

THORATEC CORP
Form DEF 14A
April 22, 2005

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SCHEDULE 14A INFORMATION

**Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934
(Amendment No.____)**

Filed by the Registrant
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to § 240.14a-12

THORATEC CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1. Title of each class of securities to which transaction applies:

2. Aggregate number of securities to which transaction applies:

3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):

4. Proposed maximum aggregate value of transaction:

5. Total fee paid:

- o Fee paid previously with preliminary materials.
 - o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- 6.** Amount Previously Paid:
- 7.** Form, Schedule or Registration Statement No.:
- 8.** Filing Party:
- 9.** Date Filed:
-

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April 22, 2005

Dear Shareholder:

You are cordially invited to attend the Thoratec Corporation 2005 Annual Meeting of Shareholders to be held on Wednesday, May 25, 2005 at 9:00 a.m., Pacific Daylight Time, at our Company's headquarters located at 6035 Stoneridge Drive, Pleasanton, California 94588. Details regarding the meeting and the business to be conducted are more fully described in the accompanying Notice of Annual Meeting of Shareholders and Proxy Statement.

We hope you will be able to attend the Annual Meeting to listen to our report on the status of our business and performance during 2004 and our near-term plans, and to ask any questions you may have.

Your vote is very important. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. You may vote in person at the meeting or by sending in your written Proxy. Your vote by written Proxy will ensure your representation at the Annual Meeting if you cannot attend in person. Please review the instructions on the Proxy Card regarding your voting options.

Thank you for your on-going support and continued interest in Thoratec Corporation.

Very truly yours,

D. Keith Grossman
President and Chief Executive Officer

Corporate Headquarters

Thoratec Corporation 6035 Stoneridge Drive, Pleasanton, CA 94588
Tel 925-847-8600 Fax 925-847-8574 www.thoratec.com

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THORATEC CORPORATION

NOTICE OF 2005 ANNUAL MEETING OF SHAREHOLDERS

To Be Held on May 25, 2005

To the Shareholders of Thoratec Corporation

NOTICE IS HEREBY GIVEN, that the 2005 Annual Meeting of Shareholders of Thoratec Corporation, a California corporation (Thoratec or our Company), will be held on Wednesday, May 25, 2005 at 9:00 a.m., Pacific Daylight Time, at our Company s headquarters located at 6035 Stoneridge Drive, Pleasanton, California 94588 for the following purposes:

To elect eight directors to serve for the ensuing year and until their successors are elected;

To ratify the appointment of Deloitte & Touche LLP as independent auditors of the Company for its fiscal year ending December 31, 2005; and

To transact such other business as may properly come before the meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice. Only shareholders of record at the close of business on April 19, 2005 are entitled to notice of, to attend and to vote at the meeting and any adjournments thereof. All shareholders are cordially invited to attend the meeting in person. Any shareholder attending the meeting may vote in person even if such shareholder previously signed and returned a Proxy. If you own shares through a broker, and you wish to attend and vote in person at the meeting, you must obtain from your broker a Proxy issued in your name.

For the Board of Directors

David A. Lehman
Secretary

Pleasanton, California

April 22, 2005

IMPORTANT: WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING, PLEASE COMPLETE, DATE AND SIGN THE ENCLOSED PROXY AND MAIL IT PROMPTLY IN THE ENCLOSED POSTAGE PAID ENVELOPE.

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THORATEC CORPORATION
PROXY STATEMENT
FOR 2005 ANNUAL MEETING OF SHAREHOLDERS

The Board of Directors of Thoratec Corporation, a California corporation, (Thoratec or our Company), is furnishing this Proxy Statement to you in connection with our solicitation of Proxies to be used at our 2005 Annual Meeting of Shareholders to be held on Wednesday, May 25, 2005 at 9:00 a.m., Pacific Daylight Time, or at any adjournments or postponements thereof (the Annual Meeting), for the purposes set forth in this Proxy Statement and in the accompanying Notice of 2005 Annual Meeting of Shareholders. The Annual Meeting will be held at our Company s headquarters at 6035 Stoneridge Drive, Pleasanton, California 94588. The telephone number at that address is (925) 847-8600.

The date of this Proxy Statement is April 22, 2005 and it was mailed on or about April 26, 2005 to all shareholders entitled to vote at the Annual Meeting.

