverse results relating to HeartWare's or Thoratec's existing businesses;

the anticipated cost savings and other synergies of the mergers may take longer to be realized or may not be achieved in their entirety, and attrition in key customer and other relationships as a result of the mergers may be greater than expected;

the ability to attract and retain qualified personnel;

responses by competitors of HeartWare and Thoratec to the mergers;

decisions to restructure, divest or eliminate business units or otherwise change the business mix of either company;

the risk of new and changing regulations and/or regulatory actions in the U.S. and internationally;

adverse general domestic and international economic conditions;

the extent and duration of continued and new economic and market disruptions as well as the effect of governmental regulatory proposals to address these disruptions;

the ability to obtain and maintain regulatory approval of Thoratec and HeartWare products for sale in the U.S. and internationally;

the results and timing of clinical trials by Thoratec and HeartWare;

reimbursement policies and decisions by government agencies and third-party payors;

competing therapies that may currently, or in the future, be available to heart failure patients;

plans to develop and market new products and the rate of market penetration of new products;

risks relating to the protection of, and challenges to, intellectual property rights; and

the exposure to litigation, including the possibility that litigation relating to the merger agreement and transactions contemplated thereby could delay or impede the completion of the merger.

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You should understand that forward-looking statements are subject to assumptions and uncertainties and that various factors unknown to either Thoratec or HeartWare at this time, in addition to those discussed elsewhere in this proxy statement/prospectus and in the documents referred to or incorporated by reference in this proxy statement/prospectus, could affect the future results of the combined company following the mergers and could cause results to differ materially from those expressed in or implied by these forward-looking statements. The actual results, performance or achievement of Thoratec following the mergers could differ significantly from those expressed in, or implied by, our forward-looking statements. In addition, any of the events anticipated by our forward-looking statements might not occur, and if they do occur, we cannot predict what impact they might have on the results of operations and financial condition of Thoratec following the mergers. You are cautioned not to place undue reliance on these statements, which speak only as of the date of this document or the date of any document incorporated by reference in this document.

All subsequent written and oral forward-looking statements concerning the mergers or other matters addressed in this document and attributable to HeartWare or Thoratec or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this document. Except to the extent required by applicable law or regulation, HeartWare and Thoratec undertake no obligation to update these forward-looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.

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RISK FACTORS

In deciding whether to vote in favor of the adoption of the merger agreement, you should consider the matters described below, as well as all of the information that we have included in this proxy statement/prospectus and its annexes and all of the information included in the documents we have incorporated into this proxy statement/prospectus by reference, especially the other risks described in Thoratec's report on Form 10-K filed with the SEC on February 27, 2009, and in HeartWare's report on Form 10-K filed with the SEC on February 26, 2009. See the section entitled *Where You Can Find More Information* beginning on page 124 of this proxy statement/prospectus and the matters addressed in *Cautionary Statement Regarding Forward-Looking Statements* beginning on page 23 of this proxy statement/prospectus.

The risks and uncertainties described below and in Thoratec's and HeartWare's Form 10-K reports referred to above are not the only risks that Thoratec and HeartWare face. Additional risks and uncertainties not currently known to Thoratec or HeartWare or that Thoratec or HeartWare currently deem immaterial also may impair the business operations of Thoratec, HeartWare or the combined company.

Risks Related to the Mergers

Because the market price of Thoratec common stock will fluctuate, HeartWare stockholders cannot be sure of the market value of the shares of Thoratec common stock that they will receive.

The market price of both Thoratec and HeartWare common stock will fluctuate after the date of this proxy statement/prospectus and the market price of Thoratec common stock will likely vary at the closing of the merger from the \$26.25 per share price used to determine the number of shares of Thoratec common stock that holders of HeartWare common stock will receive in the merger, the price of Thoratec common stock as of the date of this proxy statement/prospectus and the price of Thoratec common stock as of the date of the HeartWare special meeting. The specific dollar value of Thoratec common stock that HeartWare stockholders will receive upon completion of the merger will depend on the market value of Thoratec common stock at that time.

Fluctuations in the market price of Thoratec and HeartWare common stock may be the result of general market and economic conditions, changes in the business, operations or prospects of Thoratec or HeartWare, market assessments of the likelihood that the merger will be completed and the timing of closing of the merger, regulatory considerations and other factors independent of the merger. In addition to the adoption of the merger agreement by HeartWare stockholders at the special meeting, completion of the merger is subject to the expiration or termination of the waiting period under the HSR Act as such waiting period has been extended by the FTC's request for additional information received on March 26, 2009, and the satisfaction of other conditions that may not occur until some time after the special meeting. See *The Merger Agreement - Conditions to the Obligations of Each Party to Consummate the Merger*, *Conditions to the Obligations of Thoratec and Merger Subsidiary to Consummate the Merger*, *Conditions to the Obligations of HeartWare to Consummate the Merger* and *Conditions to the Obligations of Each Party to Consummate the Second Merger* beginning on page 95 of this proxy statement/prospectus. As a result, at the time of the HeartWare special meeting, HeartWare stockholders will not know the precise dollar value of the stock portion of the merger consideration they will be entitled to receive upon completion of the merger.

The merger consideration is valued in U.S. dollars and fluctuations in exchange rates between the U.S. dollar and the Australian dollar could affect the value, in Australian dollars, of the merger consideration to be received by HeartWare stockholders and holders of HeartWare CDIs in the merger.

The cash portion of the merger consideration payable to HeartWare stockholders in the merger will be paid by Thoratec in U.S. dollars. Also, the shares of Thoratec common stock payable to HeartWare stockholders in the merger have been valued using a market price calculated in U.S. dollars, and the value of the cash portion of the merger consideration payable to HeartWare CDI holders has been calculated in U.S. dollars. In addition, the shares of Thoratec common stock received by HeartWare CDI holders as merger consideration will not be listed in Australia with ASX or otherwise, and the market price of such shares on The NASDAQ Global Select Market will be denominated in U.S. dollars. As a result, fluctuations in exchange rates between the U.S. dollar and the

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Australian dollar may materially and adversely affect the value, in Australian dollars, of any cash and Thoratec common stock received by Australian holders of HeartWare common stock or HeartWare CDIs in the merger.

While the market price of Thoratec common stock will fluctuate, the market price of Thoratec common stock payable to HeartWare stockholders in the merger is subject to specified maximum and minimum values. If the market price exceeds the maximum value, the stock portion of the merger consideration payable to HeartWare stockholders may be reduced. If the market price falls below the minimum value, HeartWare may terminate the merger agreement or Thoratec may elect to increase the number of shares of Thoratec stock payable to HeartWare stockholders.

The number of shares of Thoratec common stock to be received by holders of HeartWare common stock in the merger as part of the merger consideration has been fixed at 0.6054 of a share of Thoratec common stock for each share of HeartWare common stock. However, if the volume weighted average of the per share closing prices of Thoratec common stock on NASDAQ for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date is equal to or exceeds 130% of \$26.25, the Thoratec per share price used to determine the merger consideration, then Thoratec may reduce the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 130% of the value of the stock consideration at the signing of the merger agreement. If the value of the stock portion of the merger consideration at closing is reduced to equal 130% of the value of the stock consideration used to determine the merger consideration, the maximum value of the Thoratec common stock consideration that you would be entitled to receive as consideration in the merger would be 130% of the value of the stock consideration used to determine the merger consideration at signing, regardless of the actual value of Thoratec common stock at the closing.

In addition, if the same volume weighted average price described above is equal to or less than 70% of \$26.25, then HeartWare will have an option to terminate the merger agreement unless Thoratec elects to increase the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 70% of the value of the stock consideration used to determine the merger consideration at signing. Thoratec's ability to increase the stock portion of the merger consideration is subject to a requirement that, if an increase in the stock portion of the consideration would require Thoratec to issue more than 19.9% of its outstanding shares of common stock and would therefore require the approval of Thoratec's shareholders under The NASDAQ Stock Market Marketplace Rule 5635 (formerly The NASDAQ Stock Market Marketplace Rule 4350), Thoratec shall increase the cash portion of the consideration payable to HeartWare stockholders instead with respect to any increase above the 19.9% threshold.

In determining whether to exercise HeartWare's right to terminate the merger agreement, the HeartWare directors will take into account the facts and circumstances existing at that time with a view to determining whether they continue to believe that the merger remains advisable and in the best interests of HeartWare's stockholders. In making its determination, the HeartWare directors will consult with HeartWare's management team, as well as its outside legal and financial advisors, and expects to consider, among other things (i) the extent of the decline in Thoratec's average stock price during the measurement period below \$18.38 per share, (ii) the perceived reasons for the decline, including whether the reasons are particular to Thoratec or apply to the medical device industry generally (including taking into account whether the shares of similarly situated companies to Thoratec have suffered a similar decline) and (iii) whether the price decline is likely to be short-term or long-term in nature. In connection with its determination, the HeartWare directors also expect to consider whether, following HeartWare's election to exercise its right to terminate the merger agreement, Thoratec is likely to elect to increase the number of shares of Thoratec common stock payable in the merger such that the per share value of the Thoratec common stock payable in the merger, as of the effective time of the merger, is equal to \$18.38 (70% of the value of the aggregate Thoratec stock consideration payable in the merger, calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration), and to review the factors described under the heading *The Merger*

HeartWare's Reasons for the Merger and Recommendation of the HeartWare Board of Directors beginning on page 55, particularly the factors described under *Strategic Advantages*, *HeartWare's Business Conditions and Prospects*, *Thoratec's Business Conditions and Prospects*, and *Tax Treatment*. The HeartWare directors are cognizant of their fiduciary duties to the HeartWare stockholders in connection with the foregoing determination, and intend to inform themselves of all material information reasonably available to them at that time and to exercise due care in their deliberations before determining

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whether to exercise their right to terminate the merger agreement in these circumstances. **Because this determination may be made by HeartWare directors after the HeartWare special meeting has occurred, in determining whether to vote to adopt the merger agreement, HeartWare stockholders should be mindful that the per share value of the Thoratec common stock they receive in the merger could, as of the effective time of the merger, be less than \$18.38, with the result that the value of the aggregate merger consideration payable for each share of HeartWare common stock, as of the effective time of the merger, could be less than \$25.43 per share, i.e. \$18.38 multiplied by the 0.6054 shares of Thoratec common stock payable in the merger plus \$14.30 in cash, (as compared to a value of \$30.19 per share of HeartWare common stock as of February 12, 2009, the date of execution of the merger agreement).**

The mergers may be fully taxable to HeartWare stockholders for U.S. federal income tax purposes.

If the second merger is not completed, either in accordance with the terms of the merger agreement or otherwise, or if the mergers fail to qualify as a reorganization for U.S. federal income tax purposes (including if the IRS successfully challenges the treatment of the mergers as a reorganization), the receipt of shares of HeartWare common stock and cash for shares of Thoratec common stock in the merger will be fully taxable to HeartWare stockholders for U.S. federal income tax purposes.

Pursuant to the merger agreement, the second merger will not be completed, and the merger will be a fully taxable transaction to HeartWare stockholders for U.S. federal income tax purposes, if the condition described in the first paragraph under the section entitled *The Merger Material U.S. Federal Income Tax Consequences Transaction Structure* beginning on page 72 of this proxy statement/prospectus is not satisfied. Whether that condition is met will depend on the trading values of Thoratec common stock during the last trading session closing before the effective time of merger. The trading value of Thoratec common stock will fluctuate prior to the merger. Accordingly, we cannot assure you that the second merger will occur or that the transaction will not be fully taxable to you.

Assuming a value per share of \$24.77 of Thoratec common stock, which was the per share closing price on June 5, 2009, and subject to the discussion under *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71, the transactions contemplated by the merger agreement would be structured to qualify as a reorganization for U.S. federal income tax purposes.

HeartWare stockholders are strongly urged to consult their tax advisors to determine the specific tax consequences to them of the merger and the second merger, including any U.S. federal, state or local, or non-U.S. or other tax consequences. For more information, see *The Merger Material U.S. Federal Income Tax Consequences* beginning on page 71 of this proxy statement/prospectus.

The merger may result in a gain that may be fully taxable to Australian resident holders of shares of HeartWare common stock to the extent that scrip-for-scrip roll-over relief is not available.

A gain on receipt of replacement Thoratec common stock under the merger contemplated by the merger agreement may be subject to Australian income tax to HeartWare shareholders that are resident of Australia for Australian tax purposes to the extent scrip-for-scrip roll-over relief is not available.

HeartWare has sought a ruling from the Australian tax authorities to confirm the Australian tax consequences for HeartWare shareholders that are resident of Australia, hold their HeartWare common stock on capital account and have their shares of HeartWare common stock cancelled under the merger contemplated in the merger agreement.

HeartWare stockholders that are resident of Australia for Australian tax purposes are strongly urged to consult their tax advisors to determine the specific Australian tax consequences to them of the merger contemplated by the merger

agreement.

Thoratec and HeartWare may not be able to obtain required governmental and regulatory approvals for completing the merger in a timely manner or at all.

Under the HSR Act, the merger may not be consummated unless certain regulatory filings have been submitted to the FTC and the Antitrust Division of the Department of Justice, which we refer to as the Antitrust Division, and certain waiting period requirements have been satisfied. The FTC and the Antitrust Division frequently scrutinize the legality under the antitrust laws of transactions like the merger. At any time before the completion of the merger, the FTC or the Antitrust Division could take any action under the antitrust laws it deems necessary or desirable in the public interest, including seeking to enjoin the completion of the merger, seeking the divestiture of substantial

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assets of Thoratec or HeartWare or seeking operating restrictions on the business of Thoratec or HeartWare or the combined company following the closing. Neither Thoratec nor HeartWare is required to agree to any divestiture of assets or restrictions on its business in order to secure approval of the merger by antitrust authorities. In addition, certain private parties as well as state attorneys general and other antitrust authorities may challenge or delay the transaction under antitrust laws under certain circumstances. On March 26, 2009, HeartWare and Thoratec each received a request for additional information from the FTC. The effect of the second request is to extend the waiting period imposed by the HSR Act until thirty (30) days after HeartWare and Thoratec have substantially complied with the second request, unless that period is extended voluntarily by the parties or terminated sooner by the FTC. We cannot assure you that the merger will not be delayed as a result of antitrust review or that a challenge to the merger on antitrust grounds will not be made, or, if such a challenge is made, what the result will be. The review of the merger by the FTC or the Antitrust Division and any such challenge could significantly delay or prevent the consummation of the merger and, in the event that Thoratec and HeartWare agree to any divestiture or operating restrictions, could have an adverse impact on the financial condition and results of operations of the combined company following the closing.

The pro forma condensed combined financial statements and other pro forma information included in the proxy statement/prospectus are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the transaction.

The pro forma condensed combined financial statements and other pro forma information contained in this proxy statement/prospectus are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the merger. The pro forma condensed combined financial statements have been derived from the historical consolidated financial statements of Thoratec and HeartWare and adjustments and assumptions have been made regarding the combined company after giving effect to the merger. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with accuracy. Moreover, the pro forma condensed combined financial statements and other pro forma information do not reflect all costs that are expected to be incurred by the combined company in connection with the merger. For example, the impact of any incremental costs incurred in integrating the two companies is not reflected in the pro forma condensed combined financial statements and other pro forma information. As a result, the actual financial condition and results of operations of the combined company following the merger may not be consistent with, or evident from, the pro forma condensed combined financial statements and other pro forma information.

The assumptions used in preparing the pro forma condensed combined financial information may not prove to be accurate, and other factors may affect the combined company's financial condition or results of operations following the transaction.

Any decline or potential decline in the combined company's financial condition or results of operations may cause significant variations in the stock price of the combined company. See *Selected Unaudited Pro Forma Condensed Combined Financial Information* beginning on page 22 and *Comparative Per Share Information* beginning on page 20 of this proxy statement/prospectus.

Thoratec and HeartWare may not realize the benefits they expect from the merger because of risks associated with integration and other challenges.

Thoratec's failure to meet the challenges involved in successfully integrating the operations of HeartWare with those of Thoratec, or to otherwise realize any of the anticipated benefits of the merger, could harm the results of operations of Thoratec following the closing. The benefits of the merger anticipated by Thoratec and HeartWare are based on projections and assumptions, not actual experience, and assume a successful integration. Thoratec's realization of the

benefits of the merger will depend, in part, on the timely and successful integration of technology, operations and personnel. The integration of the companies is a complex, time-consuming and expensive process that could disrupt the businesses of Thoratec and HeartWare, even with proper planning and implementation, and

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will require significant management attention and resources. Some of the challenges involved in integrating the businesses of Thoratec and HeartWare include:

integrating information, communications and other systems and reconciling logistics, marketing and administration methods;

maintaining employee morale, retaining key employees and integrating the business cultures of both companies;

preserving important strategic and customer relationships;

coordinating, combining and consolidating operations, relationships and facilities, which may be subject to additional constraints imposed by geographic distance, local laws and regulations;

integrating the companies' internal control over financial reporting and disclosure controls and procedures and creating uniform standards, controls, procedures, policies and information systems; and

minimizing the diversion of management's attention from ongoing business concerns.

Thoratec may not successfully integrate the operations of Thoratec and HeartWare in a timely manner, or at all, and the combined company may not realize the anticipated benefits of the merger to the extent, or in the timeframe, anticipated. In addition to the integration risks discussed above, Thoratec's ability to realize the benefits of the merger could be adversely impacted by practical or legal constraints on its ability to combine operations or by unknown liabilities associated with the merger and the combined operations. A failure by Thoratec to successfully integrate the operations of Thoratec and HeartWare or otherwise to realize any of the anticipated benefits of the merger could cause an interruption of, or a loss of momentum in, the activities of the combined company and could seriously harm Thoratec's financial position and results of operations. In addition, the overall integration of the two companies may result in unanticipated problems, expenses, liabilities, competitive responses, loss of important third-party relationships and diversion of management's attention, and may cause Thoratec's stock price to decline significantly.

Whether or not the merger is completed, the pendency of the merger may cause disruptions in the business of HeartWare or Thoratec which could have material adverse effects on each company's or the combined company's business and operations.

Whether or not the merger is completed, Thoratec's and HeartWare's customers, in response to the announcement of the merger, may delay or defer purchase decisions, which could have a material adverse effect on the business of either company or, if the merger is completed, the combined company. Additionally, HeartWare may lose certain key suppliers as a result of the merger, which, if the merger is completed, could adversely affect the business of the combined company. Current and prospective HeartWare employees may experience uncertainty about their future roles with the combined company. Any failure by HeartWare to attract, retain and motivate executives and key management, sales, marketing and technical personnel during the period prior to the completion of the merger could seriously harm its business, as well as the business of the combined company.

Failure to complete the merger could negatively impact the stock price and the future business and financial results of Thoratec and HeartWare.

Completion of the merger is subject to a number of closing conditions, including the expiration or termination of any applicable waiting period under the HSR Act and adoption of the merger agreement by HeartWare's stockholders and those closing conditions may not be satisfied on a timely basis or at all. If the merger is not completed, the price of

HeartWare and Thoratec common stock may decline. In addition, if the merger is not completed, Thoratec and HeartWare may be subject to a number of material risks, including the following:

Thoratec and HeartWare would not realize any anticipated benefits from being a part of a combined company;

HeartWare may be required to pay a termination fee of either \$11.3 million or \$5.0 million if the merger agreement is terminated under certain circumstances (see *The Merger Agreement Termination Fee* beginning on page 98 of this proxy statement/prospectus);

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Thoratec and HeartWare may be subject to litigation related to any failure to complete the merger, which could require substantial time and resources to resolve;

the market price of HeartWare common stock may be adversely affected to the extent the market price reflects an assumption that the merger will be completed;

HeartWare may not be able to find another buyer willing to pay an equivalent or higher price in an alternative transaction than the price to be paid by Thoratec in the merger;

Thoratec and HeartWare will be required to pay certain costs relating to the merger, such as legal, accounting, financial advisor and printing fees whether or not the merger is completed; and

matters relating to the merger (including integration planning) require substantial commitments of time and resources by Thoratec and HeartWare management, which could otherwise have been devoted to other opportunities that may have been beneficial to Thoratec and HeartWare.

Some directors and executive officers of HeartWare have interests in the merger that differ from the interests of HeartWare stockholders that may influence these directors and executive officers to support the mergers.

Certain of HeartWare's directors and executive officers have financial interests in the merger that are different from, or in addition to, the interests of HeartWare stockholders. The members of the HeartWare board of directors were aware of and considered these interests, among other matters, in evaluating and negotiating the merger agreement and the merger, and in recommending to HeartWare stockholders that the merger agreement be adopted. Please see *The Merger - Interests of HeartWare Directors and Executive Officers in the Mergers*, beginning on page 65.

The merger agreement limits HeartWare's ability to pursue alternatives to the merger.

The merger agreement contains no shop provisions that, subject to limited exceptions, limit HeartWare's ability to discuss, facilitate or commit to competing third-party proposals to acquire all or a significant part of the company. These provisions might discourage a potential competing acquiror that might have an interest in acquiring all or a significant part of HeartWare from considering or proposing that acquisition even if it were prepared to pay consideration with a higher per share market price than that proposed in the merger, or might result in a potential competing acquiror's proposing to pay a lower per share price to acquire HeartWare than it might otherwise have proposed to pay. HeartWare can consider and participate in discussions and negotiations with respect to an alternative proposal so long as the HeartWare board of directors determines in good faith (after consultation with outside legal counsel) that failure to take such action would reasonably be expected to be inconsistent with its fiduciary duties to HeartWare stockholders under applicable law.

The market price for Thoratec common stock may be affected by factors different from those affecting the market price of HeartWare common stock. In addition, holders of Thoratec common stock have different rights as shareholders than holders of HeartWare common stock.

If the merger is completed, holders of HeartWare common stock will become holders of Thoratec common stock. Thoratec's business differs from HeartWare's business, and Thoratec's results of operations and the market price of Thoratec common stock may be affected by factors different from those currently affecting the results of operations of HeartWare and the market price of HeartWare common stock. In addition, the results of operations of the combined company and the market price of the combined company's common stock may be affected by factors different from those currently affecting either Thoratec or HeartWare. For a discussion of the businesses of Thoratec and HeartWare

and of certain factors to consider in connection with those businesses, see the documents incorporated by reference in this proxy statement/prospectus and referred to under *Where You Can Find More Information* beginning on page 124.

In addition, holders of shares of Thoratec common stock will have different rights as Thoratec shareholders than the rights they had as HeartWare stockholders before the merger. For a detailed comparison of the rights of Thoratec shareholders compared to the rights of HeartWare stockholders, see *Comparison of Rights of Shareholders of Thoratec and Stockholders of HeartWare* beginning on page 109 of this proxy statement/prospectus.

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HeartWare stockholders, as a group, will have reduced ownership and voting interests after the merger and will exercise less influence over management of Thoratec than they currently exercise over management of HeartWare.

After the effective time of the merger, HeartWare stockholders will own, as a group, in the aggregate a significantly smaller percentage of Thoratec than they currently own of HeartWare. Immediately following the merger, former stockholders of HeartWare are expected to own approximately % of the outstanding shares of Thoratec common stock, based on the number of shares of HeartWare common stock and Thoratec common stock outstanding on the record date. Consequently, as a general matter, HeartWare stockholders, as a group, will have reduced ownership and voting interests in Thoratec following the merger than they owned of HeartWare prior to the merger and, as a result, they will have less influence over the management and policies of Thoratec than they currently exercise over the management and policies of HeartWare.

Thoratec will incur significant transaction, integration and restructuring costs in connection with the merger.

Thoratec and HeartWare expect to incur significant costs associated with transaction fees and other costs related to the merger. Specifically, as disclosed in prior public filings, Thoratec expects to incur total non-recurring charges associated with the transaction of approximately \$15.0 million to \$20.0 million. In addition, Thoratec will incur integration and restructuring costs following the completion of the merger as it integrates the business of HeartWare with Thoratec. Although Thoratec expects that the realization of efficiencies related to the integration of the businesses will offset incremental transaction, integration and restructuring costs over time, we cannot assure you that this net benefit will be achieved in the near term or at all.

THE HEARTWARE SPECIAL MEETING

HeartWare is furnishing this proxy statement/prospectus to HeartWare stockholders as of the HeartWare record date as part of the solicitation of proxies by the HeartWare board of directors for use at the HeartWare special meeting, including any postponement or adjournment of the meeting. Together with this document, HeartWare is also sending its stockholders a notice of the special meeting and a form of proxy that is solicited by the HeartWare board of directors.

Date, Time and Place of the Special Meeting

The HeartWare special meeting will be held on , 2009, at , U.S. Eastern time (, Australia Eastern Standard Time on , 2009), at .

Purpose of the Special Meeting

At the HeartWare special meeting, HeartWare stockholders will be asked to:

1. consider and vote upon a proposal to adopt the merger agreement; and
2. consider and vote upon a proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the HeartWare special meeting to adopt the merger agreement.

The HeartWare board of directors has approved and declared the advisability of the merger agreement and has determined that the merger and the other transactions contemplated by the merger agreement are fair to and in the best interests of HeartWare and its stockholders and recommends that HeartWare stockholders vote FOR the adoption of the merger agreement and FOR the proposal to adjourn the HeartWare special meeting,

if necessary or appropriate, to permit further solicitation of proxies.

Record Date; Shares Entitled to Vote; Quorum

Only holders of record of HeartWare common stock at the close of business, U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009), the HeartWare record date for the HeartWare special meeting, are entitled to notice of, and to vote at, the HeartWare special meeting and any adjournment or postponement of it.

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On the HeartWare record date, shares of HeartWare common stock, including shares represented by HeartWare CDIs, were issued and outstanding and held by approximately holders of record. Stockholders who hold shares in the form of HeartWare CDIs or in street name should follow the procedures set forth under the heading *The HeartWare Special Meeting Voting of Proxies* beginning on page 33.

Holders of HeartWare CDIs at the close of business, U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009), the HeartWare record date for the HeartWare special meeting, are entitled to notice of, and to direct CDN to vote the underlying shares of HeartWare common stock on their behalf in connection with the HeartWare special meeting and any adjournment or postponement of it by following the procedures set forth under the heading *The HeartWare Special Meeting Voting of Proxies* beginning on page 33. Holders of HeartWare CDIs cannot vote their CDIs in person at the special meeting unless such HeartWare CDI holders have completed the conversion of their HeartWare CDIs into shares of HeartWare common stock prior to the record date for the HeartWare special meeting set forth above. CDN, on behalf of the holders of HeartWare CDIs, will vote the underlying shares of HeartWare common stock represented by the HeartWare CDIs on an aggregate basis by (i) determining the total number of HeartWare CDIs **FOR** each proposal, (ii) determining the total number of HeartWare CDIs **AGAINST** each proposal, (iii) determining the total number of HeartWare CDIs abstaining from voting on each proposal, (iv) applying the ratio of one (1) share of HeartWare common stock for every thirty-five (35) HeartWare CDIs and (v) submitting the resultant number of shares of HeartWare common stock **FOR** each proposal and **AGAINST** each proposal and the number of shares abstaining from voting on each proposal, as appropriate.