INFORMATION CONCERNING SOLICITATION AND VOTING

Record Date and Shares Outstanding

Shareholders of record at the close of business on April 19, 2005, referred to as the Record Date, are entitled to notice of, and to vote at, the Annual Meeting. As of the Record Date, 48,223,420 shares of our Company s common stock (Common Stock) were outstanding.

Revocability of Proxies

Any Proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by delivering to our Secretary a written notice of revocation or a duly executed Proxy bearing a later date or by attending the Annual Meeting and voting in person. Your presence at the Annual Meeting will not in and of itself revoke your Proxy appointment.

Voting

Every shareholder voting for the election of directors may exercise cumulative voting rights and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which the shareholder s shares are entitled or distribute such shareholder s votes on the same principle among as many candidates as the shareholder may select, provided that votes cannot be cast for more than eight candidates. However, no shareholder shall be entitled to cumulate votes unless the candidate s name has been placed in nomination prior to the voting and the shareholder, or any other shareholder, has given notice at the meeting prior to the voting of the intention to cumulate votes. On all other matters, each share is entitled to one vote on each proposal or item that properly comes before the Annual Meeting.

Methods of Voting

You may vote by mail, by telephone, over the Internet or in person at the meeting.

Voting by Mail. By signing and returning the proxy card in the enclosed prepaid and addressed envelope, you are authorizing individuals named on the proxy card (known as proxies) to vote your shares at the meeting in the manner you indicate. We encourage you to sign and return the proxy card even if you plan to attend the meeting. In this way, your shares will be voted if you are unable to attend the meeting. If you received more than one proxy card, it is an indication that your shares are held in multiple accounts. Please sign and return all proxy cards to ensure that all of your shares are voted.

Voting by Telephone. To vote by telephone, please follow the instructions included on your proxy card. If you vote by telephone, you do not need to complete and mail your proxy card. If you received the proxy

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materials over the Internet, please follow the voting instructions you will receive by e-mail on about April 26, 2005.

Voting over the Internet. To vote over the Internet, please follow the instructions included on your proxy card. If you vote over the Internet, you do not need to complete and mail your proxy card. If you received the proxy materials over the Internet, please follow the voting instructions you will receive by e-mail on our about April 26, 2005.

Voting in Person. If you plan to attend the meeting and vote in person, we will provide you with a ballot at the meeting. If your shares are registered directly in your name, that is, you hold a share certificate, you are considered the shareholder of record and you have the right to vote in person at the meeting. If your shares are held in the name of your broker or other nominee, you are considered the beneficial owner of shares held in street name. As a beneficial owner, if you wish to vote at the meeting, you will need to bring with you to the meeting a legal proxy from your broker or other nominee authorizing you to vote such shares. Contact your broker where the shares are held for assistance if this applies to you.

Quorum; Abstentions; Broker Non-Votes

The required quorum for the transaction of business at the Annual Meeting is a majority of the shares of Common Stock outstanding on the Record Date. Shares that are voted FOR, AGAINST or ABSTAIN from a matter are treated as being present at the meeting for purposes of establishing a quorum. These shares are also treated as votes eligible to be cast by the holders of Common Stock present in person or represented by Proxy at the Annual Meeting and entitled to vote on the subject matter, and are referred to as the Votes Cast, with respect to such matter.

While abstentions, which are votes ABSTAINED, will be counted for purposes of determining both the presence or absence of a quorum for the transaction of business and the total number of Votes Cast with respect to a particular matter, broker non-votes (i.e. shares held by a broker or nominee which are represented at the Annual Meeting, but with respect to which such broker or nominee is not empowered to vote on a particular proposal) with respect to proposals set forth in this Proxy Statement will not be considered Votes Cast and, accordingly, will not affect the determination as to whether the requisite majority of Votes Cast has been obtained with respect to a particular matter. Under the rules that govern brokers who are voting with respect to shares held in street name, brokers have the discretion, when they have not received instructions from beneficial owners, to vote such shares on routine matters, but not on non-routine matters. Routine matters include the election of directors and ratification of auditors.