A quorum will be present at the HeartWare special meeting if a majority of the shares of HeartWare common stock issued and outstanding, including shares represented by HeartWare CDIs, on the HeartWare record date and entitled to vote at the HeartWare special meeting are represented at the HeartWare special meeting in person or by proxy. Abstentions and broker non-votes (described under the heading, *The HeartWare Special Meeting Voting of Proxies* beginning on page 33) will be treated as present at the HeartWare special meeting for purposes of determining the presence or absence of a quorum for the transaction of all business. In the event that a quorum is not present at the HeartWare special meeting, it is expected that the special meeting will be adjourned to solicit additional proxies, provided that the proposal to adjourn the special meeting has been adopted by the affirmative vote of a majority of shares of HeartWare common stock represented in person or by proxy at the special meeting and entitled to vote thereon, although less than a quorum. Holders of record of HeartWare common stock on the HeartWare record date are entitled to one vote per share on each matter submitted to a vote at the HeartWare special meeting.

Vote Required for Approval

The adoption of the merger agreement requires the affirmative vote of the holders of a majority of the outstanding shares of HeartWare common stock entitled to vote at the HeartWare special meeting. Because the required vote of HeartWare stockholders is based upon the number of outstanding shares of HeartWare common stock entitled to vote, rather than upon the shares actually voted, the failure by a HeartWare stockholder to appoint a proxy or to vote in person at the HeartWare special meeting, abstentions and any failure by street name holders to provide their brokerage firm, bank, trust or other nominee with instructions on how to vote their shares will have the same effect as a vote against the adoption of the merger agreement. If holders of HeartWare CDIs instruct CDN to abstain from voting on their behalf, the shares of HeartWare common stock underlying such HeartWare CDIs will be counted toward a quorum at the HeartWare special meeting. If holders of HeartWare CDIs fail to instruct CDN to vote the shares of HeartWare common stock underlying their HeartWare CDIs on their behalf, the shares of HeartWare common stock underlying such HeartWare CDIs will not be counted toward a quorum at the HeartWare special meeting. Instructions to CDN to abstain from voting or failure to instruct CDN to vote the underlying shares will, however, have the same effect as a vote **AGAINST** the proposal to adopt the merger agreement.

The approval of the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the HeartWare special meeting to adopt the merger agreement requires the affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the HeartWare special meeting. Because approval of such proposal requires the affirmative vote of a majority of shares present or represented, holders of HeartWare common stock who abstain from voting will have the same effect as a vote against the adoption of the proposal to adjourn the special meeting and failure to vote will have no effect on the outcome of the proposal. Brokers or other nominees

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holding shares of HeartWare common stock in street name who have not received specific instructions from beneficial owners will have the authority to vote the shares in their discretion on the proposal. If any such broker or nominee abstains from voting, such abstention will have the same effect as a vote **AGAINST** the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, in order to solicit additional proxies. CDN cannot vote the underlying shares on behalf of holders of HeartWare CDIs without instructions from such holders. An instruction to CDN to abstain will have the same effect as a vote **AGAINST** the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, in order to solicit additional proxies.

Shares Owned by HeartWare Directors, Executive Officers and Affiliates

As of the HeartWare record date, the directors and executive officers of HeartWare were entitled to vote shares of HeartWare common stock, including shares represented by HeartWare CDIs, which represented approximately % of the outstanding shares of HeartWare common stock at that date.

In connection with the transactions contemplated by the merger agreement, all but one of the directors on HeartWare's board of directors and certain executive officers of HeartWare, who collectively beneficially own, as of the HeartWare record date, approximately % of the total outstanding shares of HeartWare common stock, and Apple Tree Partners I, L.P., who beneficially owns, as of the HeartWare record date, approximately % of the total outstanding shares of HeartWare common stock have entered into separate support agreements dated as of February 12, 2009, to, among other things, vote their respective shares of HeartWare common stock in favor of the adoption of the merger agreement with Thoratec, subject to the terms and conditions of the support agreements and, subject to certain exceptions, not to dispose of their shares prior to the date of the HeartWare special meeting. See the section entitled *The Support Agreements* beginning on page 106.

Voting of Proxies

Stockholders of record of shares may vote such shares by attending the HeartWare special meeting and voting their shares in person at the meeting, or by completing the enclosed proxy card, signing and dating it and mailing it in the enclosed postage-prepaid envelope. If a proxy card is signed by a stockholder of record and returned without specific voting instructions, the shares represented by the proxy will be voted **FOR** the proposals presented at the HeartWare special meeting. No proxy voted against the proposal to adopt the merger agreement will be voted in favor of any adjournment.

Stockholders whose shares are held in street name must follow the instructions they receive from their broker, bank, trust or other nominee in order to have their shares voted. Stockholders who have not received such voting instructions or require further information regarding such voting instructions should contact their broker. Brokers who hold shares of HeartWare common stock in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals when they have not received instructions from beneficial owners. However, brokers are not allowed to exercise their voting discretion with respect to the approval of matters that are non-routine, such as adoption of the merger agreement, without specific instructions from the beneficial owner. Broker non-votes are shares held by a broker or other nominee that are represented at the meeting, but with respect to which the broker or other nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker does not have discretionary voting power on such proposal. Brokers or other nominees holding shares of HeartWare common stock in street name will vote shares held by stockholders in street name with respect to the proposal to adopt the merger agreement only if such stockholders provide instructions on how to vote by filling out the voter instruction form sent to them by their broker with this proxy statement/prospectus. Brokers or other nominees holding shares of HeartWare common stock in street name who have not received specific instructions from beneficial owners will have the authority to vote the shares in their discretion on the proposal to adjourn the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies.

Holders of HeartWare CDIs may give directions to vote the underlying shares of HeartWare common stock by submitting instructions for CDN to vote on behalf of such HeartWare CDI holder at the meeting on each proposal and according to the directions of such HeartWare CDI holder. Holders of HeartWare CDIs can submit voting instructions by completing and mailing the enclosed CDI Voting Instruction Form or by Internet at the website of Computershare, which is www.computershare.com.au. To submit voting instructions by mail, holders of HeartWare

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CDIs can send the CDI Voting Instruction Form to Computershare, using the enclosed postage-prepaid envelope or by mailing it to Computershare. To submit voting instructions via Computershare's website, holders of HeartWare CDIs will need their Holder Identification Number or Security Holder Reference Number, which is shown on the enclosed CDI Voting Instruction Form. Instructions on how to fill out the form are set out on the back of the form or on Computershare's website at www.computershare.com.au. Holders of HeartWare CDIs will be taken to have signed the CDI Voting Instruction Form if instructions are submitted in accordance with the directions on the website www.computershare.com.au. If a holder of HeartWare CDIs is directing CDN to vote on its behalf, the latest time for receipt of CDI Voting Instruction Forms (and any necessary supporting documents) via mail and voting instructions via Internet is , U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009).

Revocability of Proxies and CDI Voting Instruction Forms

Stockholders of record may revoke their proxy relating to such shares at any time prior to the time it is voted at the meeting. Such stockholders of record may revoke their proxy by:

submitting a signed proxy card bearing a later date than the previously submitted proxy card relating to the same shares to HeartWare's Company Secretary before the taking of the vote at the HeartWare special meeting;

submitting a written, signed notice of revocation bearing a later date than the proxy card to HeartWare's Company Secretary before the taking of the vote at the HeartWare special meeting; or

attending the HeartWare special meeting and voting in person (attendance at the HeartWare special meeting will not, in and of itself, revoke a proxy – the stockholder must actually vote in person at the meeting).

Any written revocation or subsequent proxy card must be delivered to HeartWare International, Inc., 205 Newbury Street, Framingham, Massachusetts 01701, Attention: Company Secretary, or hand delivered to HeartWare's Company Secretary or his representative before the taking of the vote at the HeartWare special meeting.

Stockholders who hold shares of HeartWare common stock in street name may change their vote by submitting new voting instructions to their brokerage firm, bank, trust or other nominee. Such stockholders must contact their nominee to obtain instructions as to how to change or revoke their vote.

Holders of HeartWare CDIs who have completed and returned a CDI Voting Instruction Form (in the manner described in the section entitled *The HeartWare Special Meeting – Voting of Proxies* beginning on page 33) may revoke or change their directions to CDN relating to such HeartWare CDIs at any time prior to , U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009) by providing written notice of revocation or change to Computershare bearing a later date than the CDI Voting Instruction Form previously sent. Any written revocation or change should be delivered to Computershare Investor Services Pty Ltd, Level 3, 60 Carrington Street, Sydney, New South Wales 2000 Australia or mailed to Computershare Investor Services Pty Ltd, GPO Box 242 Melbourne Victoria 3001 Australia or faxed to Computershare (within Australia) to 1800 783 447 or (outside Australia) +61 3 9473 2555 before the submission of an additional CDI Voting Instruction Form. Any additional CDI Voting Instruction Forms must be submitted via mail or Internet by , U.S. Eastern time on , 2009 (, Australia Eastern Standard Time on , 2009).

Proxies received by HeartWare at any time prior to , U.S. Eastern time (, Australia Eastern Standard Time on , 2009) on the date of the special meeting, which have not been validly revoked prior to being voted, will be voted at the special meeting.

Matters other than the proposals to adopt the merger agreement and to approve the adjournment of the HeartWare special meeting, if necessary or appropriate, to permit further solicitation of proxies will not be brought before the HeartWare special meeting.

Solicitation of Proxies

HeartWare is soliciting proxies for the HeartWare special meeting and will bear all expenses in connection with its solicitation of proxies. HeartWare will pay brokerage firms and other persons representing beneficial owners of shares held in street name certain fees associated with forwarding the notice or availability to beneficial

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owners, forwarding paper proxy materials by mail to beneficial owners, and obtaining beneficial owners' voting instructions. In addition to soliciting proxies by the Internet and mail, HeartWare's directors, officers and employees may solicit proxies on HeartWare's behalf personally, by e-mail, telephone, facsimile, mail or other means of communication. No additional compensation will be paid to directors, officers and employees of HeartWare in connection with this solicitation.

HeartWare stockholders who receive more than one proxy card or voting instruction form have shares registered in different forms or in more than one account. Please complete, sign, date and return all proxy cards and provide instructions for all voting instruction forms received to ensure that all of your shares are voted.

HeartWare stockholders should not send stock certificates with their proxies. A transmittal form with instructions for the surrender of HeartWare common stock certificates will be mailed to HeartWare stockholders shortly after completion of the merger. Similarly, holders of HeartWare CDIs should not send their holding statement(s) with their CDI Voting Instruction Form. Thoratec will send CDN instructions for exchanging its shares of HeartWare common stock for the merger consideration and Computershare will arrange for the merger consideration to be sent to holders of HeartWare CDIs on behalf of CDN.

Questions and Additional Information

If you have questions about the merger or how to submit your proxy, or if you need additional copies of this proxy statement/prospectus or the enclosed proxy card or voting instructions, please call HeartWare's Company Secretary, Mr. David McIntyre, at (305) 818-4123 or send an e-mail to enquiries@heartware.com.au.

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INFORMATION ABOUT THE COMPANIES

Thoratec Corporation
6035 Stoneridge Drive
Pleasanton, California 94588
(925) 897-8600

Thoratec Corporation, a California corporation, is a world leader in therapies to address advanced heart failure and point-of-care diagnostics, and its business is comprised of two operating divisions: Cardiovascular and International Technidyne Corporation, or ITC, a wholly owned subsidiary. For advanced heart failure, Thoratec's Cardiovascular division develops, manufactures and markets proprietary medical devices used for mechanical circulatory support. Thoratec's ITC division develops, manufactures and markets point-of-care diagnostic test systems for hospital point-of-care and alternate site point-of-care markets and incision products.

Thoratec was incorporated in California in March 1976 under the former name of Thoratec Laboratories Corporation. On February 14, 2001, Thoratec changed its name to Thoratec Corporation. Thoratec common stock is traded on The NASDAQ Global Select Market under the symbol THOR. Additional information about Thoratec and its subsidiaries is included in documents incorporated by reference in this document. See *Where You Can Find More Information* beginning on page 124.

Thomas Merger Sub I, Inc. and Thomas Merger Sub II, Inc.
6035 Stoneridge Drive
Pleasanton, California 94588
(925) 897-8600

Thomas Merger Sub I, Inc., which we refer to as Merger Subsidiary, and Thomas Merger Sub II, Inc., which we refer to as Merger Subsidiary Two, are each wholly owned subsidiaries of Thoratec and were each incorporated in Delaware in February 2009 solely for the purpose of facilitating the mergers. Neither Merger Subsidiary nor Merger Subsidiary Two has carried on any activities to date, except for activities incidental to its formation and activities undertaken in connection with the transactions contemplated by the merger agreement.

HeartWare International, Inc.
205 Newbury Street
Framingham, Massachusetts 01701
(508) 739-0950

HeartWare International, Inc., a Delaware corporation, is a medical device company that develops and manufactures miniaturized implantable heart pumps to treat patients suffering from advanced heart failure. Its first product, the HeartWare Ventricular Assist System, or the HVAS, is designed to provide circulatory support for patients with advanced heart failure. The HVAS has received regulatory approval for commercial sales in Europe and it is the subject of an ongoing clinical trial investigation by the FDA.

HeartWare's operating subsidiary, HeartWare, Inc., is a Delaware corporation which was incorporated on April 8, 2003 under the name Perpetual Medical, Inc. HeartWare common stock is traded on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs are traded on ASX under the symbol HIN. Additional information about HeartWare and its subsidiaries is included in documents incorporated by reference in this document. See *Where You Can Find More Information* beginning on page 124.

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The following unaudited pro forma condensed combined financial information combines the historical consolidated financial position and results of operations of Thoratec and of HeartWare, after giving effect to the proposed merger. The merger is expected to be accounted for using the acquisition method of accounting. Under the acquisition method of accounting, Thoratec will record all assets acquired and liabilities assumed at their respective acquisition-date fair values. The unaudited pro forma condensed combined balance sheet information gives effect to the merger as if it had occurred on April 4, 2009. The unaudited pro forma condensed combined statement of operations data for the three months ended April 4, 2009 and for the fiscal year ended January 3, 2009, give effect to the merger as if the merger had occurred on December 30, 2007. Because of different fiscal period ends, the unaudited pro forma condensed combined statement of operations data for fiscal year 2008 combines Thoratec's historical consolidated statement of operations for the fiscal year ended January 3, 2009 and HeartWare's historical consolidated statement of operations for the fiscal year ended December 31, 2008. Because of different three month period ends, the unaudited pro forma condensed combined balance sheet information and statement of operations data as of and for the first quarter of 2009 combines Thoratec's historical consolidated balance sheet and statement of operations as of and for the three months ended April 4, 2009 and HeartWare's historical consolidated balance sheet and statement of operations as of and for the three months ended March 31, 2009.

On February 12, 2009, Thoratec and HeartWare entered into the 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 adjustment as described in *The Merger Agreement Merger Consideration* beginning on page 81 of this proxy statement/prospectus. 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 (4) 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). HeartWare common stock is quoted on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs are quoted on ASX under the symbol HIN . Thoratec common stock is quoted on The NASDAQ Global Select Market under the symbol THOR .

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 HSR Act and the absence of legal impediments to the consummation of the merger. We cannot be certain when, or if, the conditions to the mergers will be satisfied or waived, or that the mergers will be completed. For a more complete description of the approval of the merger agreement and the conditions to completion of the mergers, see *The Merger Background of the Merger*, *The Merger HeartWare's Reasons for the Merger and Recommendation of the HeartWare Board of Directors*, *The Merger Thoratec's Reasons for the Merger*, *The Merger Agreement Conditions to the Obligations of Each Party to Consummate the Merger*, *The Merger Agreement Conditions to the Obligations of Thoratec and Merger Subsidiary to Consummate the Merger*, *The Merger Agreement Conditions to the Obligations of HeartWare to Consummate the Merger* and *The Merger Agreement Conditions to the Obligations of Each Party to Consummate the Second Merger* .

The unaudited pro forma condensed combined financial statements reflect the estimated merger consideration expected to be transferred, which does not purport to represent what the actual merger consideration transferred will be at the effective time of the merger. In accordance with SFAS No. 141R, as amended, the fair value of equity securities issued as part of the consideration transferred will be measured on the closing date of the merger at the then-current market price. This requirement will likely result in a per share equity component different from the \$24.77 assumed in these unaudited pro forma condensed combined financial statements and that difference may

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be material. For illustrative purposes only, assuming a then-current market price of Thoratec common stock on the closing date of the merger of between \$8.79 (the highest volume weighted average price of Thoratec common stock, subject to adjustments depending on the number of shares of Thoratec common stock reserved for issuance to holders of unvested and outstanding HeartWare incentive options pursuant to the merger agreement as described in *The Merger Agreement Treatment of Options and Other Equity-Based Awards* beginning on page 84, at which the aggregate amount of stock consideration payable in the merger will be fixed at 19.9% of the already outstanding shares of Thoratec common stock) and \$18.38 per share, and assuming that HeartWare elects to terminate the merger agreement as described in *The Merger Agreement Merger Consideration* beginning on page 81 of this proxy statement/prospectus and Thoratec elects to increase the number of shares of Thoratec common stock payable in the merger such that the per share value of Thoratec common stock payable in the merger, at the effective time, is equal to \$18.38 (70% of \$26.25, the price per share of Thoratec common stock used to determine the stock portion of the merger consideration), the estimated aggregate merger consideration (including amounts payable to holders of HeartWare restricted stock, options or other equity based awards at the effective time of the merger pursuant to the merger agreement) will be approximately \$239.7 million and the related goodwill balance will be approximately \$90.8 million. Assuming a then-current market price of Thoratec common stock on the closing date of the merger of \$34.13 per share, the estimated aggregate merger consideration (including amounts payable to holders of HeartWare restricted stock, options or other equity based awards at the effective time of the merger) will be approximately \$324.3 million and the related goodwill balance will be approximately \$164.5 million. A table illustrating the value of the consideration that would be payable, at the effective time of the merger, to holders of HeartWare common stock issued and outstanding immediately prior to the effective time of the merger, including shares of common stock underlying HeartWare CDIs, based on a range of values of Thoratec common stock is described further in *The Merger Agreement Merger Consideration* beginning on page 81 of this proxy statement/prospectus.

The unaudited pro forma condensed combined financial statements and adjustments are based upon available information and assumptions that the management of Thoratec believes reasonably reflect the merger. The merger is dependent upon certain valuations for identifiable purchased intangibles and in-process research and development that have yet to progress to a stage where there is sufficient information for a definitive measurement. The fair value of identifiable intangible assets is determined using the income approach, which starts with a forecast of all the expected future net cash flows. Under the HSR Act and other relevant laws and regulations, there are significant limitations regarding what Thoratec can learn about the specifics of the HeartWare intangible assets prior to the effective time of the merger and any such process will take several months to complete. The estimated intangible asset values and their useful lives could also be impacted by a variety of factors that may become known to Thoratec only upon access to additional information and/or by changes in such factors that may occur prior to the effective time of the merger. These factors include but are not limited to the regulatory, legislative, legal, technological and competitive environments. Accordingly, increased knowledge about these and/or other elements will likely result in a change to the estimated fair value of the HeartWare intangible assets and/or to the estimated weighted-average useful lives from what Thoratec has assumed in the unaudited pro forma condensed combined financial statements and such differences may be material. The combined effect of any such changes could then also result in a significant increase or decrease to Thoratec's estimate of associated amortization expense. Accordingly, there will be differences between such preliminary estimates and the final acquisition method of accounting for the merger, and these differences could have a material impact on the accompanying unaudited pro forma condensed combined financial statements and the combined company's future results of operations and financial position.

As of the date of this proxy statement/prospectus, Thoratec does not have sufficient information as to the amount, timing and risk of cash flows of all of the HeartWare intangible assets, particularly those assets still in the research and development phase, to calculate the fair value of such intangible assets. Some of the more significant assumptions inherent in the development of intangible asset values, from the perspective of a market participant, include the amount and timing of projected future cash flows (including revenue, cost of sales, research and development costs, sales and marketing expenses and working capital/contributory asset charges), the discount rate selected to measure

the risks inherent in the future cash flows and the assessment of the asset's life cycle and the competitive trends impacting the asset, as well as other factors.

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Acquired in-process research and development assets are initially recognized at fair value and are classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. Accordingly, during the development period after the acquisition date, these assets will not be amortized; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for an acquired in-process research and development project, determination as to the useful life of the asset will be made. At that point in time the remaining carrying value of the asset would then be considered a finite-lived intangible asset and Thoratec would begin to amortize the asset.

The unaudited pro forma condensed combined financial statements do not include the effects of the costs associated with any restructuring or integration activities resulting from the merger. In addition, the unaudited pro forma condensed combined financial statements do not include the potential realization of any cost savings from operating efficiencies or synergies resulting from the merger, nor do they include any potential incremental revenues and earnings that may be achieved with the combined capabilities of Thoratec and HeartWare.

Thoratec shareholders and HeartWare stockholders should read the unaudited pro forma condensed combined financial information in conjunction with Thoratec's and HeartWare's audited historical consolidated financial statements, accompanying notes to the consolidated financial statements and the section entitled *Management's Discussion and Analysis of Financial Condition and Results of Operations* in Thoratec's Form 8-K filed with the SEC on June 11, 2009 and Thoratec's and HeartWare's Annual Report on Form 10-K for the fiscal years ended January 3, 2009 and December 31, 2008, respectively, each of which is incorporated by reference into this proxy statement/prospectus. Thoratec shareholders and HeartWare stockholders should also read the unaudited pro forma condensed combined financial information in conjunction with Thoratec's and HeartWare's unaudited historical condensed consolidated financial statements, accompanying notes to the condensed consolidated financial statements and the section entitled *Management's Discussion and Analysis of Financial Condition and Results of Operations* in Thoratec's and HeartWare's Quarterly Report on Form 10-Q for the quarterly period ended April 4, 2009 and March 31, 2009, respectively, each of which is incorporated by reference into this proxy statement/prospectus. See *Where You Can Find More Information* beginning on page 124 of this proxy statement/prospectus.

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Unaudited Pro Forma Condensed Combined Balance Sheet
As of April 4, 2009
(In thousands)

	Thoratec as Reported(1)	HeartWare as Reported(2)	Pro Forma Adjustments	Pro Forma Combined
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 115,374	\$ 12,592	\$ (31,495)(a)	\$ 96,471
Restricted cash and cash equivalents	20,000			20,000
Short-term available-for-sale investments	109,505		(109,505)(a)	
Receivables, net	59,476	1,179		60,655
Inventories	65,644	6,685	1,089(b)	73,418
Deferred tax assets	8,397			8,397
Short-term income taxes receivable	2,514			2,514
Prepaid expenses and other assets	5,537	926		6,463
Total current assets	386,447	21,382		267,918
Property, plant and equipment, net	51,244	3,464		54,708
Goodwill	99,287		125,154(f)(g)	224,441
Purchased intangible assets, net	105,652	1,010	173,790(b)	280,452
Long-term available-for-sale investments	29,928			29,928
Deferred tax assets	2,360			2,360
Prepaid expenses and other assets	13,685	289	(240)(b)	13,734
Total Assets	\$ 688,603	\$ 26,145		\$ 873,541
LIABILITIES AND SHAREHOLDERS EQUITY				
Current liabilities:				
Accounts payable	\$ 14,580	\$ 1,674		\$ 16,254
Accrued compensation	12,639	854		13,493
Other accrued liabilities	15,982	3,366	\$ 23,923(c)(d)(e)	43,271
Total current liabilities	43,201	5,894		73,018
Senior subordinated convertible notes	126,025			126,025

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Long-term deferred tax liability	37,127		32,550(c)(d)	69,677
Other	7,092			7,092
Total Liabilities	213,445	5,894		275,812
Shareholders' equity:				
Common shares		9	(9)(a)	
Additional paid-in-capital	533,832	112,715	20,796(a)(e)(i)	667,343
Accumulated deficit	(52,881)	(83,195)	73,125(a)(d)(e)(f)(h)(i)	(62,951)
Accumulated other comprehensive loss:				
Unrealized loss on investments	(3,433)		(870)(h)	(4,303)
Cumulative translation adjustments	(2,360)	(9,278)	9,278(a)	(2,360)
Total accumulated other comprehensive loss	(5,793)	(9,278)		(6,663)
Total Shareholders' Equity	475,158	20,251		597,729
Total Liabilities and Shareholders' Equity	\$ 688,603	\$ 26,145		\$ 873,541

(1) Amounts derived from Thoratec's unaudited condensed consolidated financial statements as of April 4, 2009.

(2) Amounts derived from HeartWare's unaudited condensed consolidated financial statements as of March 31, 2009,

See Notes to Unaudited Pro Forma Condensed Combined Financial Statements beginning on page 43.

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**Unaudited Pro Forma Condensed Combined Statement of Operations
For The Three Months Ended April 4, 2009
(In thousands, except per share amounts)**

	Thoratec as Reported(1)	HeartWare as Reported(2)	Pro Forma Adjustments	Pro Forma Combined
Product sales	\$ 89,466	\$ 1,478		\$ 90,944
Cost of product sales	35,439	718	\$ (27)(m)	36,130
Gross profit	54,027	760		54,814
Operating expenses:				
Selling, general and administrative	27,455	4,200		31,655
Research and development	14,086	3,490	(16)(k)	17,560
Amortization of purchased intangible assets	2,931		2,508(l)	5,439
Total operating expenses	44,472	7,690		54,654
Income (loss) from operations	9,555	(6,930)		160
Other income and (expense):				
Foreign exchange gain		693		693
Interest expense	(2,866)			(2,866)
Interest income and other	988	5	(804)(j)	189
Income (loss) before taxes	7,677	(6,232)		(1,824)
Income tax (expense) benefit	(2,050)		2,786(n)	736
Net income (loss)	\$ 5,627	\$ (6,232)		\$ (1,088)
Net income (loss) per share:				
Basic	\$ 0.10	\$ (0.70)		\$ (0.02)
Diluted	\$ 0.10	\$ (0.70)		\$ (0.02)
Shares used to compute income (loss) per share:				
Basic	56,384	8,867	5,368(o)	61,752
Diluted	57,738	8,867	5,368(o)	61,752

(1) Amounts derived from Thoratec's unaudited condensed consolidated financial statements for the three months ended April 4, 2009.