Solicitation of Proxies

The cost of soliciting Proxies in connection with this Proxy Statement has been or will be borne by us. In addition to solicitation by mail, we may request that banks, brokers and other custodians, nominees and fiduciaries send Proxy Statements to the beneficial owners of Common Stock and secure their instructions as to consent. We may reimburse such banks, brokers and other custodians, nominees, fiduciaries and other persons representing beneficial owners of Common Stock for their expenses in forwarding solicitation material to such beneficial owners. Some of our directors, officers and other employees may, without additional compensation, solicit Proxies personally, or by telephone, facsimile or e-mail. We have also engaged Morrow & Co., Inc., an outside proxy solicitor, to assist us in soliciting Proxies in conjunction with the Annual Meeting. We estimate the cost of the outside proxy solicitation services will be \$4,000.

Householding of Annual Disclosure Documents

The Securities and Exchange Commission (the SEC) has approved a rule governing the delivery of annual disclosure documents. This rule allows us to send a single set of our Annual Report and Proxy Statement to any household at which two or more Thoratec shareholders reside if we believe that the shareholders are members of the same family. Some banks, brokers and other intermediaries may be participating in this practice of householding proxy statements and annual reports. This rule benefits both us and our shareholders. It reduces the volume of duplicate information received at your house and helps us

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reduce our expenses. Each shareholder, however, will continue to receive individual Proxy Cards or voting instruction forms.

If your household has previously received a single set of disclosure documents, but you would prefer to receive your own copy this year or in future years, you should contact your bank, broker or other nominee record holder. We can also deliver a separate copy of either our Annual Report or Proxy Statement to any shareholder upon either written request to Thoratec Corporation, 6035 Stoneridge Drive, Pleasanton, California 94588, Attention: Corporate Secretary, or upon oral request by calling (925) 847-8600. Similarly, if you share an address with another Thoratec shareholder and together both of you wish to receive only a single set of our annual disclosure documents, please follow the same instructions.

Deadline for Receipt of Shareholder Proposals

Pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the Exchange Act), proposals of our shareholders which are intended to be presented by such shareholders at our 2006 annual meeting of shareholders must be received by us no later than December 23, 2005 in order to be included in the proxy statement and form of proxy relating to that meeting. Shareholders who wish to submit a proposal or a nomination for director that is not to be included in the Company's proxy statement and form of proxy for the 2006 annual meeting must ensure that such proposal or nomination is delivered to, or mailed and received at the Company, not later than February 24, 2006, nor earlier than January 25, 2006. Shareholders are also advised to review the Company's By-Laws, which contain additional requirements with respect to advance notice of shareholder proposals and director nominations.

BOARD OF DIRECTORS STRUCTURE AND COMPENSATION

Structure and Committees

The current members of our Board of Directors (the Board) are J. Donald Hill, M.D., D. Keith Grossman, Howard E. Chase, J. Daniel Cole, Neil F. Dimick, William M Hitchcock, George W. Holbrook, Jr., and Daniel M. Mulvena. Dr. Hill serves as Chairman of the Board. The Board held a total of nine meetings during our 2004 fiscal year, which ended on January 1, 2005. The Board has an Audit Committee, a Compensation and Option Committee, an Executive Committee, and a Nominating and Corporate Governance Committee. Each director attended at least 75% of the aggregate number of meetings of the Board and the committees on which he served. While the Company encourages all members of the Board to attend the Annual Meetings of Shareholders, there is no formal policy as to their attendance at each of the annual meetings. All of the members of the Board attended the 2004 Annual Meeting of Shareholders.

The Board has determined that each of the current directors standing for re-election is an independent director, except for D. Keith Grossman, who serves as our President and Chief Executive Officer. The Board annually evaluates the independence of its members. A director will not qualify as independent unless the Board affirmatively determines that the director has no material relationship with the Company. In making its determination, the Board considers business and other applicable relationships in accordance with the director independence standards of the Nasdaq Stock Market, Inc. (NASDAQ), as currently in effect. The Board has also determined that all of the members of all of the Board's committees are independent of the Company under the director independence standards of the NASDAQ. In addition, our independent directors meet in regularly-scheduled executive sessions throughout the year.

Audit Committee

The Audit Committee of our Board reviews our auditing, accounting, financial reporting and internal control functions and selects our independent auditors. This committee operates under a written charter adopted by our Board. The Board amended and restated the Audit Committee Charter on February 25, 2005 to comply with the Sarbanes-Oxley Act, the revised rules of the SEC and the revised corporate governance listing standards of the NASDAQ. A copy of this amended and restated charter is included as Appendix A to

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this Proxy Statement. The members of this committee are Messrs. Cole, Dimick and Hitchcock, with Mr. Dimick serving as Chairman.