- (2) Amounts derived from HeartWare's unaudited condensed consolidated financial statements for the three months ended March 31, 2009.

See *Notes to Unaudited Pro Forma Condensed Combined Financial Statements* beginning on page 43.

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**Unaudited Pro Forma Condensed Combined Statement of Operations
For The Year Ended January 3, 2009
(In thousands, except per share amounts)**

	Thoratec as Reported(1)	HeartWare as Reported(2)	Pro Forma Adjustments	Pro Forma Combined
Product sales	\$ 313,564	\$ 332		\$ 313,896
Cost of product sales	127,566	78	\$ (107)(s)	127,537
Gross profit	185,998	254		186,359
Operating expenses:				
Selling, general and administrative	94,142	10,981		105,123
Research and development	52,943	18,644	(41)(q)	71,546
Amortization of purchased intangible assets	13,183		10,030(r)	23,213
Total operating expenses	160,268	29,625		199,882
Income (loss) from operations	25,730	(29,371)		(13,523)
Other income and (expense):				
Foreign exchange gain		4,550		4,550
Interest expense	(10,984)			(10,984)
Interest income and other	9,146	1,057	(4,690)(p)	5,513
Income (loss) before taxes	23,892	(23,764)		(14,444)
Income tax (expense) benefit	(5,561)		12,935(t)	7,374
Net income (loss)	\$ 18,331	\$ (23,764)		\$ (7,070)
Net income (loss) per share:				
Basic	\$ 0.33	\$ (3.00)		\$ (0.12)
Diluted	\$ 0.33	\$ (3.00)		\$ (0.12)
Shares used to compute income (loss) per share:				
Basic	55,097	7,929	5,368(u)	60,465
Diluted	56,196	7,929	5,368(u)	60,465

(1) Amounts derived from Thoratec's audited consolidated financial statements for the fiscal year ended January 3, 2009.

- (2) Amounts derived from HeartWare's audited consolidated financial statements for the fiscal year ended December 31, 2008.

See *Notes to Unaudited Pro Forma Condensed Combined Financial Statements* beginning on page 43.

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THORATEC CORPORATION

Notes to Unaudited Pro Forma Condensed Combined Financial Statements

1. Basis of Pro Forma Presentation

The unaudited pro forma condensed combined financial statements of Thoratec have been prepared giving effect to the merger between Merger Subsidiary and HeartWare on a historical basis. The unaudited pro forma condensed combined balance sheet information gives effect to the merger as if the merger had occurred on April 4, 2009. The unaudited pro forma condensed combined statement of operations data for the three months ended April 4, 2009 and for the fiscal year ended January 3, 2009, gives effect to the merger as if the merger had occurred on December 30, 2007. The merger has been accounted for in the unaudited pro forma condensed combined financial statements using the acquisition method of accounting in accordance with SFAS No. 141R, *Business Combinations*, which Thoratec adopted on January 1, 2009, and using the fair value concepts defined in SFAS No. 157, *Fair Value Measurements*.

SFAS No. 141R requires, among other things, that most assets acquired and liabilities assumed be recognized at their fair values as of the acquisition-date and that the fair value of in-process research and development be recorded on the balance sheet regardless of the likelihood of success as of the acquisition-date. In April 2009, the FASB issued FSP SFAS No. 141R-1, *Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies*, which amends the guidance in SFAS No. 141R 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. This guidance is effective for all business acquisitions occurring on or after the beginning of the first annual reporting period beginning on or after December 15, 2008.

SFAS No. 157 defines the term *fair value* and sets forth the valuation requirements for any asset or liability measured at fair value, expands related disclosure requirements and specifies a hierarchy of valuation techniques based on the nature of the inputs used to develop the fair value measures. Fair value is defined in SFAS No. 157 as *the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date*. This is an exit price concept for the valuation of the asset or liability. In addition, market participants are assumed to be buyers and sellers in the principal (or the most advantageous) market for the asset or liability. Fair value measurement for an asset assumes the highest and best use by these market participants. As a result of these standards, Thoratec may be required to record assets which are not intended to be used or sold and/or to value assets at fair value measures that do not reflect Thoratec's intended use of those assets. Many of these fair value measurements can be highly subjective and it is also possible that other professionals, applying reasonable judgment to the same facts and circumstances, could develop and support a range of alternative estimated amounts.

Under SFAS No. 141R, acquisition-related transaction costs (i.e., advisory, legal, valuation and other professional fees) and certain acquisition-related restructuring charges are not included as a component of consideration transferred but are accounted for as expenses in the periods in which the costs are incurred. As of April 4, 2009, total remaining transaction costs are estimated to be \$14.5 million, with approximately \$8.8 million allocable to Thoratec, and approximately \$5.5 million allocable to HeartWare. The estimated transaction costs also include \$0.2 million related to the issuance of Thoratec shares as stock consideration in the merger.

For purposes of these unaudited pro forma condensed combined financial statements, Thoratec has assumed the total preliminary consideration issued and paid in the merger to be approximately \$274.0 million, consisting of \$141.0 million paid in cash and approximately 5.4 million issued shares of Thoratec common stock valued at the June 5, 2009 share price of \$24.77 per share, or \$133.0 million.

Table of Contents**THORATEC CORPORATION****Notes to Unaudited Pro Forma Condensed Combined Financial Statements (Continued)**

The following table summarizes the components of the preliminary estimated merger consideration:

	Shares	Estimated
	(In thousands)	
Cash Consideration		
Cash consideration for HeartWare common stock outstanding at March 31, 2009		\$ 126,754
Net cash consideration for HeartWare stock options and restricted shares purchased at the agreed upon price of \$30.19 per share		14,246
Total cash consideration		141,000
Stock Consideration		
Shares of Thoratec common stock to be issued in exchange for HeartWare common stock outstanding at an exchange ratio of 0.6054 based on the Thoratec share price of \$24.77 as of June 5, 2009	5,368	132,984
Total preliminary estimated merger consideration		\$ 273,984

Under the acquisition method of accounting, the total preliminary estimated merger consideration is shown in the table above, and is allocated in the table below to Thoratec's net tangible and intangible assets and liabilities based on their estimated fair value. For the unaudited pro forma condensed combined financial statements, the preliminary estimated merger consideration is allocated as follows:

	(In thousands)
Assets as of April 4, 2009 at book value:	
Cash	\$ 12,592
Receivable, net	1,179
Inventory	6,685
Short-term prepaid expenses and other	926
Property, plant and equipment, net	3,464
Purchased intangibles	1,010
Long-term prepaid expenses and other	289
Accounts payable and accrued liabilities as of April 4, 2009 at book value	(5,894)
Adjustments to:	
Inventory at the estimated fair value	1,089
Estimated fair value for leases	(240)
Reversal of HeartWare purchased intangibles	(1,010)
Long-term deferred tax asset related to operating loss carry-forwards	28,881
Short-term deferred tax liabilities	(430)
Identifiable purchased intangible assets at the estimated fair value:	

Developed technology	139,950
In-process research and development	33,450
Customer relationships	1,400
Long-term deferred tax liability related to purchased intangibles and in-process-research and development	(67,345)
Goodwill	117,988
Total preliminary estimated merger consideration	\$ 273,984

Table of Contents**THORATEC CORPORATION****Notes to Unaudited Pro Forma Condensed Combined Financial Statements (Continued)**

The above estimated goodwill is calculated as the difference between the acquisition-date fair value of the consideration expected to be transferred and the values assigned to the assets acquired and liabilities assumed. Estimated goodwill does not include pro forma adjustments for non-recurring items such as transaction costs and compensation payments. Goodwill is not amortized.

The estimated consideration expected to be transferred as reflected in these unaudited pro forma condensed combined financial statements does not purport to represent what the actual merger consideration will be when the merger is consummated. In accordance with SFAS No. 141R, the fair value of the equity securities issued as part of the consideration transferred will be measured on the closing date of the merger at the then-current market price. This requirement will likely result in a per share equity component different from the \$24.77 assumed in these unaudited pro forma condensed combined financial statements and that difference may be material. For example, the high and low closing price per share of Thoratec's common stock, as reported by The NASDAQ Global Select Market for the period from the merger agreement date of February 12, 2009 to June 5, 2009 was \$30.38 and \$20.40, respectively, and if the price per share of Thoratec's common stock on the closing date of the merger were to be \$30.38 or \$20.40, the estimated merger consideration would be as follows:

	Stock Price	Estimated Merger Consideration (In thousands)
High	\$ 30.38	\$ 304,084
Low	\$ 20.40	\$ 250,509

An increase or decrease in the merger consideration transferred at the effective time of the merger as described above would be reflected as an adjustment to goodwill in the unaudited pro forma condensed combined balance sheets.

2. Pro Forma Adjustments

Adjustments included in the column under the heading *Pro Forma Adjustments* in the unaudited pro forma condensed combined financial statements correspond to the following descriptions:

Pro Forma Adjustments to Condensed Combined Balance Sheet

a) Reflects the consideration paid for HeartWare in the merger and the reversal of HeartWare's historical equity balances.

	(In thousands)
Cash consideration paid from cash and cash equivalents and short-term investments available-for-sale	\$ 141,000
Common stock consideration recorded to additional paid-in capital	132,984

Adjustment to HeartWare's equity balances	
Common Shares	(9)
Additional paid-in-capital	(112,715)
Accumulated deficit to be eliminated at closing	83,195
Cumulative translation adjustment	9,278

Table of Contents**THORATEC CORPORATION****Notes to Unaudited Pro Forma Condensed Combined Financial Statements (Continued)**

b) Reflects the following estimated acquisition-date fair value adjustments:

	(In thousands)	Estimated Useful Lives (Years)
Developed technology(1)	\$ 139,950	15
In-process research and development(2)	33,450	15
Customer relationships	1,400	2
Lease fair value adjustment	(240)	
Inventory fair value adjustment	1,089	
Reversal of HeartWare historical purchased intangibles	(1,010)	

(1) Developed technology assets represent ventricular assist device products that have received required regulatory approvals to enable such products to be marketed or sold to the public and ventricular assist device products that are currently undergoing approved clinical trials in the United States. The estimated fair value of such assets was determined using the income approach using projected discounted cash flows. Acquired developed-technology assets are recognized at fair value at the date of the transaction and are classified as finite-lived intangibles. The useful life of finite-lived intangibles is estimated and amortized over the period the asset is expected to contribute directly or indirectly to future cash flows of Thoratec. The amortized costs will be charged to Thoratec's combined net income or loss.

(2) In-process research and development assets represent ventricular assist device products that are under development and that have not received the required regulatory approvals to enable such products to be marketed or sold to the public or to be used in clinical trials. The estimated fair value of such assets was determined using the income approach using projected discounted cash flows. As of the date of this proxy statement/prospectus, Thoratec does not have sufficient information as to the amount, timing and risk of cash flows to calculate the fair value of all of the in-process research and development intangibles. Accordingly, during the development period after the acquisition date, these assets will not be amortized; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for an acquired in-process research and development project, determination as to the useful life of the asset will be made. At that point in time the remaining carrying value of the asset would then be considered a finite-lived intangible asset and Thoratec would begin to amortize the asset.

c) Reflects the following tax impacts related to fair value adjustments and loss carry-forwards:

	(In thousands)
Long-term deferred tax asset related to operating loss carry-forwards	\$ 28,881
Short-term deferred tax liabilities	430

Long-term deferred tax liability relating to purchased intangibles and in-process research and development 67,345

d) Reflects the following impact for severance payments and retention bonus payments to be made to certain HeartWare employees as a result of pre-existing change in control contractual provisions that will become payable at the time the transaction is consummated and which are directly attributable to the transaction:

(In thousands)

Accrued liabilities	\$ 8,464
Short-term deferred tax liability	548
Long-term deferred tax assets	5,914

e) Reflects accrued incremental direct and external transaction costs totaling \$14.5 million consisting of approximately \$8.8 million allocable to Thoratec's investment banking fees, legal fees and accounting fees and an

Table of Contents**THORATEC CORPORATION****Notes to Unaudited Pro Forma Condensed Combined Financial Statements (Continued)**

estimated \$0.2 million associated with stock consideration recorded to additional-paid-in capital and approximately \$5.5 million allocable to HeartWare's legal and investment banking fees and are recorded to accrued liabilities.

f) Reflects the following elimination of the impact of the pro forma adjustments on HeartWare's historical accumulated deficit balance, which is comprised of pre-existing change in control contractual provisions at the time the transaction is consummated, and therefore is directly attributable to the transaction:

	(In thousands)
Retention bonus and severance payments	\$ (7,032)
Deferred taxes	5,366
Transaction costs	(5,500)

g) Goodwill is calculated as the difference between the acquisition-date fair value of the merger consideration expected to be issued and paid and the values assigned to the assets acquired and liabilities assumed. Goodwill is not amortized.

h) Reflects the reversal of an unrealized gain of \$0.9 million, as a result of \$110.0 million in short-term investments used in the merger consideration.

i) Reflects a valuation loss of \$0.7 million which represents the difference in the share price from June 5, 2009 of \$24.77 per share and \$26.25 per share, the price per share of Thoratec common stock used to determine the stock portion of the merger consideration as a result of cancellation and conversion of HeartWare stock options and restricted stock units awarded to HeartWare employees.

Pro Forma Adjustments to Condensed Combined Statement of Operations for the Three Months Ended April 4, 2009

Significant non-recurring one time charges have not been reflected in the combined statement of operations, including merger-related transaction costs and share-based compensation costs described under the section *Pro Forma Adjustments to Condensed Combined Balance Sheet* above. Additionally, the pro forma statement of operations does not reflect the non-recurring impact on cost of sales as a result of the inventory fair value adjustment.

j) Reflects a reduction in interest income from \$0.8 million of cash and short-term investments used as merger consideration, assuming an interest rate based upon Thoratec's 2009 historical average interest rate of 2.35%.

k) Reflects the reversal of amortization of the historical book value of HeartWare's purchased intangible assets.

l) Reflects incremental amortization expense of \$2.5 million for the fair value adjustment related to purchased identified intangible assets.

m) Represents a \$27,000 amortization of fair value adjustment on operating leases recorded to cost of product sales.

n) The \$2.8 million tax benefit reflects the tax impact related to the pro forma combined net loss position from Thoratec's utilization of HeartWare net operating losses, which reduces the combined federal statutory income tax expense and state tax expense.

o) Reflects the basic shares of Thoratec common stock to be issued in exchange for HeartWare common stock outstanding at an exchange ratio of 0.6054, or 5.4 million shares. Diluted shares also include the elimination of Thoratec's common share equivalents as such shares are anti-dilutive for pro forma purposes. Additionally, the weighted average shares of HeartWare at March 31, 2009 are eliminated in the condensed combined pro forma financial statements.

Table of Contents**THORATEC CORPORATION****Notes to Unaudited Pro Forma Condensed Combined Financial Statements (Continued)*****Pro Forma Adjustments to Condensed Combined Statement of Operations for the Fiscal Year Ended January 3, 2009***

Significant non-recurring one time charges have not been reflected in the combined statement of operations, including merger-related transaction costs and share-based compensation costs described under the section *Pro Forma Adjustments to Condensed Combined Balance Sheet* above. Additionally, the pro forma statement of operations does not reflect the non-recurring impact on cost of sales as a result of the inventory fair value adjustment.

p) Reflects a reduction in interest income from \$141.0 million of cash and short-term investments used as merger consideration, assuming an interest rate based upon Thoratec's 2008 historical average interest rate of 3.3%.

q) Reflects the reversal of amortization of the historical book value of HeartWare's purchased intangible assets.

r) Reflects incremental amortization expense of \$10.0 million for the fair value adjustment related to purchased identified intangible assets.

s) Represents a \$0.1 million amortization of fair value adjustment on operating leases recorded to cost of product sales.

t) The \$12.9 million tax benefit reflects the tax impact related to the pro forma combined net loss position from Thoratec's utilization of HeartWare net operating losses, which reduces the combined federal statutory income tax expense and state tax expense.

u) Reflects the basic shares of Thoratec common stock to be issued in exchange for HeartWare common stock outstanding at an exchange ratio of 0.6054, or 5.4 million shares. Diluted shares also include the elimination of Thoratec's common share equivalents as such shares are anti-dilutive for pro forma purposes. Additionally, the weighted average shares of HeartWare at December 31, 2008 are eliminated in the condensed combined pro forma financial statements.

3. Pro Forma Condensed Combined Net Loss Per Share

The basic and diluted pro forma condensed combined net loss per common share for the periods presented are based on the weighted average number of common and diluted shares after taking into account the shares issued for the acquisition of HeartWare. Diluted net income per common share reflects the potential dilution that could occur, using the treasury stock method, if securities or other contracts to issue common stock were exercised or converted into common stock. Amounts used in the determination of pro forma basic and diluted net loss per share are as follows:

Three Months Ended April 4, 2009	Fiscal Year Ended January 3, 2009
(In thousands, except per share data)	

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Pro forma condensed combined net loss for per share calculation	\$	(1,088)	\$	(7,070)
Thoratec weighted average number of common shares-basic		56,384		55,097
Shares issued for HeartWare acquisition		5,368		5,368
Pro forma weighted average number of common shares-basic and diluted		61,752		60,465
Pro forma net loss per share:				
Basic	\$	(0.02)	\$	(0.12)
Diluted	\$	(0.02)	\$	(0.12)

The computation of diluted pro forma net loss per share excludes the effect of common stock options and convertible debt because the effect would be anti-dilutive.

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THE MERGER

Background to the Merger

From time to time, HeartWare's management and board of directors explore and assess the various strategic alternatives available to HeartWare to strengthen its existing market positions, establish new growth platforms, improve its capital position and deliver increased value to its stockholders. In late 2008, HeartWare retained J.P. Morgan as financial advisor to assist it in evaluating potential transactions, including a potential combination with Thoratec.

Thoratec's management also periodically reviews and analyzes clinical and technological market developments and explores potential strategic alternatives available to Thoratec to enhance shareholder value and facilitate the continued growth of its business and development of its product offerings. The Thoratec board of directors met on August 21, 2008, and, at that meeting, Mr. Gerhard F. Burbach, President and Chief Executive Officer of Thoratec, and other members of Thoratec's management reviewed a variety of strategic alternatives that might be available to Thoratec in order to potentially enhance the range of products in development or offered by Thoratec. Thoratec management's review of strategic alternatives included a general discussion of the potential merits of an acquisition of HeartWare. During the meeting, the Thoratec board of directors authorized Mr. Burbach to contact senior management of HeartWare to determine if HeartWare was interested in exploring an acquisition by Thoratec.

On September 23, 2008, Mr. Douglas Godshall, President and Chief Executive Officer of HeartWare, and Mr. Burbach both attended the annual scientific meeting of the Heart Failure Society of America in Toronto, Canada. At those meetings, Mr. Burbach informed Mr. Godshall that Thoratec might be interested in exploring the possibility of acquiring HeartWare. Mr. Godshall responded that HeartWare was not seeking a sale at that time but indicated that he would consult with the HeartWare board of directors should Thoratec decide to pursue an acquisition transaction.

On September 26, 2008, Mr. Godshall and Mr. Burbach spoke by telephone and agreed to meet at the Cleveland Clinic Conference that was scheduled to occur in mid-October and to further discuss Thoratec's interest in acquiring HeartWare.

On October 17, 2008, Mr. Burbach and Mr. Jon Shear, Vice President Business Development of Thoratec, met with Mr. Godshall and Mr. David McIntyre, Chief Financial Officer and Chief Operating Officer of HeartWare, at the Cleveland Clinic Conference in Cleveland, Ohio. At that meeting, Mr. Burbach again expressed Thoratec's potential interest in exploring the possibility of acquiring HeartWare. Mr. Burbach and Mr. Shear described the various business segments of Thoratec and the potential benefits to patients that could result from the combination of the two companies. At this meeting, Mr. Burbach and Mr. Godshall discussed whether Apple Tree Partners, HeartWare's largest stockholder, would be receptive to an acquisition proposal. Mr. Godshall again informed Mr. Burbach that HeartWare was not seeking a sale, and that he was not, at that time, able to respond to Mr. Burbach's inquiries regarding a potential sale of HeartWare or Apple Tree's potential response to an acquisition proposal. Mr. Godshall advised Mr. Burbach that he would inform the HeartWare board of directors of Thoratec's expression of interest.

During the week of October 19, 2008, Mr. Godshall had discussions with various members of the HeartWare board of directors regarding Thoratec's expressed interest in acquiring HeartWare.

On November 1, 2008, Thoratec delivered a draft confidentiality agreement to HeartWare that would allow Thoratec access to certain due diligence information concerning HeartWare in the event that the HeartWare board of directors determined to explore a possible business combination transaction with Thoratec.

On November 6, 2008, representatives of HeartWare met with representatives of J.P. Morgan and informed J.P. Morgan of HeartWare's discussions with Thoratec. Around this time, HeartWare also engaged Shearman as its outside legal counsel to advise it in connection with its discussions with Thoratec regarding a possible transaction.

The HeartWare board of directors met on November 12, 2008 and November 13, 2008. At those meetings, among other things, members of HeartWare's senior management team made presentations to the HeartWare board of directors regarding HeartWare's business and financial performance, and representatives of J.P. Morgan made a presentation of its preliminary financial analyses of HeartWare and Thoratec and a potential transaction. The

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HeartWare board of directors discussed whether HeartWare should engage in discussions with Thoratec concerning a possible change of control transaction, actively solicit third parties with respect to a change of control transaction or continue to pursue HeartWare's long-term strategy as an independent company. The HeartWare board of directors also discussed other aspects of HeartWare, including the status of its U.S. clinical trial and its financing plans. At the conclusion of these meetings, the HeartWare board of directors authorized HeartWare's senior management team to provide limited summary due diligence information regarding HeartWare to Thoratec and its representatives and to request that Thoratec make a more specific proposal to acquire HeartWare, including a firm indication of Thoratec's valuation of HeartWare, the form of consideration to be paid and the anticipated timing of a transaction. The HeartWare board of directors also established a sub-committee of the HeartWare board of directors in connection with its consideration of a potential transaction with Thoratec, comprised of Messrs. Godshall, Harrison, Larkin, Stockman and Thomas, which we refer to as the transaction sub-committee.

During the period from November 4 through November 14, 2008, HeartWare and Thoratec with the assistance of their respective counsel negotiated the terms of a mutual confidentiality agreement, which the parties entered into on November 14, 2008. The mutual confidentiality agreement contained customary confidentiality provisions and non-solicit provisions and a customary standstill provision for Thoratec.

On November 18, 2008, Mr. Burbach and other representatives of Thoratec's senior management team met with Mr. Godshall, Mr. McIntyre and Mr. Jeffrey LaRose, the Chief Scientific Officer of HeartWare, in New York, New York. At that meeting, HeartWare made a presentation and answered questions regarding certain aspects of its business, including its technology. The HeartWare representatives also advised the Thoratec representatives that the HeartWare board of directors required a firm indication on valuation before further due diligence with respect to HeartWare would be permitted.

On December 6, 2008, at a meeting of the Thoratec board of directors, Mr. Burbach and other members of Thoratec's senior management team presented a preliminary assessment of a potential acquisition of HeartWare. During that meeting, the Thoratec board of directors authorized Mr. Burbach to present a proposal to HeartWare pursuant to which Thoratec would acquire all of the outstanding shares of HeartWare (on a fully diluted basis) for approximately \$225.0 million, comprised of 40% cash and 60% shares of Thoratec common stock.

On December 8, 2008, Mr. Burbach called Mr. Godshall to inform him that Thoratec was prepared, on a preliminary basis, to pay approximately \$225.0 million for all of the outstanding shares of HeartWare (on a fully diluted basis). Mr. Burbach further indicated that Thoratec would propose a mix of consideration consisting of 40% in cash and 60% in shares of Thoratec common stock. Mr. Godshall indicated that he would inform the HeartWare board of directors of Thoratec's proposal.

On December 9, 2008, a meeting of the HeartWare board of directors was held by teleconference to discuss Thoratec's initial proposal. Following deliberations among the members of the HeartWare board of directors and their advisors, the HeartWare board of directors concluded that the purchase price proposed by Thoratec was inadequate. The HeartWare board of directors did, however, authorize HeartWare's senior management team to continue discussions with Thoratec and to seek an increase in the purchase price proposed by Thoratec. The HeartWare board of directors also directed HeartWare's management not to provide any additional due diligence materials to Thoratec before there was agreement between the parties on a purchase price for HeartWare.

On December 10, 2008, Mr. Godshall informed Mr. Burbach that the HeartWare board of directors believed the \$225.0 million purchase price that had been proposed was inadequate and that the HeartWare board of directors had directed management to discontinue the due diligence on HeartWare until such time as a purchase price for HeartWare was preliminarily agreed upon in principle by the parties. Mr. Godshall further informed Mr. Burbach that HeartWare, at the direction of the HeartWare board of directors, would be pursuing its plan to raise third-party financing in the

first quarter of 2009.

On December 11, 2008, the Thoratec board of directors met and Mr. Burbach updated the Thoratec board of directors on his discussions with Mr. Godshall. In addition, on December 11, 2008, Mr. Burbach called Mr. Godshall to tell him that the Thoratec board of directors had engaged Banc of America Securities LLC, which we refer to as Banc of America, as its financial advisor in connection with Thoratec's proposed acquisition of HeartWare, and that

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he would contact Mr. Godshall in the near-term following discussions with the Thoratec board of directors and Thoratec's advisors regarding the proposed transaction.

On December 18, 2008, Mr. Godshall and Mr. McIntyre, together with representatives of J.P. Morgan, met by teleconference with Mr. David Smith, the CFO of Thoratec, and Mr. Shear, together with representatives of Banc of America. During this call, Mr. Godshall repeated the position of the HeartWare board of directors regarding the inadequacy of Thoratec's \$225.0 million proposal, and stated that Thoratec would have to propose a significantly higher purchase price in order for the HeartWare board of directors to give any further consideration to a business combination transaction with Thoratec. Following that call, at the direction of senior management of HeartWare and Thoratec, representatives of J.P. Morgan and Banc of America held a follow up meeting by teleconference to discuss their respective preliminary analyses of the valuation of HeartWare.

The Thoratec board of directors met again on December 22, 2008, and Mr. Burbach and other members of Thoratec's senior management team, representatives of Banc of America and Latham, Thoratec's outside legal counsel, reviewed the current state of negotiations with HeartWare and its advisors for the Thoratec board of directors, and Banc of America provided a preliminary valuation analysis with respect to HeartWare. Following discussion among the Thoratec board of directors and its advisors, the Thoratec board of directors authorized Mr. Burbach to communicate a proposal representing a valuation of HeartWare of \$270.0 million (on a fully diluted basis) and indicate that the consideration would take the form of up to 60% shares of Thoratec common stock and approximately 40% cash.

On December 23, 2008, Mr. Burbach sent a letter to Mr. Godshall containing a brief overview of Thoratec, summarizing Thoratec's views on the strategic benefits of a business combination transaction with HeartWare and outlining Thoratec's preliminary views regarding a proposed transaction structure. The letter indicated a valuation of HeartWare of \$270.0 million (on a fully diluted basis) and indicated that the consideration would take the form of up to 60% shares of Thoratec common stock and approximately 40% cash.

On December 24, 2008, Mr. Godshall called Mr. Burbach to advise him that HeartWare was not prepared to proceed with the proposed transaction based on a purchase price of \$270.0 million. Later that day, Mr. McIntyre contacted Mr. Shear and requested that all confidential information disclosed to date be returned or destroyed pursuant to the terms of the confidentiality agreement executed on November 14, 2008.

On December 27, 2008, Mr. Godshall called Mr. Burbach to discuss the terms for the proposed transaction and a structure that might be acceptable to both the HeartWare board of directors and the Thoratec board of directors. Mr. Godshall repeated the position of the HeartWare board of directors regarding the inadequacy of Thoratec's \$270.0 million proposal and that, accordingly, Thoratec needed to propose a higher purchase price, and that while HeartWare was amenable to receiving Thoratec common stock as part of the consideration, the HeartWare stockholders would need protection against a decrease in Thoratec's stock price during the period between signing a definitive agreement and the closing of a transaction.

On December 29, 2008, a meeting of the HeartWare board of directors was held by teleconference. Representatives of Shearman and J.P. Morgan also participated in the meeting. Mr. Godshall updated the HeartWare board of directors on the recent discussions with Thoratec, including the \$270.0 million proposal. Mr. Godshall also informed the HeartWare board of directors of potential third-party financing transactions that might be available to HeartWare absent a transaction with Thoratec. The HeartWare board of directors discussed with representatives of Shearman and J.P. Morgan the potential terms for a definitive merger agreement, including various price protection mechanisms in respect of the stock portion of the proposed consideration. The HeartWare board of directors also discussed the need for interim financing in the event of a transaction with Thoratec and the preliminary terms on which Thoratec might provide this interim financing. Following further discussions, the HeartWare board of directors authorized continued discussions with Thoratec, provided that Thoratec would agree to increase the purchase price to approximately

\$285.0 million.

From December 29, 2008 through January 7, 2009, HeartWare and its legal and financial advisors and Thoratec and its legal and financial advisors continued to discuss the material terms of a proposed transaction and during those discussions, agreed to continue negotiations based upon a \$282.0 million purchase price for HeartWare. Mr. Burbach and other members of Thoratec's senior management team met with the Thoratec board

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of directors on January 5, January 8 and January 9, 2009, to discuss the material terms of the proposed transaction and the ongoing negotiations with HeartWare and to receive guidance from the members of the Thoratec board of directors on the proposed terms of an acquisition of HeartWare, including the proposed purchase price.

On January 11, 2009, representatives of HeartWare's senior management team, including Mr. Godshall and Mr. McIntyre, met at Latham's office in San Francisco, California with representatives of Thoratec's senior management team, including Mr. Burbach and Mr. Smith, and representatives of Shearman, J.P. Morgan, Latham and Banc of America, to discuss the material terms of the proposed transaction, including the terms of an interim loan from Thoratec to HeartWare, and the same participants met again on January 12, 2009 by teleconference to continue their discussion. At those meetings, Thoratec and HeartWare agreed to prepare a non-binding term sheet based on a purchase price of approximately \$282.0 million, with the consideration taking the form of 50% shares of Thoratec common stock and 50% cash, and which would include both protection for HeartWare against a decrease in Thoratec's stock price during the period between signing of a definitive merger agreement and the closing of the merger and a similar protection for Thoratec against an increase in Thoratec's stock price during the period between the signing of a definitive merger agreement and the closing of the merger.

On January 12, 2009, Mr. Godshall and representatives of HeartWare's senior management team met by teleconference with the transaction sub-committee of the HeartWare board of directors. During this call, HeartWare's senior management team and representatives of Shearman and J.P. Morgan outlined the material terms that had been agreed to in principle at the January 11 and 12, 2009 meetings. The transaction sub-committee unanimously agreed to recommend to the full HeartWare board of directors to proceed with the negotiation of the proposed transaction on the terms outlined during the call. Later that day, the full HeartWare board of directors met by teleconference, at which time the board was informed of the transaction sub-committee's recommendation. The HeartWare board of directors unanimously agreed with the transaction sub-committee's recommendation and instructed HeartWare's senior management team to proceed with negotiations. Later that day, Latham sent a detailed preliminary due diligence request list to Shearman, requesting that HeartWare provide Thoratec and its representatives with certain business, financial, accounting, legal, regulatory and other information.

On January 13, 2009, Mr. Burbach and other representatives of Thoratec's senior management met with the Thoratec board of directors and updated the Thoratec board of directors on the status of negotiations with HeartWare and the material terms of the proposed acquisition of HeartWare that had been preliminarily agreed to at the January 11 and 12, 2009 meetings. The Thoratec board of directors authorized Thoratec's senior management team to proceed with negotiations with HeartWare based on the terms presented to the Thoratec board of directors. Later that day, HeartWare and Thoratec reached a non-binding agreement in principle on the material terms for the proposed business combination between the two companies and representatives of Shearman and J.P. Morgan met by teleconference with representatives of Latham and Banc of America to discuss the preparation and negotiation of a definitive merger agreement, the ongoing due diligence process and the timing of the proposed transaction. Following that teleconference, HeartWare provided Thoratec with an initial response to its preliminary due diligence request list. In addition, on January 13, 2009, Shearman sent a detailed preliminary due diligence request list with respect to Thoratec to Latham, requesting that Thoratec provide HeartWare and its representatives with certain business, financial, accounting, legal, regulatory and other information.

On January 13, 2009, Mr. Godshall, Mr. McIntyre and other representatives of HeartWare's senior management team met with Mr. Burbach and other representatives of Thoratec's senior management team at Latham's offices in San Francisco, California to conduct due diligence on Thoratec, and Mr. Godshall, Mr. McIntyre and other representatives of HeartWare's senior management team and Mr. Burbach and other representatives of Thoratec's senior management team met again by teleconference on January 15, 2009, together with representatives of J.P. Morgan, Shearman, Banc of America and Latham to continue those discussions. At those meetings, Mr. Burbach advised HeartWare that Thoratec's wholly owned subsidiary, ITC, had received a 483 Notice of Observation report

issued by the FDA in January 2009 as a result of an inspection of ITC's facilities in New Jersey. HeartWare inquired about Thoratec's plans to publicly disclose the 483 Notice of Observation report, and HeartWare noted that it would not proceed with the due diligence process until HeartWare had additional information regarding the 483 Notice of Observation Report, its implications and nature of Thoratec's plans regarding disclosure of the report.

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On January 15, 2009 and January 16, 2009, representatives of HeartWare's senior management team consulted with Shearman, J.P. Morgan and Hogan & Hartson, HeartWare's outside legal counsel with respect to regulatory issues, in connection with its efforts to better understand the possible implications for Thoratec of the 483 Notice of Observation report issued by the FDA.

On January 18, 2009, the HeartWare board of directors met by teleconference to discuss the status of the transaction, including the results of HeartWare's due diligence investigation to date. Later that evening, at the direction of the HeartWare board of directors, HeartWare informed Thoratec that it was terminating negotiations until Thoratec presented a timeline for public disclosure of ITC's receipt of the 483 Notice of Observation report, or alternatively agreed to a transaction structure that did not include a fixed rate of exchange with respect to shares of Thoratec common stock offered as merger consideration, and HeartWare sent a notice to Thoratec requesting the return of confidential information that had been delivered to Thoratec in connection with the proposed transaction.

On January 20, 2009, representatives of HeartWare received additional information from Thoratec regarding the 483 Notice of Observation report, including Thoratec's plans to publicly disclose ITC's receipt of the 483 Notice of Observation report on February 5, 2009, in connection with its release of its fourth quarter 2008 earnings. Later that day, the HeartWare board of directors, representatives of Shearman and representatives of J.P. Morgan met by teleconference. Following deliberations, the HeartWare board of directors determined that HeartWare's senior management team should reengage with representatives of Thoratec's senior management team.

On January 21, 2009, Mr. Godshall, Mr. McIntyre and representatives of HeartWare's senior management team, and representatives of Shearman and J.P. Morgan met by teleconference with Mr. Burbach, and representatives of Thoratec's senior management team and representatives of Latham and Banc of America to again discuss the process and the timing of the proposed transaction. Following that teleconference, Thoratec sent HeartWare a draft letter of intent that included an exclusivity provision granting Thoratec a term of thirty-five (35) days during which HeartWare would agree to negotiate exclusively with Thoratec in connection with a change of control transaction.

On January 27, 2009, Mr. Godshall and Mr. McIntyre met with Mr. Burbach and Mr. Smith and other representatives of Thoratec's senior management team at Latham's office in San Francisco, California to receive presentations from management of Thoratec regarding Thoratec's businesses and operations, with representatives of J.P. Morgan, Banc of America, Shearman and Latham attending the meeting in person or by teleconference. At that meeting, HeartWare executed a letter of intent with Thoratec that granted Thoratec exclusivity with respect to negotiating a change of control transaction with HeartWare from January 27, 2009 to the first to occur of (i) February 16, 2009 and (ii) the execution of definitive agreements with respect to the proposed transaction.

Later on January 27, 2009, Latham sent a draft of a proposed merger agreement and a proposed support agreement to HeartWare and Shearman. On January 29, 2009, Latham sent drafts of a proposed loan agreement, investor's rights agreement and escrow agreement to HeartWare and Shearman.

On January 31, 2009 and February 1, 2009, representatives of Thoratec's management team met with Mr. McIntyre and other representatives of HeartWare's management team at HeartWare's operational facility in Miami Lakes, Florida to attend presentations from HeartWare regarding HeartWare's business and operations.

From November 18, 2008 through February 9, 2009, representatives of HeartWare's senior management team held discussions with various potential investors in connection with financing transactions that would be an alternative to the transaction with Thoratec.

From February 1, 2009 through February 12, 2009, Shearman and Latham discussed the terms of the proposed merger agreement, loan agreement, investor's rights agreement, escrow agreement and support agreements. In connection with

these discussions, the parties exchanged multiple drafts of the proposed agreements. Each of HeartWare's and Thoratec's senior management teams met regularly with their respective advisors to receive an update on the status of the negotiations, review issues and concerns that arose during negotiations and provide direction and instructions to their advisors. During this period, members of HeartWare's senior management team regularly updated members of the HeartWare board of directors regarding the status of the discussions and the proposed resolution of the material open issues under the draft agreements.

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On February 10, 2009, the Thoratec board of directors met with Mr. Burbach and other members of Thoratec's senior management team and representatives of Banc of America and Latham. At the meeting, Mr. Burbach and other members of Thoratec's senior management team provided an update on negotiations with HeartWare since the last meeting of the Thoratec board of directors, and Banc of America presented its financial analyses of HeartWare and Thoratec and the merger consideration that Thoratec proposed to pay to acquire all of the outstanding shares of common stock of HeartWare. Representatives of Latham reviewed the fiduciary duties of the directors in connection with the proposed acquisition of HeartWare with the Thoratec board of directors, described the principal terms of the proposed merger agreement and the other proposed transaction agreements and summarized certain matters related to the regulatory adoption of the transaction. The Thoratec board of directors and their advisors discussed the terms of the proposed acquisition of HeartWare and the terms of the merger agreement, the loan agreement and related documents.

On February 11, 2009, the HeartWare board of directors met by teleconference. Representatives of Shearman and J.P. Morgan and members of HeartWare's senior management team also participated in the meeting. At the meeting, HeartWare's senior management team provided an update of events since the last meeting of the HeartWare board of directors, as well as an update on the status of HeartWare's business and operations and a description of Thoratec's business and operations based on the information received during the Thoratec management presentation. Representatives of Shearman reviewed the fiduciary duties of the directors in connection with the HeartWare board of directors' consideration of the proposed transaction with Thoratec and described the principal terms of the proposed merger agreement and the other proposed transaction agreements. Representatives of J.P. Morgan made a presentation regarding the financial analyses it had performed in respect of HeartWare and Thoratec, and described the fairness opinion that it was prepared to deliver to the HeartWare board of directors if requested. Extended discussion followed among the directors and their advisors, with numerous questions addressed by the HeartWare board of directors to HeartWare's advisors regarding the draft agreements, the terms of the proposed transaction and the process between signing the definitive agreements and closing, including the likely timing of that process. Following these discussions, the HeartWare board of directors agreed to continue to review the information that had been presented to it regarding the proposed transaction, and to reconvene by teleconference the following day for purposes of making a final determination regarding whether HeartWare should proceed with the proposed transaction.

On February 12, 2009, the HeartWare board of directors reconvened by telephone. Representatives of Shearman and J.P. Morgan and members of HeartWare's senior management team also participated in this meeting. Representatives of HeartWare's senior management team updated the HeartWare board of directors with respect to discussions that had taken place since the previous day, and representatives of Shearman updated the HeartWare board of directors on the final revisions to the merger agreement and other transaction agreements. After discussions among the HeartWare board of directors, members of management and the board's advisors, representatives of J.P. Morgan delivered to the HeartWare board of directors an oral opinion, which was subsequently confirmed by delivery of a written opinion, dated February 12, 2009, to the effect that as the date of the opinion and based on and subject to the factors, procedures, assumptions, qualifications and limitations set forth in the opinion, the merger consideration was fair from a financial point of view to HeartWare's stockholders. After additional discussions, and taking into account the factors described below in greater detail under the section entitled *The Merger - HeartWare's Reasons for the Merger and Recommendation of the HeartWare Board of Directors*, the HeartWare directors, by the unanimous vote of the directors present, approved the merger agreement and declared its advisability, approved the merger and the other transactions contemplated by the merger agreement and resolved to recommend that HeartWare stockholders vote for the adoption of the merger agreement.

The Thoratec board of directors also met on February 12, 2009, with Mr. Burbach and other members of Thoratec's senior management team and representatives of Banc of America and Latham. Thoratec's senior management team updated the Thoratec board of directors concerning the conclusion of negotiations with HeartWare, and representatives of Banc of America and Latham provided the Thoratec board of directors with a summary of the final

terms of the merger agreement and other transaction agreements. After additional discussion among the members of the Thoratec board of directors and its advisors, and taking into account the factors described below under the section entitled *The Merger Thoratec s Reasons for the Merger* , the Thoratec board of

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directors approved the merger agreement, the loan agreement and the other transaction agreements and the transactions contemplated thereby.

Following the meetings of each of the HeartWare board of directors and the Thoratec board of directors on February 12, 2009, HeartWare, Thoratec, Merger Subsidiary and Merger Subsidiary Two executed the merger agreement and the other transaction agreements.

Early in the morning of February 13, 2009, HeartWare and Thoratec issued a joint press release announcing their execution of the merger agreement and Messrs. Burbach, Smith, Godshall and McIntyre held a joint conference call for investors of both companies to discuss the merger.

HeartWare's Reasons for the Merger and Recommendation of the HeartWare Board of Directors

In reaching its decision to approve the merger agreement and declare its advisability and to recommend that HeartWare stockholders vote in favor of the adoption of the merger agreement, the HeartWare board of directors consulted with HeartWare's senior management team, as well as its outside legal and financial advisors, and considered a number of factors, including the following:

Value of Merger Consideration. The HeartWare board of directors considered the value of the per share merger consideration to be received by HeartWare stockholders in the merger. The HeartWare board of directors noted that HeartWare stockholders will receive \$14.30 in cash and 0.6054 of a share of Thoratec common stock for each share of HeartWare common stock outstanding, which, based upon a volume weighted average closing price of Thoratec common stock for the four (4) days preceding the signing of the merger agreement of \$26.25 per share, reflected a price of \$30.19 per share of HeartWare common stock or \$0.86 for each HeartWare CDI (based upon the then current US/AUS exchange rate of 1.5265), representing a significant premium to the current and historical trading prices for shares of HeartWare common stock and for HeartWare CDIs. The HeartWare board of directors also considered the current and historical trading prices of shares of Thoratec common stock as of the date of the meeting at which the HeartWare board of directors approved the merger, and noted that the current trading price of shares of Thoratec common stock was approximately 21.1% below the fifty-two (52) week high for these shares.

The HeartWare board of directors also considered the fact that if the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on the fifth (5th) trading day prior to the closing date is less than \$18.38 (70% of the \$26.25 stock price used to calculate the merger consideration), then HeartWare will have an option to terminate the merger agreement unless Thoratec increases the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration as of the fifth (5th) business day prior to closing is equal to 70% of the value of the aggregate Thoratec stock consideration payable in the merger at the signing of the merger agreement (which was calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration).

The HeartWare board of directors further considered that if that same volume weighted average price as mentioned above exceeds \$34.13 (130% of the \$26.25 stock price used to calculate the merger consideration), then Thoratec may reduce the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration as of the fifth (5th) business day prior to closing is equal to 130% of the value of the aggregate Thoratec stock consideration payable in the merger at the signing of the merger agreement (which was calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration).

Form of the Merger Consideration. The HeartWare board of directors considered that part of the merger consideration includes shares of Thoratec common stock and, therefore, in addition to the possibility that, for U.S. federal income tax purposes, the amount of gain, if any, recognized by U.S. holders of HeartWare common stock may be limited to the cash portion of the merger consideration received (as discussed below) and that, for Australian tax purposes, the stock portion of the merger consideration may be tax free to HeartWare stockholders (as discussed below), HeartWare stockholders will retain an equity interest in the combined enterprise with the related opportunity to share in its future growth.

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Strategic Advantages. In light of the significant stock component of the merger consideration, the HeartWare board of directors also assessed the complementary strengths of each of the companies and the compatibility of the corporate structures. The HeartWare board of directors also reviewed information with respect to the prospects of the combined company, including the potential for the combined company, by using the existing strengths and relationships of each of Thoratec and HeartWare, to offer a broader range of treatments and to develop more effective and less invasive treatment options more quickly than if the companies were to remain separate entities. In addition, the board of directors also considered that the combined company would be more financially stable than HeartWare would be if it remained independent.

Terms of the Merger Agreement. The HeartWare board of directors, with the assistance of its legal advisors, reviewed the terms of the merger agreement, including:

The ability of the HeartWare board of directors to respond to and engage in discussions or negotiations regarding unsolicited third-party acquisition proposals under certain circumstances and, ultimately, to terminate the merger agreement in order to accept a superior proposal;

The fact that the HeartWare board of directors has the right to change its recommendation to the HeartWare stockholders that they vote in favor of the adoption of the merger agreement if the HeartWare board of directors determines in its good faith judgment prior to the HeartWare special meeting of stockholders and after consultation with its outside legal counsel and financial advisors, that the failure to change its recommendation would reasonably be expected to be inconsistent with its fiduciary duties to HeartWare stockholders under applicable law; and

HeartWare's right to terminate the merger agreement under certain circumstances, including if the volume weighted average closing price of shares of Thoratec common stock is less than \$18.38 over the twenty (20) business day period ending five (5) business days prior to the closing of the merger.

The Loan Agreement. The HeartWare board of directors considered that Thoratec had agreed to provide a convertible loan facility of up to \$28.0 million to fund ongoing operations, which will allow HeartWare to proceed with its product development and commercialization efforts without the need to raise additional financing, which the board viewed as particularly advantageous in light of the current state of the financing markets.

HeartWare's Business Conditions and Prospects. The HeartWare board of directors considered information with respect to HeartWare's financial condition, results of operations, business, competitive position and business prospects and risks, on both an historical and prospective basis, as well as current industry, economic and market conditions and trends. The HeartWare board of directors also took into account risks associated with HeartWare's clinical trial program, its ability to obtain regulatory approval needed to commercialize its products and generate revenues and its ability to obtain the financing that would be necessary to allow it to continue its development program on terms that would not be overly dilutive to its current stockholders.

Thoratec's Business Condition and Prospects. The HeartWare board of directors considered information with respect to Thoratec's financial condition, results of operations, business, competitive position and business prospects and risks, on both an historical and prospective basis, as well as current industry, economic and market conditions and trends. In considering Thoratec's condition and prospects, the HeartWare board of directors reviewed information regarding Thoratec's historical performance and received reports from HeartWare's senior management team regarding its due diligence review of Thoratec's business and legal affairs and Thoratec's management. The HeartWare board also took into account the expected effect of the merger on

Thoratec's EPS and EBITDA.

Regulatory Matters. The HeartWare board of directors considered the regulatory clearances that would be required as a condition to the merger and the prospects and anticipated timing of obtaining those clearances.

Tax Treatment. The HeartWare board of directors noted the expected tax treatment of the merger consideration to be received by HeartWare stockholders, including the fact that, subject to certain tax-related conditions being satisfied and the second merger occurring, the amount of gain, if any, recognized by

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U.S. holders of HeartWare common stock for U.S. federal income tax purposes may be limited to the cash portion of the merger consideration received, and that, subject to a favorable tax ruling or other relief from Australian tax authorities, Australian holders of HeartWare common stock will not be required to recognize any gain on the stock portion of the merger consideration for Australian tax purposes.

Potential Negative Considerations. The HeartWare board of directors considered a number of potentially negative factors, as well as related mitigating factors in its deliberations concerning the merger agreement and the merger, including:

The possibility that the merger might not be completed as a result of the failure to receive the required regulatory clearances or satisfy other closing conditions, including securing the required approval from HeartWare stockholders, which could result in a significant distraction to HeartWare employees and increased expenses from an unsuccessful attempt to complete the merger. In that regard, the board of directors considered the support agreements to be entered into by its directors and certain stockholders, on the one hand, and Thoratec, on the other hand, both in the context of making it more likely that stockholder approval for the merger would be obtained, and that the execution of these support agreements should not deter a superior proposal as they would terminate upon termination of the merger agreement in favor of a superior proposal.

The risk that adverse changes to the business, assets, liabilities, condition (financial or otherwise) or operating results of HeartWare could result in a failure to complete the merger.

The possibility that the value of the per share merger consideration could decrease prior to the closing of the merger if the trading price of Thoratec decreases below \$26.25 per share (but remains higher than \$18.38 per share) and the inability of HeartWare stockholders to participate in any pre-merger increases in the trading price of Thoratec common shares above \$34.13 per share.

The potential difficulties of integrating the businesses of HeartWare and Thoratec and the risk that all or some portion of the potential benefits of the merger might not be realized.

The fact that, under the terms of the merger agreement, prior to the completion of the merger or termination of the merger agreement, HeartWare is required to conduct its business only in the ordinary course and is subject to specified restrictions on its ability to conduct its business, including in respect of entering into or terminating material contracts, commencing or settling litigation or increasing the compensation of its employees.

HeartWare's inability to solicit competing acquisition proposals and the possibility that the \$11.3 million termination fee payable by HeartWare upon termination of the merger agreement could discourage other potential acquirers from making a competing offer to purchase HeartWare.

The fact that in the event that the merger agreement is terminated due to a superior proposal, Thoratec may convert the outstanding principal amount of the loans to HeartWare under the loan agreement, as well as amounts then held in escrow pursuant to the loan agreement, into shares of HeartWare common stock based on a conversion rate equal to \$21.5355 per share of HeartWare common stock, which could discourage other potential bidders from making a bid.

In the judgment of the HeartWare board of directors, however, these potential risks were more than offset by the potential benefits of the merger discussed above.

Opinion of Financial Advisor. The HeartWare board of directors also considered the oral opinion rendered by J.P. Morgan on February 12, 2009, which opinion was subsequently confirmed in writing, to the effect that, as of the date of the opinion and based on and subject to the factors, procedures, assumptions, qualifications and limitations set forth in the opinion, the merger consideration was fair, from a financial point of view, to HeartWare stockholders, and the analyses, methodologies and conclusions underlying such determinations, as described under *The Merger Opinion of HeartWare's Financial Advisor*, beginning on page 60 of this proxy statement/prospectus. A copy of J.P. Morgan's written opinion is attached as Annex F to this proxy statement/prospectus.

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Additional Considerations. In the course of its deliberations on the merger, the HeartWare board of directors consulted with members of HeartWare's management and HeartWare's legal, financial, accounting and tax advisors on various legal, business and financial matters. Additional factors considered by the HeartWare board of directors in determining whether to approve the merger agreement and declare its advisability and recommend that HeartWare stockholders vote to adopt the merger agreement include:

The fact that HeartWare stockholders will have an opportunity to vote on the merger on the terms provided in the merger agreement.

The fact that for one (1) year following the merger, employees that remain in the employment of HeartWare will receive employee benefits that, in the aggregate, are substantially similar to those received by similarly situated employees of Thoratec.

The fact that at closing, holders of options issued under HeartWare's employee stock option plan and holders of certain HeartWare incentive options will become entitled to receive a cash payment equal to the difference between \$30.19 (the value of the merger consideration at signing) and the exercise price of the options and that at closing each restricted stock unit will be converted into the right to receive a cash payment of \$30.19.

The foregoing discussion of the information and factors considered by the HeartWare board of directors is not exhaustive, but includes the material factors that the HeartWare board of directors considered. In view of the wide variety of factors considered in connection with its evaluation of the merger and related transactions and the complexity of these matters, the HeartWare board of directors did not find it useful, and did not attempt, to quantify, rank or otherwise assign relative weights to these factors. In considering the factors described above, individual members of the HeartWare board of directors may have given different weight to different factors. The HeartWare board of directors conducted an overall analysis of the factors described above, including discussions with, and questioning of, the management of HeartWare and HeartWare's legal and financial advisors, and reached the consensus that the merger was advisable and in the best interests of HeartWare and HeartWare stockholders.

In considering the recommendation of the HeartWare board of directors to adopt the merger agreement, HeartWare stockholders should be aware that the executive officers and directors of HeartWare have certain interests in the merger that may be different from, or in addition to, the interests of HeartWare generally. The HeartWare board of directors was aware of these interests and considered them when adopting the merger agreement and recommending that HeartWare stockholders vote to adopt the merger agreement. See *The Merger - Interests of HeartWare Directors and Executive Officers in the Mergers* beginning on page 65.

Thoratec's Reasons for the Merger

The Thoratec board of directors approved the merger agreement and the transactions contemplated by the merger agreement.

In reaching its decision to approve the merger agreement, the Thoratec board of directors consulted with senior members of Thoratec's management team and with its financial, legal and accounting advisors regarding the strategic and operational aspects of combining Thoratec and HeartWare and the results of the due diligence efforts undertaken by management and Thoratec's financial, legal and accounting advisors. In addition, the Thoratec board of directors held discussions with representatives of Banc of America, Thoratec's financial advisor, and Thoratec's other advisors regarding the past and current business operations, financial condition and future prospects of HeartWare. In reaching its decision to approve the merger agreement, the Thoratec board of directors considered a variety of factors, including

the following:

Strengthened Business and Operating Efficiencies.