The Board has determined that at least one member of the Audit Committee, the committee Chairman, Neil Dimick, is an audit committee financial expert, as that term is defined under Section 407 of the Sarbanes-Oxley Act of 2002 and the rules promulgated by the SEC in furtherance of Section 407. As described above, Mr. Dimick is an independent director. Our Audit Committee met ten times during our 2004 fiscal year. The purpose of our Audit Committee includes:

Overseeing the accounting and financial reporting process of our Company;

Overseeing the audits of our financial statements;

Overseeing our relationship with our independent auditors; and

Overseeing our system of internal controls.

In discharging its duties, our Audit Committee, among its other duties:

Recommends to the Board the selection of the independent auditors and their compensation, evaluates the independent auditors and, where appropriate, recommends the replacement of the independent auditors;

Meets with management and the independent auditors to review and discuss the annual financial statements and the report of the independent auditors thereon and, to the extent the independent auditors or management brings any such matters to the attention of the Audit Committee, to discuss significant issues encountered in the course of the audit work, if any. Examples of such would include restrictions on the scope of activities or access to required information;

Meets quarterly with management and the independent auditors to review and discuss the quarterly financial statements;

Reviews significant changes to our Company's accounting principles and practices proposed by the independent auditors or management;

Meets with management and the independent auditors to review and discuss reports on the adequacy and effectiveness of our internal controls; and

Reviews and approves all related party transactions.

Compensation and Option Committee

Our Compensation and Option Committee met four times during our 2004 fiscal year. The members of this committee are Messrs. Holbrook and Mulvena and Dr. Hill, with Mr. Mulvena serving as Chairman. Our Compensation and Option Committee:

Reviews compensation and benefits for our employees generally and for our senior executives specifically and makes recommendations to the full Board; and

Has authority to grant stock options under our 1997 Stock Option Plan to employees and consultants.

Executive Committee

Our Executive Committee was formed in December 2004 and met three times during our 2004 fiscal year. The members of this committee are Messrs. Chase and Dimick and Dr. Hill, with Dr. Hill serving as Chairman. Our Executive Committee serves as a resource for the Board and the President and Chief Executive Officer with respect to strategic planning and major business issues of the Company.

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Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee met two times during our 2004 fiscal year. The members of this committee are Dr. Hill and Messrs. Chase and Cole, with Mr. Cole serving as Chairman. The purpose of the Corporate Governance and Nominating Committee is to:

Identify and approve individuals qualified to serve as members of the Board;

Select director nominees for the next annual meeting of shareholders;

Develop and recommend to the Board corporate governance guidelines; and

Provide oversight with respect to corporate governance and ethical conduct.

The Nominating and Corporate Governance Committee's written charter is available on the Company's website at www.thoratec.com.

Board Compensation

Directors who are employees of Thoratec do not receive additional compensation for serving on the Board or its committees. Directors who are not employees of Thoratec receive compensation for Board service. The arrangements as of the Annual Meeting are that all directors receive a \$20,000 annual retainer that is paid quarterly on a calendar basis. They also receive \$1,250 for each quarter where there are one or more Board meetings attended by the director. All Audit Committee and Executive Committee members receive \$1,250 for each quarter where one or more Audit Committee meetings or Executive Committee meetings, respectively, are attended by a committee member, and for all other committees, committee members receive \$500 for each quarter where one or more committee meetings are attended by a committee member. If the committee meeting exceeds four hours, the Chairman has the discretion to grant an additional fee. In addition to the director fees described above, the Chairman of the Board receives \$2,750 per quarter in which there are one or more Board meetings that he attends, the Chairman of each of the Audit Committee and the Executive Committee receives \$1,500 per quarter in which there are one or more Audit Committee or Executive Committee meetings, respectively, that he attends, and each other committee chairman receives \$1,000 per quarter in which there are one or more committee meetings that he attends. Outside directors are eligible to participate in our 1996 Nonemployee Directors Stock Option Plan (the "Directors Option Plan").