The complementary nature of the technology and products of HeartWare, including HeartWare's current portfolio of miniaturized implantable heart pumps that have been approved for sale, are undergoing clinical trials or are under development, which would increase Thoratec's portfolio of mechanical circulatory support devices and accelerate Thoratec's development of enhanced technologies for heart failure patients.

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The expectation that, after the consummation of the merger, the greater scale and scope of the combined company's operations could create added resources to fund ongoing, focused research and development programs, future technology innovations and clinical studies, and the combined company would be better positioned to grow through external initiatives, if and when such opportunities should arise.

The expectation that the merger would result in operating synergies for the combined company over the long-term.

Positioned for Long-Term Growth.

The potential to accelerate Thoratec's future revenue and earnings growth.

The expectation that the merger would expand the acceptance and availability of mechanical circulatory support devices, including Thoratec's and HeartWare's products.

The expectation that, after the consummation of the merger, the experience, resources and breadth of product offerings of the combined company would allow the combined company to respond more quickly and effectively to technological change and market demands.

Merger Consideration. The market price of Thoratec common stock payable to HeartWare stockholders in the merger is subject to specified maximum and minimum values, such that if the market price exceeds the maximum value, the stock portion of the merger consideration payable to HeartWare stockholders may be reduced by Thoratec and if the market price falls below the minimum value and HeartWare elects to terminate the merger agreement, Thoratec may elect to increase the number of shares of Thoratec stock payable to HeartWare stockholders and consummate the merger. See *The Merger Agreement Merger Consideration* beginning on page 81 of this proxy statement/prospectus.

Terms of the Merger Agreement. The Thoratec board of directors, with the assistance of its legal advisors, reviewed the terms of the merger agreement, including the provisions in the merger agreement that prohibit HeartWare from soliciting other acquisition proposals and the circumstances under which a termination fee is payable by HeartWare to Thoratec under the merger agreement and the nature of the negotiating process that resulted in the termination fee provision.

Support Agreements. The agreement by all but one of HeartWare's directors, certain executive officers and Apple Tree Partners, HeartWare's largest stockholder, who collectively beneficially own, as of the HeartWare record date, approximately % of the total outstanding shares of HeartWare common stock, to vote their respective shares of HeartWare common stock for the adoption of the merger agreement with Thoratec, subject to the terms and conditions of the support agreements. See *The Support Agreements* beginning on page 106 of this proxy statement/prospectus.

Potential Negative Considerations. The Thoratec board of directors considered a number of potentially negative factors, as well as related mitigating factors, in its deliberations concerning the merger agreement, including:

The risk of obtaining required regulatory approvals relating to the merger and the possibility that the merger might not be completed or might be unduly delayed, even if HeartWare's stockholders approve the merger.

The potential adverse consequences to Thoratec if the merger is not completed or is significantly delayed.

That the merger will be dilutive to Thoratec's earnings on both a GAAP and non-GAAP basis into 2011.

The expectation that Thoratec will record non-recurring charges associated with the acquisition of HeartWare of approximately \$15.0 million to \$20.0 million in 2009.

The risk that anticipated cost savings, operational synergies and other benefits sought in the merger might not be fully realized.

The time, effort and costs incurred in connection with the negotiation and implementation of the merger and involved in integrating the management teams, strategies, cultures and organizations of the two companies

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following the closing, including the risk of diverting management's attention from the operation of Thoratec's business and from other strategic priorities.

The fact that the outcome of ongoing clinical trials related to HeartWare's products may not be favorable and that regulatory approvals necessary to market and sell those products may not be received in a timely manner or at all.

The risk that Thoratec may not be able to retain key employees of HeartWare following the closing.

The fact that certain preferred stockholders have a minority interest in HeartWare, Inc. and that HeartWare, Inc. is not a wholly-owned subsidiary of HeartWare.

The other risks of the type and nature described under *Risk Factors* beginning on page 25 of this proxy statement/prospectus.

After consideration of these factors, the Thoratec board of directors determined that these risks could be mitigated or managed by Thoratec, HeartWare or by the combined company following the merger, were reasonably acceptable under the circumstances or, in light of the anticipated benefits, the risks were unlikely to have a materially adverse impact on the merger or on the combined company following the merger, and that, overall, these risks were significantly outweighed by the potential benefits of the merger.

The Thoratec board of directors considered all of the foregoing factors as a whole and determined to approve the merger agreement.

The foregoing discussion of the information and factors considered by the Thoratec board of directors is not exhaustive, but Thoratec believes it includes all the material factors considered by the Thoratec board of directors. In view of the wide variety of factors considered by the Thoratec board of directors in connection with its evaluation of the mergers and the complexity of these matters, the Thoratec board of directors did not consider it practical, and did not attempt, to quantify, rank or otherwise assign relative weights to the specific factors it considered in reaching its decision. Rather, the Thoratec board of directors made its decision based on the totality of information presented to, and the investigation conducted by, it. In considering the factors discussed above, individual directors may have given different weights to different factors.

Opinion of HeartWare's Financial Advisor

Pursuant to an engagement letter dated December 2, 2008, HeartWare retained J.P. Morgan to act as its financial advisor in connection with the transactions contemplated by the merger agreement.

At the meeting of the HeartWare board of directors on February 12, 2009, J.P. Morgan rendered its oral opinion, subsequently confirmed in writing, to the HeartWare board of directors that, as of such date and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in its opinion, the merger consideration to be paid to the holders of shares of HeartWare common stock in the merger was fair, from a financial point of view, to such holders.

The full text of the written opinion of J.P. Morgan dated February 12, 2009, which sets forth, among other things, the assumptions made, procedures followed, matters considered, and qualifications and limitations on the review undertaken in connection with its opinion, is included as Annex F to this proxy statement/prospectus and is incorporated herein by reference. The summary of J.P. Morgan's opinion below is qualified in its entirety by reference to the full text of the opinion, and HeartWare stockholders are urged to read the opinion carefully and in its entirety.

J.P. Morgan provided its opinion for the information of the HeartWare board of directors in connection with and for the purposes of the evaluation of the transactions contemplated by the merger agreement. J.P. Morgan's written opinion addresses only the consideration to be paid to the holders of shares of HeartWare common stock in the merger, and does not address any other matter. J.P. Morgan's opinion does not constitute a recommendation to any stockholder of HeartWare as to how such stockholder should vote with respect to any matter. The consideration to be paid to the holders of shares of HeartWare common stock in the merger was determined in negotiations between HeartWare and Thoratec, and the decision to approve and recommend the merger was made independently by the HeartWare board of directors.

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In arriving at its opinion, J.P. Morgan, among other things:

reviewed the merger agreement;

reviewed certain publicly available business and financial information concerning HeartWare and Thoratec and the industries in which they operate;

compared the proposed financial terms of the merger with the publicly available financial terms of certain transactions involving companies J.P. Morgan deemed relevant and the consideration received for such companies;

compared the financial and operating performance of HeartWare and Thoratec with publicly available information concerning certain other companies J.P. Morgan deemed relevant and reviewed the current and historical market prices of the shares of HeartWare common stock and Thoratec common stock and certain publicly traded securities of such other companies;

reviewed certain internal financial analyses and forecasts prepared by or at the direction of the managements of HeartWare and Thoratec relating to their respective businesses, as well as discussed the estimated amount and timing of the cost savings and related expenses and synergies expected by the managements of HeartWare and Thoratec to result from the merger; and

performed such other financial studies and analyses and considered such other information as J.P. Morgan deemed appropriate for the purposes of its opinion.

In addition, J.P. Morgan held discussions with certain members of the management of HeartWare and Thoratec with respect to certain aspects of the merger and the past and current business operations of HeartWare and Thoratec, the financial condition and future prospects and operations of HeartWare and Thoratec, the effects of the merger on the financial condition and future prospects of HeartWare and Thoratec and certain other matters J.P. Morgan believed necessary or appropriate to its inquiry.

In giving its opinion, J.P. Morgan relied upon and assumed the accuracy and completeness of all information that was publicly available or was furnished to or discussed with J.P. Morgan by HeartWare and Thoratec or otherwise reviewed by or for J.P. Morgan, and J.P. Morgan has not independently verified (nor has J.P. Morgan assumed responsibility or liability for independently verifying) any such information or its accuracy or completeness. J.P. Morgan has not conducted or been provided with any valuation or appraisal of any assets or liabilities, nor has J.P. Morgan evaluated the solvency of HeartWare or Thoratec under any state or federal laws relating to bankruptcy, insolvency or similar matters. In relying on financial analyses and forecasts provided to J.P. Morgan or derived therefrom, including the synergies referred to above, J.P. Morgan has assumed that they have been reasonably prepared based on assumptions reflecting the best currently available estimates and judgments by management as to the expected future results of operations and financial condition of HeartWare and Thoratec to which such analyses or forecasts relate. J.P. Morgan expresses no view as to such analyses or forecasts (including the synergies referred to above) or the assumptions on which they were based. J.P. Morgan has also assumed that the merger and the other transactions contemplated by the merger agreement will have the tax consequences described in discussions with, and materials furnished to J.P. Morgan by, representatives of HeartWare, and will be consummated as described in the merger agreement. J.P. Morgan has also assumed that the representations and warranties made by HeartWare and Thoratec in the merger agreement and the related agreements are and will be true and correct in all respects material to J.P. Morgan's analysis, and that there will not be any adjustment to the stock portion of merger consideration that is material to their analysis. J.P. Morgan is not a legal, regulatory or tax expert and has relied in all legal, regulatory and tax matters on the assessments made by advisors to HeartWare with respect to such issues. J.P. Morgan has further

assumed that all material governmental, regulatory or other consents and approvals necessary for the consummation of the merger will be obtained without any adverse effect on HeartWare or Thoratec or on the contemplated benefits of the merger.

The forecasts furnished to J.P. Morgan by HeartWare and Thoratec were prepared by the managements of HeartWare and Thoratec. Neither HeartWare nor Thoratec publicly discloses internal management forecasts of the type provided to J.P. Morgan in connection with J.P. Morgan's analysis of the merger, and such forecasts were not prepared with a view toward public disclosure. These forecasts were based on numerous variables and assumptions

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that are inherently uncertain and may be beyond the control of management, including, without limitation, factors related to general economic and competitive conditions and prevailing interest rates. Accordingly, actual results could vary significantly from those set forth in such forecasts.

J.P. Morgan's opinion is necessarily based on economic, market and other conditions as in effect on, and the information made available to J.P. Morgan as of, the date of its opinion. It should be understood that subsequent developments may affect J.P. Morgan's opinion and that J.P. Morgan does not have any obligation to update, revise, or reaffirm its opinion. J.P. Morgan's opinion is limited to the fairness, from a financial point of view, of the consideration to be paid to the holders of the shares of HeartWare common stock in the merger and J.P. Morgan expresses no opinion as to the fairness of the merger to, or any consideration paid in connection therewith to, the holders of any other class of securities, creditors or other constituencies of HeartWare or as to the underlying decision by HeartWare to engage in the merger. Furthermore, J.P. Morgan expresses no opinion with respect to the amount or nature of any compensation to any officers, directors, or employees of any party to the merger, or any class of such persons relative to the consideration to be paid to the holders of the shares of HeartWare common stock in the merger or with respect to the fairness of any such compensation. J.P. Morgan expresses no opinion as to the price at which HeartWare common stock or Thoratec common stock will trade at any future time, whether before or after the closing of the merger.

In accordance with customary investment banking practice, J.P. Morgan employed generally accepted valuation methods in reaching its opinion. The following is a summary of the material financial analyses utilized by J.P. Morgan in connection with providing its opinion. The financial analyses summarized below include information presented in tabular format. In order to fully understand J.P. Morgan's financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data described below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of J.P. Morgan's financial analyses.

Financial Analyses HeartWare***Selected public benchmarks analysis***

Using publicly available information, J.P. Morgan compared selected financial data of HeartWare with similar data for selected publicly traded companies engaged in businesses which J.P. Morgan judged to be analogous to HeartWare's business. These companies were selected, among other reasons, because they share similar business characteristics to HeartWare based on operational characteristics and financial metrics. However, none of the companies selected is identical or directly comparable to HeartWare. Accordingly, J.P. Morgan made judgments and assumptions concerning differences in financial and operating characteristics of the selected companies and other factors that could affect the public trading value of the selected companies.

For each selected company, J.P. Morgan calculated such company's firm value divided by its estimated revenue, which we refer to as FV/Revenue, for fiscal year 2010. For purposes of this analysis, a company's firm value is calculated as the fully diluted common equity value of such company as of February 11, 2009, plus the value of such company's indebtedness and minority interests and preferred stock, minus such company's cash, cash equivalents and marketable securities.

The following table represents the results of this analysis:

Peer Group	Mean	Median
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FV/Revenue 2.7x 3.0x

Based on the results of this analysis and other factors that J.P. Morgan considered appropriate, J.P. Morgan applied a FV/Revenue of 2.0x to 3.5x to HeartWare's estimated revenue for fiscal year 2010. This resulted in an implied equity value per share of HeartWare common stock of \$9.75 to \$15.00.

Selected precedent transactions analysis

Using publicly available information, J.P. Morgan examined the following selected transactions involving businesses which J.P. Morgan judged to be analogous to HeartWare's business. These transactions were selected,

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among other reasons, because the businesses involved in these transactions share similar business characteristics to HeartWare based on operational characteristics and financial metrics:

Date Announced	Acquiror	Target
September 2008	Medtronic, Inc.	CryoCath Technologies Inc.
April 2008	Kinetic Concepts, Inc.	LifeCell Corp.
July 2007	Medtronic, Inc.	Kyphon Inc.
June 2007	Qiagen N.V.	Digene Corp.
May 2007	Inverness Medical Innovations, Inc.	Biosite, Inc.
February 2007	Cytoc Corp.	Adeza Biomedical Corp.
January 2007	Advanced Medical Optics, Inc.	IntraLase Corp.
December 2006	Kyphon Inc.	St. Francis Medical Technologies, Inc.
November 2006	Johnson & Johnson	Conor Medsystems, Inc.
December 2005	Johnson & Johnson	Animas Corp.
November 2005	Allergan, Inc.	Inamed Corp.
October 2005	St. Jude Medical, Inc.	Advanced Neuromodulation Systems, Inc.
June 2004	Boston Scientific Corp.	Advanced Bionics Corp.
March 2004	Cytoc Corp.	Novacept

For each of the selected transactions, J.P. Morgan calculated and, to the extent information was publicly available, compared the transaction value divided by the target's one-year forward revenue for the one-year period immediately following the announcement of the respective transaction, which we refer to as a Transaction Value/FTM Revenue Multiple.

The following table represents the results of this analysis:

	Transaction Value/FTM Revenue Multiple
High	14.2x
Low	4.5x
Median	6.1x

Based on the results of this analysis and other factors that J.P. Morgan considered appropriate, J.P. Morgan derived a Transaction Value/FTM Revenue Multiple of 5.0x to 8.0x to HeartWare's estimated revenue for fiscal year 2009. This resulted in an implied equity value per share of common stock of HeartWare of \$11.25 to \$16.25.

Discounted cash flow analysis

J.P. Morgan conducted a discounted cash flow analysis for the purpose of determining the fully diluted equity value per share of HeartWare common stock. J.P. Morgan calculated the unlevered free cash flows that HeartWare is expected to generate during fiscal years 2009 through 2022 based upon the financial forecasts prepared by HeartWare's management. J.P. Morgan also calculated a range of terminal firm values for HeartWare by applying, based upon J.P. Morgan's judgment and experience, a perpetual growth rate ranging from 2.50% to 3.50% to HeartWare's unlevered free cash flow during the final year of the fourteen (14)-year period ending 2022 and using a range of discount rates from 19.0% to 21.0%. This discount rate range was based upon an analysis of the weighted average cost

of capital of HeartWare conducted by J.P. Morgan. The unlevered free cash flows and the range of terminal firm values were then discounted to present values using the same range of discount rates from 19.0% to 21.0%. The present value of the unlevered free cash flows and the range of terminal firm values were then adjusted for HeartWare's excess cash and total debt as of December 31, 2008. Based on the foregoing, this analysis indicated an implied fully diluted equity value per share of HeartWare common stock of between \$20.50 to \$26.25, on a stand-alone basis (i.e., without synergies). J.P. Morgan also performed discounted cash flow analyses on upside and downside sensitivities to management's forecasts, which analyses were not material in determining fairness.

Table of Contents**Financial Analyses Thoratec*****Selected public benchmarks analysis***

Using publicly available information, J.P. Morgan compared selected financial data of Thoratec with similar data for selected publicly traded companies engaged in businesses which J.P. Morgan judged to be analogous to Thoratec's business. These companies were selected, among other reasons, because they share similar business characteristics to Thoratec based on operational characteristics and financial metrics. However, none of the companies selected is identical or directly comparable to Thoratec. Accordingly, J.P. Morgan made judgments and assumptions concerning differences in financial and operating characteristics of the selected companies and other factors that could affect the public trading value of the selected companies.

For each selected company, J.P. Morgan calculated such company's firm value divided by its estimated revenue, which we refer to as FV/Revenue, for fiscal years 2009 and 2010. For purposes of this analysis, a company's firm value is calculated as the fully diluted common equity value of such company as of February 11, 2009, plus the value of such company's indebtedness and minority interests and preferred stock, minus such company's cash, cash equivalents and marketable securities.

The following table represents the results of this analysis:

Peer Group	Mean		Median	
	2009	2010	2009	2010
FV/Revenue	3.5x	3.1x	3.5x	3.3x

Based on the results of this analysis and other factors that J.P. Morgan considered appropriate, J.P. Morgan applied a FV/Revenue of 3.0x to 4.5x to Thoratec's estimated revenue for fiscal year 2009 and a FV/Revenue of 2.0x to 4.0x to Thoratec's estimated revenue for fiscal year 2010. This resulted in an implied equity value per share of Thoratec common stock of \$19.50 to \$29.75.

Discounted cash flow analysis

J.P. Morgan conducted a discounted cash flow analysis for the purpose of determining the fully diluted equity value per share of Thoratec common stock. J.P. Morgan calculated the unlevered free cash flows that Thoratec is expected to generate during fiscal years 2009 through 2018 based upon the financial forecasts prepared by HeartWare's management. J.P. Morgan also calculated a range of terminal firm values for Thoratec by applying, based upon J.P. Morgan's judgment and experience, a perpetual growth rate ranging from 2.50% to 3.50% to Thoratec's unlevered free cash flow during the final year of the 10-year period ending 2018 and using a range of discount rates from 10.0% to 12.0%. This discount rate range was based upon an analysis of the weighted average cost of capital of Thoratec conducted by J.P. Morgan. The unlevered free cash flows and the range of terminal firm values were then discounted to present values using the same range of discount rates from 10.0% to 12.0%. The present value of the unlevered free cash flows and the range of terminal firm values were then adjusted for Thoratec's excess cash and total debt as of December 31, 2008. Based on the foregoing, this analysis indicated an implied fully diluted equity value per share of Thoratec common stock of between \$27.50 to \$38.25, on a stand-alone basis (i.e., without synergies).

The foregoing summary of certain material financial analyses does not purport to be a complete description of the analyses or data presented by J.P. Morgan. The preparation of a fairness opinion is a complex process and is not necessarily susceptible to partial analysis or summary description. J.P. Morgan believes that the foregoing summary

and its analyses must be considered as a whole and that selecting portions of the foregoing summary and these analyses, without considering all of its analyses as a whole, could create an incomplete view of the processes underlying the analyses and its opinion. In arriving at its opinion, J.P. Morgan did not attribute any particular weight to any analyses or factors considered by it and did not form an opinion as to whether any individual analysis or factor (positive or negative), considered in isolation, supported or failed to support its opinion. Rather, J.P. Morgan considered the results of all its analyses as a whole and made its determination as to fairness on the basis of its experience and professional judgment after considering the results of all of its analyses.

Analyses based on forecasts of future results are inherently uncertain, as they are subject to numerous factors or events beyond the control of the parties and their advisors. Accordingly, forecasts and analyses used or made by

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J.P. Morgan are not necessarily indicative of actual future results, which may be significantly more or less favorable than suggested by those analyses. Moreover, J.P. Morgan's analyses are not and do not purport to be appraisals or otherwise reflective of the prices at which businesses actually could be bought or sold. None of the selected companies reviewed as described in the above summary is identical to HeartWare, and none of the selected transactions reviewed as described in the above summary was identical to the merger. However, the companies selected were chosen because they are publicly traded companies with operations and businesses that, for purposes of J.P. Morgan's analysis, may be considered similar to those of HeartWare. The transactions selected were similarly chosen for their participants, size and other factors that, for purposes of J.P. Morgan's analysis, may be considered similar to those of the merger. The analyses necessarily involve complex considerations and judgments concerning differences in financial and operational characteristics of the companies involved and other factors that could affect the companies compared to HeartWare and the transactions compared to the merger.

The opinion of J.P. Morgan was one of the many factors taken into consideration by the HeartWare board of directors in making its determination to approve the merger. The analyses of J.P. Morgan as summarized above should not be viewed as determinative of the opinion of the HeartWare board of directors with respect to the value of HeartWare or Thoratec, or of whether the HeartWare board of directors would have been willing to agree to different or other forms of consideration.

As part of its investment banking and financial advisory business, J.P. Morgan and its affiliates are continually engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, investments for passive and control purposes, negotiated underwritings, competitive biddings, secondary distributions of listed and unlisted securities, private placements and valuations for estate, corporate and other purposes.

J.P. Morgan has acted as financial advisor to HeartWare with respect to the merger and will receive a fee from HeartWare for its services if the merger is consummated. In addition, HeartWare has agreed to indemnify J.P. Morgan for certain liabilities arising out of its engagement. During the two years preceding the date of J.P. Morgan's opinion, neither J.P. Morgan nor its affiliates had any other significant commercial or investment banking relationships with HeartWare or Thoratec. In the ordinary course of J.P. Morgan's businesses, J.P. Morgan and its affiliates may actively trade the debt and equity securities of HeartWare or Thoratec for its own account or for the accounts of customers and, accordingly, J.P. Morgan may at any time hold long or short positions in such securities.

Interests of HeartWare Directors and Executive Officers in the Mergers

In considering the recommendation of the HeartWare board of directors with respect to the merger, HeartWare stockholders should be aware that certain executive officers and non-employee directors of HeartWare have certain interests in the merger that may be different from, or in addition to, the interests of HeartWare stockholders generally. The HeartWare board of directors was aware of the interests described below and considered them, among other matters, when approving the merger agreement and recommending that the HeartWare stockholders vote to adopt the merger agreement. These interests are summarized below.

Equity Compensation Awards

The merger agreement provides that, at or immediately prior to the effective time, the terms of each then outstanding vested HeartWare incentive option and each then outstanding option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan will be adjusted to provide that, at or immediately prior to the effective time of the merger, each vested HeartWare incentive option and each HeartWare employee stock option, whether or not exercisable or vested, that is outstanding immediately prior to the effective time will be cancelled and will convert into a right to receive a cash payment, without interest, equal to (i) the excess, if any, of \$30.19 over the applicable exercise price per share of HeartWare common stock of such cancelled option multiplied by (ii) the number

of shares of HeartWare common stock such holder would have purchased (assuming full vesting of each outstanding option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan) had such holder exercised such cancelled option in full immediately prior to the effective time. Based upon the number of unvested HeartWare employee stock options outstanding as of the HeartWare record date, the unvested HeartWare employee stock options held by the HeartWare non-employee

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directors and executive officers relating to shares of HeartWare common stock will be cancelled and will be converted into aggregate cash payments of \$.

The merger agreement also provides that, at the effective time of the merger, each then outstanding unvested HeartWare incentive option shall cease to represent the right to acquire shares of HeartWare common stock and will be converted into, and deemed to constitute, an option to acquire, on the same terms and conditions as were applicable under such HeartWare incentive option, a number of shares of Thoratec common stock equal to the product of (i) the number of shares of HeartWare common stock represented by such unvested HeartWare incentive option and (ii) 1.1499, rounded down, to the nearest whole share of Thoratec common stock, and such new option to acquire Thoratec common stock will have an exercise price per share (rounded up to the nearest cent) equal to (x) the per share exercise price specified in such HeartWare incentive option divided by (y) 1.1499. The 1.1499 exchange ratio for each outstanding unvested HeartWare incentive option is subject to the same volume weighted average price adjustments to the stock portion of the merger consideration described in the section entitled, *The Merger Agreement Merger Consideration* beginning on page 81 of this proxy statement/prospectus. See *The Merger Agreement Treatment of Options and Other Equity-Based Awards* beginning on page 84 of this proxy statement/prospectus. Based upon the number of outstanding unvested HeartWare incentive options as of the HeartWare record date, the unvested HeartWare incentive options held by the HeartWare non-employee directors and executive officers relating to shares of HeartWare common stock will be converted into options to acquire an aggregate of approximately shares of Thoratec common stock.

Pursuant to the terms of the merger agreement, the exercise price for any HeartWare employee stock option or HeartWare incentive option that is measured in Australian dollars will be deemed to be converted to U.S. dollars at an exchange rate of 1.5265 Australian dollars for each U.S. dollar.

Further, the merger agreement provides that the terms of each HeartWare stock-based award, other than HeartWare incentive options and HeartWare employee stock options, will be adjusted as necessary to provide that at, or immediately prior to the effective time, each such HeartWare stock-based award, whether or not exercisable or vested, that is outstanding immediately prior to the effective time, will be cancelled and will convert into the right to receive a cash payment, without interest, equal to \$30.19 multiplied by the number of shares of HeartWare common stock the holder of such HeartWare stock-based award would have received had such HeartWare stock-based award been fully earned, vested and exercisable and had been exercised or settled immediately prior to the effective time. See *The Merger Agreement Treatment of Options and Other Equity-Based Awards* beginning on page 84 of this proxy statement/prospectus. Based upon the number of restricted stock units, or RSUs, as of the HeartWare record date, RSUs held by the HeartWare executive officers and non-employee directors relating to will be cancelled and will be converted into aggregate cash payments of \$.

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The following table sets forth, as of the HeartWare record date, the number of vested and unvested HeartWare employee stock options, vested HeartWare incentive stock options and the number of RSUs held by each of the HeartWare executive officers and non-employee directors, as well as the value of the cash payment to be received with respect to the conversion of the unvested HeartWare employee stock options and RSUs contemplated by the merger agreement and described above, and the value of the aggregate cash payment to be received, in respect of the vested and unvested HeartWare employee stock options, vested HeartWare incentive stock options and RSUs.

Name and Title	Vested	Unvested	Vested	RSUs	Total Cash For Previously	Total Cash (Vested, Unvested Options, and RSUs)
	Heartware Employee Stock Options	Heartware Employee Stock Options	Heartware Incentive Stock Options		Unvested Employee Stock Options and RSUs	
Robert Thomas <i>Chairman, Non-Executive Director</i>					\$	\$
Dr. Seth Harrison <i>Deputy Chairman, Non-Executive Director</i>					\$	\$
Douglas Godshall <i>Executive Director, Managing Director, Chief Executive Officer</i>					\$	\$
Dr. Christine Bennett <i>Non-Executive Director</i>					\$	\$
Dr. Denis Wade, AM <i>Non-Executive Director</i>					\$	\$
Robert Stockman <i>Non-Executive Director</i>					\$	\$
Timothy Barberich <i>Non-Executive Director</i>					\$	\$
Ray Larkin, Jr. <i>Non-Executive Director</i>					\$	\$
David McIntyre <i>Chief Financial Officer, Company Secretary</i>					\$	\$
Jeffrey LaRose <i>Chief Scientific Officer</i>					\$	\$
James Schuermann <i>Vice President, Sales and Marketing</i>					\$	\$
Barry Yomtov <i>Vice President, Product Development</i>					\$	\$
Ramon Paz <i>Vice President, Quality Assurance</i>					\$	\$
Dr. David Hathaway <i>Chief Medical Officer</i>					\$	\$

Lauren Farrell
Vice President, Finance

\$ \$

Executive Officer Employment Agreements, Retention Bonus Agreements, Thoratec Offer Letters and Separation Benefits Agreements

Executive Officer Employment Agreements. Each of HeartWare's executive officers is a party to an employment agreement that requires HeartWare to make certain payments and provide certain benefits if the executive's employment is terminated by HeartWare without cause (as defined in the agreement) or is terminated by the executive officer for good reason (as defined in the agreement) within eighteen (18) months following a change in control of HeartWare.

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Mr. Godshall's employment agreement provides for a lump-sum cash payment of two (2) times the aggregate of his base salary and the most recent annual bonus (employment agreements for Messrs. McIntyre and LaRose provide for a similar payment, however, their change in control benefits have been addressed in their separation benefits agreements with Thoratec, described below). With regard to Messrs. Schuermann, Yomtov, Paz, Hathaway and Ms. Farrell, their employment agreements provide for a lump-sum cash payment equal to one (1) year of the executive's base salary. The employment agreements also provide for continued payment of the executive's portion of elected Consolidated Omnibus Budget Reconciliation Act of 1985, which we refer to as COBRA, continuation coverage for a period of twelve (12) months (twenty-four (24) months for Mr. Godshall) or, if earlier, until the executive becomes entitled to participate in another employer's health plan. Additionally, the employment agreements require the company to provide sixty (60) days (or ninety (90) days for Mr. Godshall), prior written notice for a termination of employment, other than for cause, or to provide additional severance to the extent such notice is not given. Upon a termination following a change in control, Messrs. Godshall, Schuermann, Yomtov, Paz, Hathaway and Ms. Farrell are entitled to severance payments of \$920,000, \$243,000, \$189,000, \$210,600, \$250,000, and \$195,000, respectively. Upon the closing of the merger, the employment agreements for Messrs. McIntyre and LaRose will terminate and their continuing employment will be governed by the offer letters and separation benefits agreements described below.

Severance payments and benefits are conditioned on the executive's execution of a release of claims against HeartWare, its affiliates and personnel. In addition, pursuant to their employment agreements, the executives may be subject to an ongoing confidentiality obligation, post-employment non-competition, non-solicitation and non-disparagement covenants and they must continue to comply with the terms of their Proprietary Information, Confidentiality and Invention Assignment Agreement. Additionally, pursuant to the employment agreements, if the HeartWare board of directors determines that an executive has engaged in any activity that contravenes any restrictive covenant set forth in the agreement, the executive will forfeit any severance payable, in addition to repaying the previously paid severance pay, within thirty (30) days after receipt of the HeartWare board of directors' determination notice.

Retention Bonus Agreements. Messrs. Godshall, McIntyre and LaRose have each entered into a retention bonus agreement with HeartWare. Mr. Godshall's retention bonus agreement provides for the payment of \$3,300,000 within thirty (30) days following the closing of the merger, subject to his continued employment through the closing of the merger and his entry into a consulting agreement with Thoratec that has a term of at least three (3) months. In the event that, prior to the close of the merger, Mr. Godshall is terminated without cause (as defined by Mr. Godshall's employment agreement) or resigns for good reason (as defined by Mr. Godshall's employment agreement), the retention bonus will vest in full and be paid on the later of (i) the closing of the merger and (ii) within sixty (60) days following such termination, subject to Mr. Godshall entering into a general release of claims.

Mr. McIntyre's retention bonus agreement provides for payments totaling \$2,100,000 that vest and are paid in two (2) equal installments (the second installment of which is subject to accelerated vesting that may occur pursuant to termination without cause, resignation under certain circumstances, death or disability). Mr. McIntyre receives his first installment if he remains employed through the closing of the merger and the second installment on the first anniversary of the closing of the merger, on the condition that he remain employed through that date. In the event that Mr. McIntyre is terminated without cause (as defined in Mr. McIntyre's separation benefits agreement), resigns for good reason (as defined in Mr. McIntyre's separation benefits agreement), or resigns for any reason after six (6) consecutive months of service with Thoratec following the closing of the merger (and provides three (3) months notice prior to the resignation date), any unvested retention bonus will vest and be paid within sixty (60) days following such termination, subject to Mr. McIntyre entering into a general release of claims. Pursuant to the retention bonus agreement, Mr. McIntyre waived resignation for good reason as a result of any changes of employment due to the mergers.

Mr. LaRose's retention bonus agreement provides for payments totaling \$1,700,000 that vest and are paid in two equal installments (subject to accelerated vesting that may occur pursuant to termination without cause, resignation without good reason, death or disability). Mr. LaRose receives his first installment if he remains employed through the closing of the merger and the second installment on the first anniversary of the closing of the merger, on the condition that he remain employed through that date. In the event that Mr. LaRose is terminated

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without cause (as defined in Mr. LaRose's separation benefits agreement) or resigns for good reason (as defined in Mr. LaRose's separation benefits agreement), any unvested retention bonus will vest and be paid within sixty (60) days following such termination, subject to Mr. LaRose entering into a general release of claims. Pursuant to the retention bonus agreement, Mr. LaRose waived resignation for good reason as a result of any changes of employment due to the mergers.

Each executive with a retention bonus agreement will be solely responsible for all taxes with respect to any payment received, including, without limitation, any excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, which we refer to as the Internal Revenue Code; provided, however, that if the payments and benefits received constitute an excess parachute payment (as defined under Section 280G of the Internal Revenue Code), such payments and benefits will be reduced to the extent necessary to prevent any portion from becoming nondeductible by HeartWare or subject to excise tax imposed under Section 4999 of the Internal Revenue Code, but only if the net after-tax benefit received by the executive by reason of the reduction will exceed the net after-tax benefit that he would receive if no such reduction was made.

Subject to certain conditions, HeartWare will also be permitted to award additional cash retention bonuses to other HeartWare employees, payable on or following the effective time of the merger. The maximum aggregate amount payable (inclusive of any and all payments, reimbursements and tax gross-ups) pursuant to such additional cash retention bonuses and the retention bonus agreements discussed above will be \$8.0 million. As part of the additional cash retention bonuses, retention bonus letters for Messrs. Schuermann, Paz, Yomtov, Hathaway, and Ms. Farrell provide for payment of \$150,000, \$150,000, \$100,000, \$80,000, and \$100,000, respectively, ninety (90) days following the closing of the merger, subject to continued employment through the entirety of this period. In the event that, prior to the end of this period, the executive is terminated without cause (as defined by the executive's employment agreement) or in the event of death or disability of the executive, the retention bonus, whether vested or unvested, will be paid in full, provided that the executive enters into a general release of claims. See, *The Merger Agreement - Obligations with Respect to Continuing Employees and Benefit Matters* beginning on page 94 of this proxy statement/prospectus.

Thoratec Offer Letters. Messrs. McIntyre and LaRose have accepted employment with Thoratec that become effective on the closing of the merger. Mr. McIntyre has accepted a position as Vice President of Business Operations in the Cardiovascular Division of Thoratec. Mr. McIntyre's offer letter provides for (i) an annual base salary of \$260,000, (ii) options to purchase 25,000 shares of Thoratec common stock that vest ratably over four years, (iii) 20,000 RSUs that convert one-for-one into shares of common stock of Thoratec that vest ratably over four years, (iv) a bonus opportunity equal to 60% of his base salary, payable based on the achievement of his 2009 individual and corporate objectives (prorated based on hire date) and (v) a monthly housing allowance of \$10,000.

Mr. LaRose has accepted a position as Vice President of Advanced Development in Thoratec's Research and Development group. Mr. LaRose's offer letter provides for (i) an annual base salary of \$260,000, (ii) options to purchase 20,000 shares of Thoratec common stock that vest ratably over four years, (iii) 15,000 RSUs that convert one-for-one into shares of common stock of Thoratec that vest ratably over four (4) years, and (iv) a bonus opportunity equal to 50% of his base salary, payable based on the achievement of his 2009 individual and corporate objectives (prorated based on hire date).

Separation Benefits Agreements. Messrs. McIntyre and LaRose have entered into substantially similar separation benefits agreements with Thoratec that become effective on the closing of the merger and supersede the employment agreements of Messrs. McIntyre and LaRose with HeartWare. These separation benefits agreements require Thoratec to make certain payments and provide certain benefits if the executive officer's employment is involuntarily terminated by Thoratec without cause (as defined in the agreement) or by the executive for good reason (as defined in the agreement).

The separation benefits agreements of Messrs. McIntyre and LaRose provide for the payment of two (2) times the then-current annual base salary if employment is involuntarily terminated without cause (as defined in the agreement) within twelve (12) months after the close of the merger. If the applicable executive's employment is involuntarily terminated more than twelve (12) months following the close of the merger, the executive will be paid severance equal to one year of his then-current base salary. The separation benefits agreements also provide for continued payment or reimbursement of the executive's portion of elected COBRA continuation coverage for a

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period of twelve (12) months following a termination without cause (as defined in the agreement) or resignation for good reason (as defined in the agreement) or, if earlier, until the applicable executive becomes entitled to participate in another employer's health plan. These agreements also provide Messrs. McIntyre and LaRose certain change in control protections upon a change in control of Thoratec.

Additionally, Mr. McIntyre's agreement provides that if he is terminated for any reason, other than for cause, after nine months of continuous employment with Thoratec following the close of the merger, Thoratec will reimburse certain of Mr. McIntyre and his dependents' relocation costs and provide a lump-sum payment equivalent to one month of his then-current base salary.

In the event that any payment or benefit payable is subject to the excise tax imposed by Section 4999 of the Internal Revenue Code, the applicable executive will be paid an additional payment, which we refer to as a Gross-Up Payment, in an amount that after the payment by the executive of all taxes, including, without limitation, any income taxes and excise tax imposed upon the Gross-Up Payment, the executive will retain the full remaining amount of the payment without being reduced by the excise tax imposed upon the payment. Under the terms of the separation benefits agreement, the executive will not be paid a Gross-Up Payment with respect to any payments or benefits deemed to be a parachute payment within the meaning of Section 280G(b)(2) of the Internal Revenue Code in connection with the merger.

Each separation benefits agreement requires that in order to receive any payments the executive must execute and not revoke an effective release of claims, in a form acceptable to Thoratec, and remain in compliance with all applicable restrictive covenants set forth in the separation benefits agreement, the employee confidential information and inventions agreement and the non-competition agreement. The proprietary information, confidentiality and inventions assignment agreement requires an employee to, among other things, assign all rights, including all intellectual property rights, to HeartWare, Inc. without further compensation and prevents the executive from revealing any of HeartWare's trade secrets or confidential information concerning the organization, business or finances, for a period of five (5) years after cessation of employment.

Ownership of Thoratec Following the Merger

Based on the number of outstanding shares of HeartWare common stock (including shares represented by HeartWare CDIs) on the HeartWare record date, the number of outstanding shares of Thoratec common stock on , 2009 and assuming an exchange ratio of 0.6054, we anticipate that the holders of outstanding shares of HeartWare common stock (excluding holders of options and other awards) will own approximately % of the outstanding shares of Thoratec common stock following the merger.

Effective Time of the Mergers

The merger will become effective upon the filing of a certificate of merger with the Secretary of State of the State of Delaware or at such other time as is agreed upon by HeartWare and Thoratec and specified as the effective time in the certificate of merger. The filing of the certificate of merger will occur as soon as practicable after satisfaction or waiver of the conditions to the completion of the merger, as described in the merger agreement. As a result of the merger, HeartWare will become a wholly owned subsidiary of Thoratec, all of the outstanding shares of HeartWare common stock will be cancelled and the former HeartWare stockholders will be entitled to receive the merger consideration. Assuming certain tax-related conditions described in the merger agreement are met, immediately following the consummation of the merger, the second merger will become effective upon the filing of a certificate of merger, which we refer to as the second merger certificate of merger, with the Secretary of State of the State of Delaware or at such other time as is agreed upon by HeartWare and Thoratec and specified as the effective time in the second merger certificate of merger.

Public Trading Markets

HeartWare common stock trades on The NASDAQ Global Market under the symbol HTWR and HeartWare CDIs trade on ASX under the symbol HIN . Thoratec common stock trades on The NASDAQ Global Select Market under the symbol THOR . Upon completion of the merger, HeartWare common stock and HeartWare CDIs will be delisted from the above listed exchanges and deregistered under the Exchange Act. Thoratec will apply

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to have the shares of Thoratec common stock to be issued in the merger approved for listing on The NASDAQ Global Select Market. Shares of Thoratec common stock will not be listed on ASX.

Thoratec's Dividend Policy

The holders of Thoratec common stock receive dividends if and when declared by the Thoratec board of directors. Thoratec has not declared or paid any dividends on its common stock and does not intend to pay dividends in the foreseeable future.

Material U.S. Federal Income Tax Consequences

The following summary describes the material U.S. federal income tax consequences to holders of HeartWare common stock upon an exchange of their HeartWare common stock for Thoratec common stock and cash in the merger. The following summary is based upon the Internal Revenue Code, existing and proposed Treasury regulations and published administrative rulings and court decisions, all as currently in effect as of the date hereof, and all of which are subject to change, possibly with retroactive effect. The following discussion does not address the following: (i) the tax consequences of the mergers under U.S. federal non-income tax laws or under state, local or non-U.S. tax laws; or (ii) the tax consequences of the ownership or disposition of Thoratec common stock acquired in the merger.

Except as specifically set forth below, this discussion addresses only those HeartWare stockholders that are U.S. persons for U.S. federal income tax purposes. You are a U.S. person for purposes of this discussion if you are:

a citizen or resident of the United States;

a corporation (or an entity treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States or of any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income tax regardless of its source; or

a trust if (a) (i) a court within the United States is able to exercise primary supervision over the trust, and (ii) one or more U.S. persons have authority to control all substantial decisions of the trust, or (b) the trust has made an election under applicable Treasury regulations to be treated as a U.S. person.

This discussion addresses only those HeartWare stockholders that hold their HeartWare common stock as a capital asset within the meaning of Section 1221 of the Internal Revenue Code and does not address all the U.S. federal income tax consequences that may be relevant to particular HeartWare stockholders in light of their individual circumstances or to HeartWare stockholders that are subject to special rules, such as:

financial institutions;

investors in pass-through entities;

insurance companies;

tax-exempt organizations;

dealers in securities or currencies;

traders in securities that elect to use a mark to market method of accounting;

persons that hold HeartWare common stock as part of a straddle, hedge, constructive sale or conversion transaction;

regulated investment companies;

real estate investment trusts;

certain U.S. expatriates;

persons whose functional currency is not the U.S. dollar; and

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stockholders who acquired their HeartWare common stock through the exercise of an employee stock option or otherwise as compensation.

If a partnership (or other entity taxed as a partnership for U.S. federal income tax purposes) holds HeartWare common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner and the activities of the partnership. Partnerships and partners in such a partnership should consult their tax advisers about the tax consequences of the mergers to them.

Under general U.S. federal income tax principles, a holder of HeartWare CDIs will be treated as the beneficial owner of the corresponding number of shares of HeartWare common stock held by CDN. References to HeartWare common stock in this discussion include HeartWare CDIs.

Holders of HeartWare common stock are urged to consult their own tax advisors regarding the U.S. federal income tax consequences of the mergers in light of their personal circumstances and the consequences of the mergers under U.S. federal non-income tax laws and state, local and non-U.S. tax laws.

Transaction Structure

Pursuant to the merger agreement, the acquisition of HeartWare by Thoratec will be effected either as (i) a transaction structured to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, if the value of the stock portion of the merger consideration equals or exceeds 41% of the value of the aggregate merger consideration, in each case as specifically calculated pursuant to relevant provisions in the merger agreement, or (ii) otherwise, a transaction that is not structured to qualify as a reorganization and that will be fully taxable to HeartWare stockholders for U.S. federal income tax purposes. Whether the acquisition of HeartWare will be effected as a transaction intended to qualify as a reorganization or as a fully taxable transaction will depend in part upon future events that are not within the control of HeartWare or Thoratec, as described in more detail below.

Assuming a value per share of \$24.77 of Thoratec common stock, which was the per share closing price on June 5, 2009, and assuming that the number of HeartWare stockholders exercising dissenters' rights is not material, the transactions contemplated by the merger agreement would be structured to qualify as a reorganization for U.S. federal income tax purposes.

Thoratec will notify HeartWare's stockholders via a press release announcing the consummation of the merger as to whether or not the acquisition of HeartWare by Thoratec has been structured as a reorganization.

The merger agreement provides that if the aggregate value of the Thoratec common stock, measured by using the mean between the high and low selling prices of a share of Thoratec common stock as reported on The NASDAQ Stock Market for the last trading session closing prior to the effective time of the merger is at least 41% of the sum of the stock value and all cash payable to HeartWare stockholders pursuant to the merger (as calculated pursuant to the merger agreement), which calculation will take into account the number of Heartware stockholders exercising dissenters' rights as well as cash paid in respect of certain HeartWare stock-based awards, then immediately following, and as part of the same plan as, the merger, the second merger will occur. We refer to the condition described in the preceding sentence as the stock value condition. Pursuant to the second merger, HeartWare, the surviving corporation in the merger, will merge with and into a direct, wholly owned subsidiary of Thoratec. To the extent the stock value condition is satisfied and thus the second merger occurs: (i) Thoratec and HeartWare intend to treat the merger and the second merger, taken together, as a single integrated transaction for U.S. federal income tax purposes that qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, and (ii) as a condition to the completion of the acquisition of HeartWare pursuant to the Merger Agreement (which condition is not waivable after

the receipt of stockholder approval for the merger unless further stockholder approval is obtained with appropriate disclosure), Shearman will deliver a tax opinion to HeartWare, and Latham will deliver a tax opinion to Thoratec, in each case, to the effect that the merger and the second merger, taken together, will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code.

The tax opinions described in the preceding paragraph will be based on certain assumptions and on representation letters provided by HeartWare and Thoratec. The determination by Shearman and Latham as to whether the merger and the second merger, taken together, will be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code will depend upon the facts and circumstances (including as set forth in the representation letters) and law existing at the effective times of the mergers. It is possible that HeartWare and/or Thoratec will not be able to obtain its respective tax opinion. If any of the representations in the

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representation letters is or becomes inaccurate, then the tax opinions may no longer be valid. Neither of these tax opinions will be binding on the IRS and will not preclude the IRS from asserting, or a court from sustaining, a contrary conclusion. Neither HeartWare nor Thoratec intends to request any ruling from the IRS as to the U.S. federal income tax consequences of the mergers. Thus, even if the stock value condition is satisfied, there can be no assurance that the merger and the second merger, taken together, will qualify as a reorganization .

The satisfaction of the stock value condition will depend on future trading values of Thoratec common stock which cannot be predicted. If the stock value condition is not satisfied, the second merger will not occur and the merger will not qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. In such event, (i) the acquisition of HeartWare will be treated as a transaction that is fully taxable to HeartWare stockholders for U.S. federal income tax purposes, and (ii) the receipt of the tax opinions described above will not be a condition to completing the acquisition of HeartWare pursuant to the merger agreement. The possibility of a fully taxable transaction should not be dismissed.

Treatment as a Reorganization

Assuming that the stock value condition is satisfied and that the merger and the second merger, taken together, are treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, the following material U.S. federal income tax consequences generally will result:

A HeartWare stockholder that exchanges HeartWare common stock for Thoratec common stock and cash pursuant to the merger will recognize gain (but not loss) in an amount equal to the lesser of (i) the amount of cash received in the merger (other than any cash received with respect to a fractional share of Thoratec common stock, which is discussed below) and (ii) an amount equal to the excess, if any, of (x) the sum of the amount of cash and the fair market value of the shares of Thoratec common stock received over (y) the stockholder's adjusted tax basis in the HeartWare common stock exchanged.

The gain recognized will be capital gain unless the receipt of cash by the stockholder has the effect of a distribution of a dividend, in which case such gain will be treated as ordinary dividend income to the extent of the stockholder's ratable share of accumulated earnings and profits of Thoratec as calculated for U.S. federal income tax purposes. In general, the determination of whether the receipt of cash in the merger will be treated as a dividend for U.S. federal income tax purposes depends upon the extent to which a HeartWare stockholder's receipt of cash reduces its deemed percentage stock ownership of Thoratec. For purposes of this determination, a HeartWare stockholder will be treated as if it first exchanged all of its HeartWare common stock solely for Thoratec common stock, and then Thoratec immediately redeemed a portion of such Thoratec common stock in exchange for the cash that such stockholder actually received.

The deemed redemption will not be treated as a dividend for U.S. federal income tax purposes if it results in a meaningful reduction in the stockholder's deemed percentage stock ownership of Thoratec, taking into account any of such stockholder's existing ownership of Thoratec common stock and certain constructive ownership rules. The IRS has indicated in rulings that any reduction in the interest of a minority stockholder that owns a small number of shares in a publicly and widely held corporation and that exercises no control over corporate affairs is a meaningful reduction resulting in capital gain treatment. In one published ruling, the IRS indicated that a shareholder in a publicly held corporation whose relative stock interest in the corporation is minimal and who exercises no control over corporate affairs is treated as having had a meaningful reduction in his or her stock after a redemption transaction if his or her percentage stock ownership in the corporation has been reduced by any extent, taking into account the shareholder's actual and constructive ownership before and after the hypothetical redemption. In that ruling, a reduction from 0.000118% to 0.0001081% was held to be a meaningful reduction. Each HeartWare stockholder whose deemed percentage stock ownership in Thoratec is

not minimal should consult its tax advisor to determine whether the receipt of cash by such stockholder may be treated as a dividend for U.S. federal income tax purposes.

A HeartWare stockholder will have an aggregate initial tax basis in the Thoratec common stock received in the merger equal to the stockholder's aggregate adjusted tax basis in its HeartWare common stock surrendered (i) reduced by the sum of (x) the portion of the stockholder's adjusted tax basis in its HeartWare

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common stock surrendered that is allocable to fractional shares of Thoratec common stock for which cash is received and (y) the amount of cash received by the stockholder in the merger and (ii) increased by the amount of gain (including any portion of such gain that is treated as a dividend as described above), if any, recognized by the stockholder (but not including the gain recognized upon the receipt of cash in lieu of fractional shares of Thoratec common stock).

The holding period for Thoratec common stock received by a HeartWare stockholder in the merger (including fractional shares of Thoratec common stock deemed received) will include the holding period for the HeartWare common stock surrendered.

If a HeartWare stockholder receives cash in lieu of fractional shares of Thoratec common stock in the merger, the stockholder generally will recognize capital gain or loss equal to the difference between the amount of cash received in lieu of the fractional shares of Thoratec common stock and the portion of the stockholder's adjusted tax basis in its HeartWare common stock surrendered that is allocable to the fractional shares.

Any capital gain that is recognized on the exchanges described above will be long-term capital gain if the stockholder's holding period with respect to its HeartWare common stock exceeds one (1) year. Long-term capital gains of non-corporate taxpayers currently are taxed at a maximum U.S. federal income tax rate of 15%. Short-term capital gains are taxed at ordinary income rates. Subject to certain exceptions, dividends received by non-corporate stockholders currently are taxed at a maximum U.S. federal income tax rate of 15%, provided certain holding period requirements are met.

A HeartWare stockholder who receives Thoratec common stock in the merger will be required to retain records pertaining to the merger. In addition, a HeartWare stockholder who, immediately before the merger, owned at least 5% (by vote or value) of the total outstanding stock of HeartWare is required to attach a statement to its U.S. federal income tax return for the year in which the merger is completed that sets forth such stockholder's tax basis in its HeartWare common stock surrendered and the fair market value of such stock.

If a HeartWare stockholder acquired different blocks of HeartWare common stock at different times or at different prices, any gain will be determined separately with respect to each block of HeartWare common stock, and the cash and shares of Thoratec common stock received in the merger will be allocated on a pro rata basis to each such block of HeartWare common stock.

Treatment as a Fully Taxable Transaction

If the stock value condition is not satisfied, the second merger will not occur and the merger will not qualify as a reorganization. Instead, the merger will be fully taxable for U.S. federal income tax purposes and HeartWare stockholders will be fully subject to tax on the exchange of their HeartWare common stock for Thoratec common stock and cash. In general, each HeartWare stockholder will recognize capital gain or loss in the merger in an amount equal to the difference between (i) the sum of the amount of cash received (including any cash received with respect to a fractional share of Thoratec common stock) and the fair market value of Thoratec common stock received, and (ii) the stockholder's adjusted tax basis in its HeartWare common stock surrendered. The capital gain or loss will be long-term capital gain or loss if the stockholder had held the HeartWare common stock surrendered for more than one year. Long-term capital gains of non-corporate taxpayers currently are taxed at a maximum U.S. federal income tax rate of 15%. Short-term capital gains are taxed at ordinary income rates. The initial tax basis in the Thoratec common stock received in the merger will be equal to its fair market value and the holding period for such Thoratec common stock will begin the day after the effective time of the merger.

If a HeartWare stockholder acquired different blocks of HeartWare common stock at different times or at different prices, any gain or loss will be determined separately with respect to each block of HeartWare common stock, and the cash and shares of Thoratec common stock received in the merger will be allocated on a pro rata basis to each such block of HeartWare common stock.