A total of 550,000 shares of Common Stock have been authorized for issuance under the Directors Option Plan. The Directors Option Plan provides for the automatic grant of nonqualified stock options to our directors who are not employees of our Company or any parent or subsidiary of our Company and who have not been an employee of our Company or any parent or subsidiary of our Company in the previous 12 months (the "Eligible Outside Directors"). Each person who is newly elected or appointed as an Eligible Outside Director will be granted an option to purchase 15,000 shares of Common Stock on the effective date of such initial election or appointment (the "Initial Grant"). Each Eligible Outside Director (including the existing outside directors) generally will be granted an option to purchase 7,500 shares of Common Stock in quarterly installments beginning on the date of the first meeting of the Board following the annual meeting of shareholders (the "Annual Grant"). In any event, both the Initial Grant and the Annual Grant will be made no later than August 31, November 30, February 28 or May 31 of the relevant year. As of April 1, 2005, options to purchase 334,582 shares were outstanding under the Directors Option Plan. We currently have seven Eligible Outside Directors who are eligible to participate in the Directors Option Plan. The exercise price of the options in all cases is equal to the fair market value of Common Stock on the grant date. Each option granted pursuant to the Directors Option Plan expires five years after the date of grant or earlier in the event of the termination of the director's service on the Board. Each option granted under the Directors Option Plan is exercisable immediately after the date of grant. The Board may waive any or all the directors' fees in any given year and have the exercise price of options granted under the Directors Option Plan reduced by the amount of the fees so waived.

For their services on the Board and committees of the Board provided during our 2004 fiscal year, Dr. Hill and Messrs. Chase, Cole, Dimick, Hitchcock, Holbrook, and Mulvena received compensation of

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\$34,000, \$27,750, \$33,000, \$31,000, \$30,000, \$26,500, and \$28,000, respectively. Each Eligible Outside Director was granted options to purchase 1,875 shares of Common Stock on February 26, 2004, May 20, 2004, August 19, 2004, and November 18, 2004 with an exercise price of \$12.80 per share, \$14.46 per share, \$10.00 per share and \$10.67 per share, respectively.

CODE OF ETHICS

We have adopted a code of ethics that applies to all of our directors, officers, and employees and which meets the requirements of Item 406 of Regulation S-K of the Exchange Act. Our code of ethics is available on our website at www.thoratec.com. Any amendments to the code of ethics will be posted on our website. The Board has the sole authority to approve any waiver from the Code of Ethics by any senior financial officers, other executive officers and directors. Any waiver for the Code of Ethics for these individuals will be disclosed promptly on Form 8-K or any other means approved by applicable SEC rules or listing standards.

DIRECTOR NOMINATIONS

Criteria for Nomination to the Board

The Corporate Governance and Nominating Committee considers the appropriate balance of experience, skills and personal characteristics required of Board members, and seeks to insure that at least a majority of the directors are independent under the rules of the NASDAQ, and that members of the Company's Audit Committee meet the financial literacy and other requirements under the rules of the NASDAQ. Nominees for director are selected on the basis of their depth and breadth of experience, wisdom, integrity, ability to make independent analytical inquiries, understanding of the Company's business environment, willingness to devote adequate time to Board duties, the interplay of the candidate's experience and skills with those of other Board members, and the extent to which the candidate would be a desirable addition to the Board and any committees of the Board.

Shareholder Recommendations for Director

The Corporate Governance and Nominating Committee will consider written recommendations for director candidates from shareholders. Any such recommendations should be submitted to the Corporate Governance and Nominating Committee, c/o the Secretary of the Company, and should include the following information: (a) all information relating to the candidate that is required to be disclosed pursuant to Regulation 14A under the Exchange Act (including the person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) the name(s) and address(es) of the shareholder(s) making the recommendation and the number of shares of Common Stock which are owned beneficially and of record by the shareholder(s); and (c) appropriate biographical information and a statement as to the qualification of the candidate.

Alternatively, shareholders intending to appear at an annual meeting of shareholders in order to nominate a candidate for election by the shareholders at the meeting (in cases where the Board of Directors does not intend to nominate the candidate or where the Corporate Governance and Nominating Committee was not requested to consider the candidate) must comply with the procedures in Section 4(c) of the Company's By-laws. Shareholders can obtain a copy of the Company's By-laws without charge by writing to the Secretary of the Company. Under the Company's By-laws, and as described under **Deadline for Receipt of Shareholder Proposals** above, written notice of a nomination must be received by the Secretary of the Company by February 24, 2006 in order to be considered at the 2006 Annual Meeting.