Dissenting HeartWare Stockholders

The above discussion does not apply to HeartWare stockholders who properly perfect dissenters' rights. A HeartWare stockholder who perfects dissenters' rights with respect to such stockholder's HeartWare common stock

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will recognize capital gain or loss equal to the difference between (i) the amount of cash received in exchange for such HeartWare common stock and (ii) such stockholder's adjusted tax basis in such HeartWare common stock. The capital gain or loss will be long-term capital gain or loss if the stockholder had held such HeartWare common stock surrendered for more than one year. Long-term capital gains of non-corporate taxpayers currently are taxed at a maximum U.S. federal income tax rate of 15%. Short-term capital gains are taxed at ordinary income rates.

If a HeartWare stockholder acquired different blocks of HeartWare common stock at different times or at different prices, any gain or loss will be determined separately with respect to each block of HeartWare common stock.

Certain Considerations for Non-U.S. Stockholders

This section describes certain considerations for HeartWare stockholders that are not U.S. persons, which we will refer to as non-U.S. stockholders.

Any capital gain recognized by a non-U.S. stockholder as a result of the exchange of HeartWare common stock in the merger generally will not be subject to U.S. federal income tax unless: (i) the gain is effectively connected with the conduct of a trade or business in the United States and, if an applicable income tax treaty applies, is attributable to a U.S. permanent establishment of the non-U.S. stockholder (in this case, such non-U.S. stockholder will be subject to U.S. federal income tax on the net gain derived from the disposition in the same manner as if the non-U.S. stockholder was a U.S. person, and if the non-U.S. stockholder is a corporation, it may be subject to the additional branch profits tax at a 30% rate or a lower rate specified by an applicable income tax treaty); (ii) the non-U.S. stockholder is an individual present in the United States for 183 days or more in the taxable year in which the disposition occurs and certain other conditions are met (in this case, the individual non-U.S. stockholder will be subject to a flat 30% U.S. federal income tax on the gain derived from the disposition, which tax may be offset by U.S. source capital losses); or (iii) HeartWare is or has been a U.S. real property holding corporation for U.S. federal income tax purposes and one or more other conditions are satisfied (HeartWare has provided a representation in the merger agreement to the effect that it is not and has not been a U.S. real property holding corporation).

To the extent the receipt of cash by a non-U.S. stockholder is treated as a dividend for U.S. federal income tax purposes as described above in *Treatment as a Reorganization*, the dividend generally will be subject to withholding of U.S. federal income tax at a 30% rate unless such withholding rate is reduced by an applicable income tax treaty. In order for a non-U.S. stockholder to claim benefits under an applicable income tax treaty in respect of a dividend, the non-U.S. stockholder generally will be required to provide a completed IRS Form W-8BEN and certify under penalties of perjury that it is not a U.S. person.

Backup Withholding

Certain HeartWare stockholders may be subject to backup withholding of U.S. federal income tax, at a rate of 28%, with respect to the consideration received pursuant to the merger. Backup withholding will not apply, however, to a HeartWare stockholder that (i) is a U.S. person and furnishes a correct taxpayer identification number and certifies that it is not subject to backup withholding on IRS Form W-9 or a substantially similar form, (ii) provides a certification of its status as a non-U.S. stockholder on an appropriate IRS Form W-8 or successor form or (iii) is otherwise exempt from backup withholding, such as a corporation, and provides appropriate proof of the applicable exemption. Any amounts withheld from payments to a HeartWare stockholder under the backup withholding rules are not an additional tax and will be allowed as a refund or credit against the HeartWare stockholder's U.S. federal income tax liability, if any, provided that the HeartWare stockholder timely furnishes the required information to the IRS.

THE FOREGOING DISCUSSION IS INTENDED ONLY AS A SUMMARY. HOLDERS OF HEARTWARE COMMON STOCK ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING THE

U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGERS IN LIGHT OF THEIR PERSONAL CIRCUMSTANCES AND THE CONSEQUENCES OF THE MERGERS UNDER U.S. FEDERAL NON-INCOME TAX LAWS AND STATE, LOCAL AND NON-U.S. TAX LAWS.

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Regulatory Matters

Both HeartWare and Thoratec have agreed to use their respective reasonable best efforts to prepare and file as soon as practicable all forms, registrations and notices relating to antitrust, competition, trade or other regulatory matters and to take any such actions as are reasonably necessary to obtain any regulatory approvals required to complete the transactions contemplated by the merger agreement, including any notification and report forms and related material required to be filed pursuant to the HSR Act with the FTC and with the Antitrust Division. 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 and, as discussed below, HeartWare and Thoratec are in the process of responding to the FTC's request for additional information.

United States Antitrust Approval

Under the provisions of the HSR Act and related rules, certain transactions, including the merger, may not be completed until each party has filed its notification and report form with the FTC and the Antitrust Division and the HSR Act thirty (30) calendar-day waiting period has expired or been terminated early. HeartWare and Thoratec each filed their respective notification and report forms with the FTC and the Antitrust Division regarding the merger under the HSR Act on February 24, 2009. On March 26, 2009, each of HeartWare and Thoratec received a request for additional information, or a second request, from the FTC. The effect of the second request is to extend the waiting period for the merger under the HSR Act until thirty (30) calendar days after Thoratec and HeartWare have substantially complied with the second request, unless that period is extended voluntarily by Thoratec and HeartWare or terminated sooner by the FTC. HeartWare and Thoratec are in the process of responding to the information request. At any time before or after the effective time of the merger, the FTC, or others (including state attorney generals and private parties) could take action under the antitrust laws as they deem necessary or desirable in the public interest, including seeking to prevent the merger, to rescind the merger or to conditionally approve the merger upon the divestiture of assets of HeartWare or Thoratec or their subsidiaries.

Under the terms of the merger agreement, neither Thoratec nor HeartWare is obligated to consent to or to effect any divestiture or hold separate-order or enter into any license or similar agreement with respect to, or agree to restrict its ownership or operation of, any of its business or assets of that of either Thoratec, HeartWare or any of its affiliates or subsidiaries, in order to consummate the mergers. We cannot assure that a challenge to the merger on antitrust grounds will not be made or, if a challenge is made, of the results of such challenge. Similarly, we cannot assure that HeartWare or Thoratec will obtain the regulatory approvals necessary to consummate the merger or that the granting of these approvals will not involve the imposition of conditions to the consummation of the merger or require changes to the terms of the merger. These conditions or changes could result in the conditions to the merger not being satisfied prior to the termination date or at all. See the section entitled *Risk Factors* beginning on page 25.

Dissenters' Rights

Holders of record of shares of HeartWare common stock who do not vote in favor of the adoption of the merger agreement and who properly demand an appraisal of the fair value of their shares will be entitled to dissenters' rights in connection with the merger under Section 262 of the Delaware General Corporation Law, which we refer to as Section 262.

The following discussion is not a complete statement of the law pertaining to dissenters' rights under Section 262 and is qualified in its entirety by the full text of Section 262 which is attached to this proxy statement/prospectus as Annex G. The following summary does not constitute any legal or other advice nor does it constitute a recommendation that stockholders exercise their dissenters' rights under Section 262. All references in Section 262 and

in this summary to a stockholder or holders of shares of HeartWare common stock are to the record holder or holders of the shares of HeartWare common stock as to which dissenters' rights are asserted. A person having a beneficial interest in shares of HeartWare common stock held of record in the name of another person, such as a broker, fiduciary, depositary or other nominee, must act promptly to cause the record holder to follow the steps summarized below properly and in a timely manner to perfect dissenters' rights.

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Under Section 262, a record holder of shares of HeartWare common stock who makes the demand described below with respect to such shares, who continuously is the record holder of such shares through the effective time of the merger, who does not vote in favor of the adoption of the merger agreement and who otherwise follows the procedures set forth in Section 262 will be entitled to have his or her shares appraised by the Delaware Court of Chancery and to receive payment in cash of the fair value of the shares, exclusive of any element of value arising from the accomplishment or expectation of the merger, together with interest, if any, to be paid upon the amount determined to be the fair value.

Under Section 262, where a merger is to be submitted for approval at a meeting of stockholders, as in the case of the adoption of the merger agreement by HeartWare stockholders, the corporation, not less than twenty (20) days prior to the meeting, must notify each of its stockholders entitled to dissenters' rights that dissenters' rights are available and include in the notice a copy of Section 262. This proxy statement/prospectus constitutes the notice, and the full text of Section 262 is attached to this proxy statement/prospectus as Annex G. Any holder of HeartWare common stock who wishes to exercise dissenters' rights, or who wishes to preserve such holder's right to do so, should review the following discussion and Annex G carefully because failure to timely and properly comply with the procedures specified will result in the loss of dissenters' rights. Moreover, because of the complexity of the procedures for exercising the right to seek appraisal of shares of HeartWare common stock, we believe that if you are considering exercising such rights, you should seek the advice of legal counsel.

Any stockholder wishing to exercise dissenters' rights must deliver to HeartWare, before the vote on the adoption of the merger agreement at the HeartWare special meeting on [redacted], 2009, at [redacted], U.S. Eastern time ([redacted], Australia Eastern Standard Time on [redacted], 2009), a written demand for the appraisal of the stockholder's shares, and that holder of shares of HeartWare common stock must not vote in favor of the adoption of the merger agreement. A holder of shares of HeartWare common stock wishing to exercise dissenters' rights must hold the shares of record on the date the written demand for appraisal is made and must continue to hold the shares of record through the effective date of the merger, since dissenters' rights will be lost if the shares are transferred prior to the effective time of the merger. A proxy which is properly executed and does not contain voting instructions will, unless revoked, be voted in favor of the adoption of the merger agreement, and it will constitute a waiver of the stockholder's right of appraisal and will nullify any previously delivered written demand for appraisal. Therefore, a stockholder who votes by proxy and who wishes to exercise dissenters' rights must vote against the adoption of the merger agreement or abstain from voting on the adoption of the merger agreement. Neither voting against the adoption of the merger agreement (in person or by proxy) nor abstaining from voting or failing to vote on the proposal to adopt the merger will in and of itself constitute a written demand for appraisal satisfying the requirements of Section 262. The written demand for appraisal must be in addition to and separate from any proxy or vote. The demand must reasonably inform HeartWare of the identity of the record holder as well as the intention of the holder to demand an appraisal of the fair value of the shares held by the holder. A stockholder's failure to make the written demand prior to the taking of the vote on the adoption of the merger agreement at the special meeting of stockholders will constitute a waiver of dissenters' rights.

Only a holder of record of shares of HeartWare common stock is entitled to assert dissenters' rights for the shares registered in that holder's name. A demand for appraisal in respect of shares of HeartWare common stock should be executed by or on behalf of the holder of record, fully and correctly, as the holder's name appears on the holder's stock certificates, should specify the holder's name and mailing address and the number of shares registered in the holder's name and must state that the person intends thereby to demand appraisal of the holder's shares in connection with the merger. If the shares are owned of record by a person other than the beneficial owner, including a broker, fiduciary (such as a trustee, guardian or custodian), depositary or other nominee, execution of the demand should be by or for the record owner, and if the shares are owned of record by more than one person, as in a joint tenancy and tenancy in common, the demand should be executed by or on behalf of all joint owners. An authorized agent, including an agent for two or more joint owners, may execute a demand for appraisal on behalf of a holder of record; however, the agent must identify the record owner or owners and expressly disclose that, in executing the demand, the agent is acting as

agent for the record owner or owners. A record holder such as a broker who holds shares as nominee for several beneficial owners may exercise dissenters' rights with respect to the shares held for one or more beneficial owners while not exercising the rights with respect to the shares held for other beneficial owners; in such case, however, the written demand should set forth the number of shares as to which

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appraisal is sought, and where no number of shares is expressly mentioned the demand will be presumed to cover all shares of HeartWare common stock held in the name of the record owner. Stockholders who hold their shares in brokerage accounts or other nominee forms and who wish to exercise dissenters' rights are urged to consult with their brokers to determine the appropriate procedures for the making of a demand for appraisal by such a nominee.

All written demands for appraisal pursuant to Section 262 should be sent or delivered to HeartWare at 205 Newbury Street, Framingham, Massachusetts 01701, Attention: David McIntyre, Chief Financial Officer and Company Secretary.

At any time within sixty (60) days after the effective date of the merger, any holder of HeartWare common stock who has not commenced an appraisal proceeding or joined that proceeding as a named party may withdraw his, her or its demand for appraisal and accept the merger consideration offered pursuant to the merger agreement by delivering to the surviving corporation a written withdrawal of the demand for appraisal. However, any such attempt to withdraw the demand made more than sixty (60) days after the effective date of the merger will require written approval of the surviving corporation. No appraisal proceeding in the Delaware Court of Chancery will be dismissed as to any stockholder without the approval of the Delaware Court of Chancery, and such approval may be conditioned upon such terms as the court deems just; provided, however, that any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party may withdraw his, her or its demand for appraisal and accept the merger consideration offered pursuant to the merger agreement within sixty (60) days after the effective date of the merger. If the surviving corporation does not approve a request to withdraw a demand for appraisal when that approval is required, or, except with respect to any stockholder who withdraws such stockholder's right to appraisal in accordance with the proviso in the immediately preceding sentence, if the Delaware Court of Chancery does not approve the dismissal of an appraisal proceeding, the stockholder will be entitled to receive only the appraised value determined in any such appraisal proceeding, which value could be less than, equal to or more than the merger consideration being offered pursuant to the merger agreement.

Within ten (10) days after the effective date of the merger, the surviving corporation must notify each holder of HeartWare common stock who has complied with Section 262 and who has not voted in favor of the adoption of the merger agreement, that the merger has become effective. Within 120 days after the effective date of the merger, but not thereafter, the surviving corporation or any holder of HeartWare common stock who has so complied with Section 262 and is entitled to dissenters' rights under Section 262 may commence an appraisal proceeding by filing a petition in the Delaware Court of Chancery with a copy served on the surviving corporation demanding a determination of the fair value of the shares held by all dissenting holders. If a petition for appraisal is not timely filed, then the right to an appraisal for all dissenting stockholders will cease. The surviving corporation is under no obligation to and has no present intention to file a petition, and holders should not assume that the surviving corporation will file a petition or that the surviving corporation will initiate any negotiations with respect to the fair value of such shares. Accordingly, it is the obligation of the holders of HeartWare common stock who desire to have their shares appraised to initiate all necessary action to perfect their dissenters' rights in respect of shares of HeartWare common stock within the time and in the manner prescribed in Section 262.

Within one hundred and twenty (120) days after the effective date of the merger, any holder of HeartWare common stock who has complied with the requirements for exercise of dissenters' rights will be entitled, upon written request, to receive from the surviving corporation a statement setting forth the aggregate number of shares not voted in favor of the adoption of the merger agreement and with respect to which demands for appraisal have been received and the aggregate number of holders of such shares. The statement must be mailed within ten (10) days after a written request therefore has been received by the surviving corporation or within ten (10) days after the expiration of the period for delivery of demands for appraisal, whichever is later. Notwithstanding the foregoing, a person who is the beneficial owner of shares of common stock of HeartWare held either in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from HeartWare the statement described in this paragraph.

Under the merger agreement, we have agreed to provide Thoratec notice of any demands for appraisal received by us. Thoratec will have the right to participate in all negotiations and proceedings with respect to demands for appraisal under Section 262. We will not make any payments with respect to, or settle or offer to settle, any demand for appraisal without the written consent of Thoratec.

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If a petition for an appraisal is timely filed by a holder of shares of HeartWare common stock and a copy thereof is served upon the surviving corporation, the surviving corporation will then be obligated within twenty (20) days to file with the Delaware Register in Chancery a duly verified list containing the names and addresses of all stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached. After notice to the stockholders as required by the court, the Delaware Court of Chancery is empowered to conduct a hearing on the petition to determine those stockholders who have complied with Section 262 and who have become entitled to dissenters' rights thereunder. The Delaware Court of Chancery may require the stockholders who demanded payment for their shares to submit their stock certificates to the Delaware Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with the direction, the Delaware Court of Chancery may dismiss the proceedings as to the stockholder.

After the Delaware Court of Chancery determines the holders of HeartWare common stock entitled to appraisal, appraisal proceedings shall be conducted in accordance with the rules of the Delaware Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceedings, the court will determine the fair value of shares, exclusive of any element of value arising from the accomplishment or expectation of the merger, together with interest, if any, to be paid upon the amount determined to be the fair value. Unless the court in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the federal reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. In determining fair value, the Delaware Court of Chancery will take into account all relevant factors. In *Weinberger v. UOP, Inc.*, the Delaware Supreme Court discussed the factors that could be considered in determining fair value in an appraisal proceeding, stating that proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court should be considered and that [f]air price obviously requires consideration of all relevant factors involving the value of a company. The Delaware Supreme Court stated that, in making this determination of fair value, the court must consider market value, asset value, dividends, earnings prospects, the nature of the enterprise and any other facts that could be ascertained as of the date of the merger that throw any light on future prospects of the merged corporation. Section 262 provides that fair value is to be exclusive of any element of value arising from the accomplishment or expectation of the merger. In *Cede & Co. v. Technicolor, Inc.*, the Delaware Supreme Court stated that such exclusion is a narrow exclusion [that] does not encompass known elements of value, but which rather applies only to the speculative elements of value arising from such accomplishment or expectation. In *Weinberger*, the Delaware Supreme Court also stated that elements of future value, including the nature of the enterprise, which are known or susceptible of proof as of the date of the merger and not the product of speculation, may be considered.

Stockholders considering seeking appraisal should be aware that the fair value of their shares as so determined could be more than, the same as or less than the merger consideration they would receive pursuant to the merger if they did not seek appraisal of their shares and that an investment banking opinion as to the fairness from a financial point of view of the consideration to be received in a merger is not necessarily an opinion as to fair value under Section 262. Although we believe that the merger consideration is fair, no representation is made as to the outcome of the appraisal of fair value as determined by the Delaware Court of Chancery, and stockholders should recognize that such an appraisal could result in a determination of a value higher or lower than, or the same as, the merger consideration. Neither Thoratec nor HeartWare anticipate offering more than the applicable merger consideration to any holder of common stock of HeartWare exercising appraisal rights, and Thoratec and HeartWare reserve the right to assert, in any appraisal proceeding, that for purposes of Section 262, the fair value of a share of HeartWare common stock is less than the merger consideration. The Delaware courts have stated that the methods which are generally considered acceptable in the financial community and otherwise admissible in court may be considered in the appraisal proceedings. In addition, the Delaware courts have decided that the statutory appraisal remedy, depending on factual circumstances, may or may not be a dissenting stockholder's exclusive remedy. The costs of the action may be determined by the court and taxed upon the parties as the court deems equitable under the circumstances. However,

costs do not include attorneys' and expert witness fees. Each dissenting stockholder is responsible for his or her attorneys' and expert witness expenses, although upon application of a dissenting stockholder or the surviving corporation, the Delaware Court of Chancery may also order that all or a portion of the

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expenses incurred by a stockholder in connection with an appraisal, including, without limitation, reasonable attorneys fees and the fees and expenses of experts utilized in the appraisal proceeding, be charged pro rata against the value of all the shares entitled to be appraised.

Any holder of shares of HeartWare common stock who has duly demanded an appraisal in compliance with Section 262 will not, after the effective date of the merger, be entitled to vote the shares subject to the demand for any purpose or be entitled to the payment of dividends or other distributions on those shares (except dividends or other distributions payable to holders of record of HeartWare common stock as of a record date prior to the effective time of the merger).

If any stockholder who demands appraisal of shares of HeartWare common stock under Section 262 fails to perfect, successfully withdraws or loses such holder's right to appraisal, then as of the later of the occurrence of such event or the effective date of the merger, the stockholder's shares of HeartWare common stock will be deemed to have been converted at the effective time of the merger into and represent solely the right to receive the merger consideration, without interest, pursuant to the merger agreement. A stockholder will fail to perfect, or effectively lose, the holder's right to appraisal if no petition for appraisal is filed within one hundred and twenty (120) days after the effective date of the merger. In addition, as indicated above, a stockholder may withdraw his, her or its demand for appraisal in accordance with Section 262 and accept the merger consideration offered pursuant to the merger agreement.

Failure to comply with all of the procedures set forth in Section 262 will result in the loss of a stockholder's statutory dissenters' rights. Consequently, any stockholder wishing to exercise dissenters' rights is urged to consult legal counsel before attempting to exercise those rights.

Holders of HeartWare CDIs are not entitled to exercise dissenters' rights in connection with the merger. Holders of HeartWare CDIs must have converted their HeartWare CDIs into shares of HeartWare common stock prior to the record date for the HeartWare special meeting in order to have dissenters' rights in connection with the merger.

THE MERGER AGREEMENT

This section of the proxy/statement prospectus describes the material provisions of the merger agreement but does not purport to describe all of the terms of the merger agreement. The following summary is qualified in its entirety by reference to the complete text of the merger agreement, which is attached as Annex A to this proxy statement/prospectus. We urge you to read the full text of the merger agreement because it is the legal document that governs the mergers. The merger agreement and the discussion under the heading "The Merger Agreement" have been included to provide you with information regarding the terms of the merger agreement. They are not intended to provide any other factual information about HeartWare and Thoratec. That information can be found elsewhere in this proxy statement/prospectus and in the other public filings made by HeartWare or Thoratec with the SEC, which are available without charge. See "Where You Can Find More Information" beginning on page 124.

The merger agreement contains representations and warranties the parties made to each other as of specific dates. The assertions embodied in those representations and warranties were made solely for purposes of the contract between HeartWare and Thoratec and may be subject to important qualifications and limitations agreed to by HeartWare and Thoratec in connection with negotiating its terms. Moreover, certain representations and warranties may not be accurate or complete as of any specified date because they are subject to a contractual standard of materiality different from those generally applicable to stockholders or were used for the purpose of allocating risk between HeartWare and Thoratec rather than establishing matters as facts. For the foregoing reasons, you should not rely on the representations and warranties as statements of factual information.

The Mergers

Pursuant to the merger agreement, Merger Subsidiary will merge with and into HeartWare, with HeartWare surviving the merger as a wholly owned subsidiary of Thoratec, which we refer to as the intermediate surviving corporation. Provided that the value of the stock consideration is at least 41% of the aggregate merger consideration at closing, then immediately following the merger, HeartWare will merge with and into Merger Subsidiary Two with

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Merger Subsidiary Two surviving the second merger as a subsidiary of Thoratec, which we refer to as the surviving corporation.

Merger Consideration

At the effective time, each share of HeartWare common stock issued and outstanding immediately prior to the effective time, including shares of common stock underlying HeartWare CDIs, will be automatically converted into the right to receive (i) \$14.30 in cash, without interest, and (ii) 0.6054 shares of common stock of Thoratec, other than:

shares held in the treasury of HeartWare or owned by Thoratec, Merger Subsidiary or Merger Subsidiary Two, which shares will be cancelled; and

shares held by holders who have properly demanded and perfected their dissenters' rights.

Thoratec will not issue any fractional shares of Thoratec common stock in the merger. Instead, a HeartWare stockholder who otherwise would have received a fraction of a share of Thoratec common stock will receive an amount in cash, without interest, in lieu thereof equal to such holder's proportionate interest in the net proceeds from the sale or sales by the exchange agent on behalf of such holder of the aggregate fractional shares of Thoratec common stock that such holder otherwise would be entitled to receive. As soon as practicable after the exchange agent determines the amount of cash to be paid to former HeartWare stockholders (and, to the extent applicable, holders of HeartWare CDIs) in respect of any fractional shares of Thoratec common stock, the exchange agent will distribute such amounts to such former holders in cash rounded to the nearest cent.

In addition, if the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date of the merger is less than or equal to \$18.38 per share, or 70% of \$26.25, the Thoratec per share price used to determine the merger consideration, then HeartWare will have an option to terminate the merger agreement unless within two (2) business days following receipt of HeartWare's written notice of its election to terminate the merger agreement, Thoratec elects to increase the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 70% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If that same volume weighted average price is greater than or equal to \$34.13 per share, or 130% of \$26.25, then Thoratec may reduce the number of shares of Thoratec common stock payable in the merger such that the value of the stock portion of the merger consideration at closing is equal to 130% of the value of the aggregate Thoratec stock consideration payable in the merger (calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration).

If Thoratec, following HeartWare's exercise of its option to terminate the merger agreement, then elects to increase the number of shares of Thoratec common stock payable in the merger to the degree that such increase would require Thoratec to issue more than 19.9% of the already outstanding shares of Thoratec common stock, and would therefore, require the approval of Thoratec's shareholders under The NASDAQ Stock Market Marketplace Rule 5635 (formerly The NASDAQ Market Marketplace Rule 4350), the number of shares payable in the merger will instead be increased to equal the maximum number of shares that may be issued without requiring the approval of Thoratec's shareholders and the additional consideration due to HeartWare stockholders resulting from Thoratec's exercise of its election to increase the stock portion of the merger consideration would be paid in cash in an amount equal to the product of (i) the number of shares above such 19.9% that would have otherwise been issued as merger consideration and (ii) the volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market

for the twenty (20) consecutive trading days ending on and including the fifth (5th) trading day prior to, but not including, the closing date of the merger.

Set forth below is a table illustrating the value of the merger consideration that would be payable, at the effective time of the merger, to holders of HeartWare common stock issued and outstanding immediately prior to the effective time of the merger, including shares of common stock underlying HeartWare CDIs, based on a range of values of Thoratec common stock reflecting a hypothetical volume weighted average of the per share closing prices of Thoratec common stock on The NASDAQ Stock Market for the twenty (20) consecutive trading days ending on

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and including the fifth (5th) trading day prior to, but not including, the closing date of the merger, or the volume weighted average price. The hypothetical consideration amounts provided in the table below include the aggregate value of the cash and stock consideration that would be payable to holders of HeartWare common stock issued and outstanding immediately prior to the effective time of the merger, based on each hypothetical value.

With the exception of the consideration payable to HeartWare stockholders in the event that the volume weighted average price equals \$8.79 or less, the range of consideration payable in the merger shown in the table below reflects fluctuations in the value of the aggregate stock consideration; the value of the per share cash consideration payable in the merger does not vary from \$14.30 per share of HeartWare common stock. If the volume weighted average price is equal to or less than \$8.79 (subject to adjustments depending on the number of shares of Thoratec common stock reserved for issuance to holders of unvested and outstanding HeartWare incentive options pursuant to the merger agreement as described below under the heading *Treatment of Options and Other Equity-Based Awards*), the aggregate amount of stock consideration payable in the merger will be fixed at 19.9% of the then outstanding shares of Thoratec common stock, the maximum number of shares that may be issued by Thoratec without requiring the approval of Thoratec's shareholders under The NASDAQ Stock Market Marketplace Rule 5635 (formerly The NASDAQ Stock Market Marketplace Rule 4350) and any additional consideration due to HeartWare stockholders will be paid solely in cash in lieu of issuance of shares of Thoratec common stock.

The following table is provided for illustrative purposes only. The actual prices at which shares of Thoratec common stock trade during the twenty (20) consecutive trading day measurement period will determine the actual volume weighted average price and the value of the consideration payable in the merger as of the effective time of the merger. The actual volume weighted average price will not be determinable until five (5) trading days prior to the closing date of the merger. All dollar amounts set forth in the table below have been calculated in U.S. dollars, and as a result, fluctuations in exchange rates between the U.S. dollar and the Australian dollar may materially and adversely affect the value, in Australian dollars, of the cash and Thoratec common stock received by Australian holders of HeartWare common stock or HeartWare CDIs in the merger.

Hypothetical volume weighted average price of Thoratec common stock	Value of the consideration to be paid to HeartWare stockholders(1)		Additional consideration to be paid to HeartWare stockholders following Thoratec's exercise of election to increase stock consideration(2)		Total consideration		Percentage of outstanding common shares of Thoratec held by former HeartWare stockholders
	Aggregate	Per share	Aggregate	Per share	Aggregate	Per share	
\$ 8.79(3)	\$ 173,977,691.83	\$ 19.62	\$ 51,451,334.83	\$ 5.80	\$ 225,429,026.66	\$ 25.42	19.90%
\$ 18.37(4)	\$ 225,402,187.15	\$ 25.42	\$ 26,839.51	\$ 0.00	\$ 225,429,026.66	\$ 25.42	9.52%
\$ 20.40(5)	\$ 236,299,026.97	\$ 26.65	N/A	N/A	\$ 236,299,026.97	\$ 26.65	9.51%
\$ 24.77(6)	\$ 259,756,756.05	\$ 29.30	N/A	N/A	\$ 259,756,756.05	\$ 29.30	9.51%
\$ 25.39(7)	\$ 263,084,854.91	\$ 29.67	N/A	N/A	\$ 263,084,854.91	\$ 29.67	9.51%
\$ 30.38(8)	\$ 289,870,682.85	\$ 32.69	N/A	N/A	\$ 289,870,682.85	\$ 32.69	9.51%
\$ 34.13(9)	\$ 309,973,473.56	\$ 34.96	N/A	N/A	\$ 309,973,473.56	\$ 34.96	9.51%

- (1) Amounts in this column reflect the cash and stock portions of the merger consideration, but do not reflect amounts to be paid to HeartWare stockholders if, following HeartWare's election to terminate the merger agreement, Thoratec exercises its right to increase the stock consideration payable in the merger. As of February 12, 2009, the date of execution of the merger agreement, the value of the aggregate merger consideration payable by Thoratec in the merger was \$30.19 per share of HeartWare common stock.
- (2) If the volume weighted average price is less than or equal to \$18.38 per share, or 70% of \$26.25 (the price per share of Thoratec common stock used to determine the stock portion of the merger consideration), HeartWare will have the right to terminate the merger agreement unless, within two (2) business days following receipt of HeartWare's written notice of its election to terminate the merger agreement, Thoratec elects to increase the number of shares of Thoratec common stock payable in the merger such that the per share value of Thoratec common stock payable in the merger, at the effective time, is equal to \$18.38 (70% of \$26.25, the price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If HeartWare does not elect to terminate the merger agreement (and thus Thoratec does not increase the number of shares of Thoratec common stock payable in the merger), HeartWare stockholders will receive, for each share of

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HeartWare common stock, including shares of HeartWare common stock represented by HeartWare CDIs, \$14.30 in cash and 0.6054 of a share of Thoratec common stock (which may reflect a value per share of Thoratec common stock, as of the effective time of the merger, of less than \$18.38). If HeartWare elects to terminate the merger agreement and Thoratec does not elect to increase the number of shares of Thoratec common stock payable in the merger, the merger agreement will be terminated and no merger consideration will be paid to HeartWare stockholders.

- (3) If the volume weighted average price is equal to or less than \$8.79 (subject to adjustments depending on the number of shares of Thoratec common stock reserved for issuance to holders of unvested and outstanding HeartWare incentive options pursuant to the merger agreement as described below under the heading *Treatment of Options and Other Equity-Based Awards*), the aggregate amount of stock consideration payable in the merger will be fixed at 19.9% of the already outstanding shares of Thoratec common stock and any additional consideration due to HeartWare stockholders will be paid solely in cash in lieu of the issuance of shares of Thoratec common stock, with such cash consideration calculated using the volume weighted average price of shares of Thoratec common stock otherwise issuable in the merger.
- (4) One cent less than \$18.38, which is 70% of \$26.25, the price per share of Thoratec common stock used to determine the stock portion of the merger consideration and the highest volume weighted average price that gives HeartWare the right to terminate the merger agreement, and following the exercise by HeartWare of this right, Thoratec the opportunity to elect to increase the stock consideration. Although HeartWare may terminate the merger agreement if the volume weighted average price is equal to \$18.38, the exercise by Thoratec of its election to increase shares pursuant to the terms of the merger agreement at such a volume weighted average price would not result in additional consideration to be paid to HeartWare shareholders; \$18.37 is the highest volume weighted average price at which Thoratec's election to increase the stock consideration will result in additional consideration to be paid to HeartWare stockholders. If HeartWare does not elect to terminate the merger agreement (and thus Thoratec does not increase the number of shares of Thoratec common stock payable in the merger), HeartWare stockholders will receive, for each share of HeartWare common stock, including shares of HeartWare common stock represented by HeartWare CDIs, \$14.30 in cash and 0.6054 of a share of Thoratec common stock (which may reflect a value per share of Thoratec common stock, as of the effective time of the merger, of less than \$18.38). If HeartWare elects to terminate the merger agreement, and Thoratec does not elect to increase the number of shares of Thoratec common stock payable in the merger, the merger agreement will be terminated and no merger consideration will be paid to HeartWare stockholders.
- (5) The low closing price per share of Thoratec's common stock, as reported by The NASDAQ Global Select Market for the period from February 12, 2009 (the date of execution of the merger agreement) to June 5, 2009.
- (6) The closing price per share of Thoratec common stock, as reported by The NASDAQ Global Select Market, on June 5, 2009.
- (7) The average of the high and low closing price per share of Thoratec's common stock, as reported by The NASDAQ Global Select Market for the period from February 12, 2009 (the date of execution of the merger agreement) to June 5, 2009.
- (8) The high closing price per share of Thoratec's common stock, as reported by The NASDAQ Global Select Market for the period from February 12, 2009 (the date of execution of the merger agreement) to June 5, 2009.
- (9) 130% of \$26.25, the price per share of Thoratec common stock used to determine the stock portion of the merger consideration. If the volume weighted average price is above \$34.13, Thoratec may elect to reduce the number of shares of Thoratec common stock payable in the merger such that the value per share of Thoratec common stock

payable in the merger is equal to \$34.13 (130% of the value of the aggregate Thoratec stock consideration payable in the merger, calculated using the \$26.25 price per share of Thoratec common stock used to determine the stock portion of the merger consideration). If the volume weighted average price is above \$34.13 and Thoratec elects to reduce the number of shares of Thoratec common stock such that the value per share of Thoratec common stock payable in the merger is equal to \$34.13, the aggregate number of shares of Thoratec common stock issued as merger consideration will decrease as the volume weighted average price increases such that the total consideration payable to HeartWare shareholders will remain the same as the total consideration displayed in the table for the volume weighted average price of \$34.13.

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The calculations presented in the table set forth above assume 8,866,702 outstanding shares of HeartWare common stock, 56,417,263 outstanding shares of Thoratec common stock, the number of outstanding shares of each of HeartWare and Thoratec as of February 11, 2009 and solely for purposes of calculating the maximum number of shares that may be issued by Thoratec without requiring the approval of Thoratec's shareholders under The NASDAQ Stock Market Marketplace Rule 5635 (previously The NASDAQ Stock Market Marketplace Rule 4350) at the volume weighted average price of \$8.79, 20,000 shares of Thoratec common stock reserved for issuance to holders of unvested and outstanding HeartWare incentive options pursuant to the merger agreement as described below under the heading *Treatment of Options and Other Equity-Based Awards*. The calculations presented in the table set forth above do not reflect amounts payable to holders of HeartWare restricted stock, options or other equity-based awards at the effective time of the merger described under the heading *Treatment of Options and Other Equity-Based Awards* below.

If the number of shares of HeartWare or Thoratec capital stock outstanding changes before the merger is completed for any reason, including by reason of any reclassification, recapitalization, stock split or combination, exchange or readjustment of shares or any stock dividend thereon with a record date during such period, but excluding any change that results from any exercise of HeartWare stock awards as described below, then appropriate adjustments to amounts payable in the merger will be made to account for such change.

Treatment of Options and Other Equity-Based Awards

The terms of the unvested and outstanding HeartWare incentive options will be adjusted to provide that, at the effective time of the merger, each unvested and outstanding HeartWare incentive option will be converted into an option to acquire, on the same terms and conditions as were applicable under such HeartWare incentive option, a number of shares of Thoratec common stock equal to the product of (i) the number of shares of HeartWare common stock represented by such HeartWare incentive option and (ii) 1.1499 rounded down, to the nearest whole share of Thoratec common stock and such new option to acquire Thoratec common stock will have an exercise price equal to (x) the per share exercise price specified in such unvested HeartWare incentive option divided by (y) 1.1499. The 1.1499 exchange ratio for each outstanding unvested HeartWare incentive option is subject to the same volume weighted average price adjustments to the stock portion of the merger consideration described in the section entitled, *Merger Consideration* above. Any exercise price for a converted HeartWare incentive option that is measured in Australian dollars will be deemed to be converted to U.S. dollars at an exchange rate of 1.5265 Australian dollars for each U.S. dollar.

The terms of each outstanding vested HeartWare incentive option and each outstanding option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan, will be adjusted to provide that, at or immediately prior to the effective time of the merger, each vested HeartWare incentive option and each HeartWare employee stock option, whether or not exercisable or vested, that is outstanding immediately prior to the effective time of the merger will be cancelled and will convert into the right to receive a cash payment, without interest, equal to (i) the excess, if any, of \$30.19 over the applicable exercise price per share of HeartWare common stock of such cancelled option multiplied by (ii) the number of shares of HeartWare common stock such holder would have purchased (assuming full vesting of each outstanding option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan) had such holder exercised such cancelled option in full immediately prior to the effective time. Any exercise price for an option to purchase shares of HeartWare common stock issued under the HeartWare employee stock option plan that is measured in Australian dollars will convert to U.S. dollars at an exchange rate of 1.5265 Australian dollars for each U.S. dollar.

The terms of each HeartWare stock-based award will be adjusted as necessary to provide that at, or immediately prior to, the effective time, each such HeartWare stock-based award, whether or not exercisable or vested, that is

outstanding immediately prior to the effective time, will be cancelled and will convert into the right to receive a cash payment, without interest, equal to \$30.19 multiplied by the number of shares of HeartWare common stock the holder of such HeartWare stock-based award would have received had such HeartWare stock-based award been fully earned, vested and exercisable and had been exercised or settled immediately prior to the effective time.

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HeartWare will take any necessary action to ensure that, as of the effective time of the merger, the HeartWare International, Inc. 2008 Stock Incentive Plan, HeartWare International, Inc. Incentive Option Terms: Non-Executive Directors, HeartWare employee stock option plan, the HeartWare International, Inc. Restricted Stock Unit Plan and each other employee, director or consultant stock option, stock purchase or equity compensation plan, arrangement or agreement of HeartWare will terminate.

Exchange of Certificates

Prior to the effective time of the merger, Thoratec will appoint an exchange agent for the payment of merger consideration. At the effective time of the merger, Thoratec will deposit with the exchange agent certificates or, at Thoratec's option, evidence of shares in book-entry form, representing shares of Thoratec stock and cash in an amount sufficient to pay the aggregate merger consideration. In addition, Thoratec will deposit with the exchange agent, as necessary from time to time after the effective time of the merger, any dividends or distributions with respect to shares of Thoratec stock constituting part of the merger consideration.

Surrender of Certificates

Promptly following the effective time of the merger, Thoratec has agreed to send HeartWare stockholders a letter of transmittal and instructions advising HeartWare stockholders how to surrender certificates in exchange for the merger consideration. The exchange agent will pay HeartWare stockholders their merger consideration after HeartWare stockholders have (i) surrendered their certificates to the exchange agent, or in the case of book-entry shares, followed the applicable procedures set forth in the letter of transmittal, and (ii) provided to the exchange agent a duly signed and completed letter of transmittal and any other items specified by the letter of transmittal. Interest will not be paid or accrue in respect of the merger consideration. The shares of Thoratec stock constituting part of the merger consideration, at Thoratec's option, will be in uncertificated book-entry form, unless a physical certificate is requested by a HeartWare stockholder or otherwise required by applicable law.

Stock Transfer Books and Share Transfers

After the effective time of the merger, there will be no further transfers on the stock transfer books of HeartWare. If certificates are presented to the exchange agent or the intermediate surviving corporation or the surviving corporation for transfer, or transfer is sought for book-entry shares, such certificates or book-entry shares will be cancelled and exchanged as set forth under this heading *The Merger Agreement Exchange of Certificates*.

Investment and Return of Exchange Fund

The exchange agent will invest the cash portion of the merger consideration deposited with the exchange agent as directed by Thoratec on a daily basis from time to time. Any interest or other income resulting from such investments will be paid to Thoratec. In the event such cash is insufficient to fully satisfy all of the payment obligations to be made by the exchange agent, Thoratec will promptly deposit cash with the exchange agent in an amount that is equal to the deficiency in the amount of cash required to fully satisfy such payment obligations.

Any shares of Thoratec common stock, cash dividends and other distributions deposited with the exchange agent (and any interest or other income earned thereon) that remains undistributed to the holders of certificates or book-entry shares six (6) months after the effective time of the merger will be delivered to Thoratec upon demand, and any HeartWare stockholders who have not complied with the exchange procedure will thereafter look only to Thoratec for payment of the merger consideration.

Lost Certificates

If a certificate for HeartWare common stock has been lost, stolen or destroyed, the exchange agent will issue the consideration payable under the merger agreement upon receipt of an affidavit from the applicable HeartWare stockholder of that fact and, if required by the exchange agent or Thoratec, the posting of a bond in an amount as the exchange agent or Thoratec reasonably directs as indemnity against any claim that may be made with respect to such certificate by the applicable HeartWare stockholder.

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Dividends on Thoratec Common Stock

No dividends or other distributions with respect to shares of Thoratec common stock constituting part of the merger consideration, and no cash payment in lieu of fractional shares, will be paid to the holder of any certificates not surrendered or of any book-entry shares not transferred until such certificates or book-entry shares are surrendered or transferred in accordance with the exchange procedures.

Withholding

Thoratec, Merger Subsidiary, Merger Subsidiary Two, the surviving corporations and the exchange agent will be entitled to deduct and withhold from the consideration otherwise payable to any holder of shares of HeartWare stock, stock awards or otherwise pursuant to the merger agreement such amounts as may be required to be deducted and withheld with respect to the making of such payment under any federal, state, local or foreign tax law.

The Surviving Corporations

The Certificate of Incorporation of HeartWare will be amended and restated as of the effective time of the merger, and, as so amended, will be the Certificate of Incorporation of the intermediate surviving corporation, as set forth on Exhibit A to the merger agreement, a copy of which has been attached as Annex A to this proxy statement/prospectus. Following the merger, if the value of the stock consideration is at least 41% of the aggregate merger consideration at closing, the Certificate of Incorporation of Merger Subsidiary Two shall be amended and restated and, as so amended, shall be the Certificate of Incorporation of the surviving corporation. The bylaws of the intermediate surviving corporation shall be amended and restated as of the effective time of the merger to be identical to the bylaws of Merger Subsidiary as in effect immediately prior to the effective time of the merger. If the value of the stock consideration is at least 41% of the aggregate merger consideration at the effective time of the merger, the bylaws of the surviving corporation shall be amended and restated to be identical to the bylaws of the intermediate surviving corporation.

After the effective time of the merger, until successors are duly elected or appointed, the directors of Merger Subsidiary shall be the directors of the intermediate surviving corporation and the officers of Merger Subsidiary shall be the officers of the intermediate surviving corporation. If the value of the stock consideration is at least 41% of the aggregate merger consideration at the effective time of the merger, after the second merger effective time, until successors are duly elected or appointed and qualified, the directors of the intermediate surviving corporation shall be the directors of the surviving corporation and the officers of the intermediate surviving corporation shall be the officers of the surviving corporation.

Representations and Warranties

The merger agreement contains representations and warranties made by HeartWare to Thoratec and representations and warranties made by Thoratec to HeartWare. The assertions embodied in those representations and warranties were made solely for purposes of the merger agreement and may be subject to important qualifications and limitations agreed by the parties in connection with negotiating its terms. Moreover, some of those representations and warranties may not be accurate or complete as of any particular date because they are subject to a contractual standard of materiality or material adverse effect different from that generally applicable to public disclosures to stockholders or used for the purpose of allocating risk between the parties to the merger agreement rather than establishing matters of fact. For the foregoing reasons, you should not rely on the representations and warranties contained in the merger agreement as statements of factual information. None of the representations and warranties of the parties to the merger agreement will survive the effective time of the merger.

In the merger agreement, HeartWare made representations and warranties relating to, among other things:

corporate existence and authorization to enter into and perform its obligations under, and enforceability of, the merger agreement;

required regulatory filings and consents and approvals of governmental entities;

the absence of conflicts with or defaults under organizational documents, other contracts and applicable laws and judgments;

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capitalization of HeartWare;

corporate existence and authorization of subsidiaries to enter into and perform its obligations under, and enforceability of, the merger agreement;

documents filed with the SEC and ASX and the accuracy of information contained in those documents, and compliance with the requirements of the Sarbanes-Oxley Act of 2002, as amended, which we refer to as the Sarbanes-Oxley Act and other matters relating to the internal controls of HeartWare;

accuracy of financial statements;

absence of undisclosed liabilities;

accuracy of information included in this document and other similar documents;

absence of certain changes since December 31, 2007;

compliance with applicable laws and possession of and compliance with permits, including certain regulations of the FDA and similar laws;

absence of pending or threatened litigation;

material contracts;

tax matters;

employee matters, including employee benefit plans and compliance with the Employee Retirement Income Securities Act of 1974, as amended;

intellectual property owned or licensed;

compliance with environmental laws;

absence of product liability claims;

insurance policies;

title to and sufficiency of assets;

absence of any unlawful contributions, gifts, payments or expenses;

affiliate transactions;

engagement and payment of fees of brokers, finders and investment bankers;

receipt of the fairness opinion of the financial advisor; and

inapplicability of anti-takeover statutes and absence of a rights plan.

Thoratec also made representations and warranties relating to, among other things:

corporate existence and authorization to enter into and perform its obligations under, and enforceability of, the merger agreement;

required regulatory filings and consents and approvals of governmental entities;

absence of conflicts with or defaults under organizational documents, other contracts and applicable laws and judgments;

capitalization of Thoratec;

documents filed with the SEC and the accuracy of information contained in those documents, and compliance with the requirements of the Sarbanes-Oxley Act and other matters relating to the internal controls of Thoratec;

accuracy of financial statements;

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accuracy of information included in this document and other similar documents;

compliance with applicable laws and possession of and compliance with permits, including certain regulations of the FDA and similar laws;

the absence of pending or threatened litigation;

engagement and payment of fees of brokers, finders and investment bankers;

Merger Subsidiary and Merger Subsidiary Two formation for sole purpose of facilitation of mergers;

tax treatment of mergers;

capital resources necessary to complete mergers; and

non-constitution of a United States real property holding corporation under Section 897(c)(2) of the Internal Revenue Code during the applicable period described in Internal Revenue Code Section 897(c)(1)(A)(ii).

Many of HeartWare's and Thoratec's representations and warranties are qualified by a material adverse effect standard. For purposes of the merger agreement, material adverse effect for HeartWare is defined to mean any event, change or occurrence which, individually or together with any one or more other events, changes or occurrences (A) has had, or is reasonably likely to have, a material adverse effect upon the business, assets, liabilities, condition (financial or otherwise) or operating results of HeartWare and its subsidiaries taken as a whole; *provided*, that in no event shall any of the following events, changes or occurrences constitute a HeartWare material adverse effect or be considered in determining whether a HeartWare material adverse effect has occurred or is reasonably likely to occur: (i) changes in general economic, securities market or business conditions except to the extent that such changes have a materially disproportionate effect (relative to other industry participants) on HeartWare and its subsidiaries, taken as a whole, (ii) changes in conditions generally affecting the industry in which HeartWare and its subsidiaries operate, except to the extent that such changes have a materially disproportionate effect (relative to other industry participants that are development stage companies at a similar stage of development as HeartWare and its subsidiaries) on HeartWare and its subsidiaries, taken as a whole, (iii) any change in the trading price or trading volume of HeartWare common stock or HeartWare CDIs in and of itself or any failure to meet internal or published projections or forecasts for any period in and of itself (in each case, as distinguished from any event, change or occurrence giving rise or contributing to such change or failure), (iv) changes in GAAP, or applicable laws or (v) changes resulting from the announcement or the existence of, or that result from the compliance by HeartWare with its obligations under, the merger agreement, or (B) would prevent HeartWare from consummating, or materially delay, the merger.

Material adverse effect for Thoratec is defined to mean any event, change or occurrence which, individually or together with any one or more other events, changes or occurrences (A) has had, or is reasonably likely to have, a material adverse effect upon the business, assets, liabilities, condition (financial or otherwise) or operating results of Thoratec and its subsidiaries taken as a whole; *provided*, that in no event shall any of the following events, changes or occurrences constitute a Thoratec material adverse effect or be considered in determining whether a Thoratec material adverse effect has occurred or is reasonably likely to occur: (i) changes in general economic, securities market or business conditions except to the extent that such changes have a materially disproportionate effect (relative to other industry participants) on Thoratec and its subsidiaries, taken as a whole, (ii) changes in conditions generally affecting the industry in which Thoratec and its subsidiaries operate, except to the extent that such changes have a materially disproportionate effect (relative to other industry participants that are at a similar stage of development as Thoratec and its subsidiaries) on Thoratec and its subsidiaries, taken as a whole, (iii) any change in the trading price or trading

volume of Thoratec common stock in and of itself or any failure to meet internal or published projections or forecasts for any period in and of itself (in each case, as distinguished from any event, change or occurrence giving rise or contributing to such change or failure), (iv) changes in GAAP or applicable laws or (v) changes resulting from the announcement or the existence of, or that result from the compliance by Thoratec with its obligations under, the merger agreement or (B) would prevent Thoratec, Merger Subsidiary or Merger Subsidiary Two from consummating, or materially delay, the merger.

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Conduct of Business of HeartWare

HeartWare has agreed that until the effective time of the merger, except as expressly consented to in writing by Thoratec, HeartWare will and will cause each of its subsidiaries to conduct its business in the ordinary course in a manner consistent with past practice and to use its commercially reasonable efforts to preserve intact its present business organization, maintain in effect all material permits, keep available the services of its current officers and key employees and maintain satisfactory relationships with its customers, suppliers and others having material business relationships with it.

HeartWare has also agreed that, until the effective time of the merger, except as expressly contemplated or permitted by the merger agreement or consented to in writing by Thoratec (which consent Thoratec will not, acting from Thoratec's own point of view, unreasonably withhold or delay), HeartWare will not, and will not permit any of its subsidiaries to:

amend any organizational or governing documents;

split, combine or reclassify any shares of its capital stock or declare or pay any dividend or other distribution in respect of its capital stock (except for dividends paid by any of its wholly owned subsidiaries to HeartWare, or to any other wholly owned subsidiary), or redeem, repurchase or otherwise acquire, any of its securities;

issue or sell any securities of HeartWare or any of its subsidiaries, other than upon the vesting and/or exercise of stock awards that were outstanding on February 12, 2009 in accordance with their terms;

amend any security of HeartWare or any of its subsidiaries;

acquire or make any loans, advances or capital contributions to, or investments in, any equity interests or equity securities in any person or any assets, loans or debt securities thereof other than in wholly owned subsidiaries of HeartWare or in the ordinary course of business consistent with past practice;

sell or lease or incur any lien on, any business organization or division thereof or any assets or securities, other than sales or dispositions of inventory and other assets in the ordinary course of business or pursuant to existing contracts;

abandon, fail to maintain or allow to expire (other than in the ordinary course of business), or sell or exclusively license to any person, any material company intellectual property;

authorize any material new capital expenditures, in the aggregate, in excess of 110% of the capital expenditures set forth in the capital expenditure and loan proceeds budget provided to Thoratec;

use any of the proceeds from loans drawn under the loan agreement other than in accordance with the loan agreement;

adopt or enter into a plan of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other reorganization of HeartWare or any of its subsidiaries (other than the merger or among wholly owned subsidiaries);

create, incur, assume, suffer to exist or otherwise be liable with respect to any indebtedness, or issue any debt securities or assume, guarantee or endorse, or otherwise as an accommodation become responsible for, the

indebtedness of any other person, other than, in each case, as permitted under the loan documents (see *The Loan Agreement Representations and Warranties* beginning on page 101);

renew or enter into any contract or other arrangement that limits or otherwise restricts in any material respect HeartWare, any of its subsidiaries or any of their respective affiliates or any successor thereto from engaging or competing in any line of business, in any location or with any person;

enter into any new line of business outside of its existing business segments;

enter into or, except as in the ordinary course of business consistent with past practice, amend or modify in any material respect or terminate any material contract or otherwise waive, release or assign any material rights, claims or benefits of HeartWare or any of its subsidiaries;

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enter into any exclusive license, distribution, marketing or sales contracts or grant most favored nation or similar pricing to any person;

pay, discharge, settle or satisfy any material claims, liabilities or obligations to third parties, other than (i) performance of contractual obligations in accordance with their terms, (ii) in the ordinary course of business or (iii) in accordance with their terms, of claims, liabilities or obligations that have been (A) disclosed in the most recent financial statements of HeartWare or (B) incurred since the date of such financial statements of HeartWare in the ordinary course of business or in connection with the transactions contemplated by the merger agreement;

settle, or offer or propose to settle any material litigation, investigation, arbitration, proceeding or other claim involving or against HeartWare or any of its subsidiaries, or any material litigation, arbitration, proceeding or dispute that relates to the transactions contemplated by the merger agreement, or commence any material litigation, investigation, arbitration or proceeding against any third-party;

fail to keep in force insurance policies or replacement or revised provisions regarding insurance coverage with respect to the assets, products, operations and activities of HeartWare and its subsidiaries substantially equal to those currently in effect;