Process for Identifying and Evaluating Director Candidates

The process for identifying and evaluating candidates for the Board of Directors is initiated by identifying a slate of candidates who meet the criteria for selection as nominees and have the specific qualities or skills being sought based on input from members of the Board and, if the Corporate Governance and Nominating

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Committee deems appropriate, a third-party search firm. These candidates are evaluated by the Corporate Governance and Nominating Committee by reviewing the candidates' biographical information and qualification and checking the candidates' references. Qualified nominees are interviewed by at least one member of the Corporate Governance and Nominating Committee. Promising candidates meet with all members of the Board, and using the input from such interviews and the information obtained by the Corporate Governance and Nominating Committee, the committee evaluates which of the prospective candidates is qualified to serve as a director and whether the committee should recommend to the Board that the Board nominate, or elect to fill a vacancy, these final prospective candidates. Candidates recommended by the Corporate Governance and Nominating Committee are presented to the Board for selection as nominees to be presented for election by the shareholders or to fill a vacancy.

The Corporate Governance and Nominating Committee evaluates shareholder-recommended candidates using the same process and the same criteria it uses to evaluate candidates from other sources.

Board Nominees for the Annual Meeting

Dr. Hill and Messrs. Chase, Cole, Dimick, Grossman, Hitchcock, Holbrook, and Mulvena, who are all current members of the Board, are the directors standing for re-election at the Annual Meeting.

COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Shareholders can send communications to the Board by sending a certified or registered letter to the Chairman of the Board care of the Secretary of the Company, at the Company's main business address set forth above. Communications that are threatening, illegal or similarly inappropriate, and advertisements, solicitations for periodical or other subscriptions, and other similar communications generally will not be forwarded to the Chairman.

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ELECTION OF DIRECTORS****Nominees**

A board of eight directors is to be elected at the Annual Meeting. Unless otherwise instructed, the Proxy holders will vote the Proxies received by them for the eight nominees named below, each of whom is presently serving as one of our directors. If additional persons are nominated for election as directors, the Proxy holders intend to vote all Proxies received by them in accordance with cumulative voting to elect as many of the nominees listed below as possible. In such event, the Proxy holders will determine the specific nominees for whom such votes will be cumulated. The term of office for each person elected as a director will continue until the next annual meeting of shareholders or until his successor has been elected and qualified. We do not expect that any nominee will be unable or will decline to serve as a director.

The following table provides information concerning our director nominees, including their ages as of April 22, 2005:

Name of Nominee	Age	Position with Our Company	Director Since
J. Donald Hill	68	Director and Chairman of the Board	1976
D. Keith Grossman	45	Director, President and Chief Executive Officer	1996
Howard E. Chase	68	Director	1986
J. Daniel Cole	58	Director	1997
Neil F. Dimick	55	Director	2003
William M. Hitchcock	65	Director	1996
George W. Holbrook, Jr	73	Director	1995
Daniel M. Mulvena	56	Director	1997

There are no family relationships among any of our directors or executive officers.

J. Donald Hill, M.D. has been a director of our Company since our inception. In January 1995, Dr. Hill became Chairman of the Board. Dr. Hill was the director of the Heart Failure, Transplant, Artificial Heart and Circulatory Support Program at California Pacific Medical Center in San Francisco from 1984 to 2003. Dr. Hill became the Surgical Director of the Congestive Heart Failure Program at the University of California at San Francisco in February 2004. Dr. Hill has been a practicing cardiovascular surgeon since 1966.

D. Keith Grossman, President, Chief Executive Officer and Director, joined our Company as President and Chief Executive Officer in January 1996. He was elected to the Board in February 1996. Prior to joining us, Mr. Grossman was a Division President of Major Pharmaceuticals, Inc., from June 1992 to September 1995, at which time it was sold. From July 1988 to June 1992, Mr. Grossman served as the Vice President of Sales and Marketing for Calcitek, Inc., a manufacturer of implantable medical devices and a division of Sulzermedica (formerly Intermedics, Inc.). Prior to 1988, Mr. Grossman held various other sales and marketing management positions within the McGaw Laboratories Division of American Hospital Supply Corporation. Mr. Grossman also serves as a member of the board of directors of Intuitive Surgical, Inc., as well as Acorn Cardiovascular, Incorporated, a private medical technology company.

Howard E. Chase became a director of our Company in November 1986. He is currently the President and Chief Executive Officer of The Hollandbrook Group, LLC, which provides merger and acquisition consulting services to asset management firms and others. Mr. Chase served as President and Chief Executive Officer of Carret Holdings, Inc. (formerly Matrix Global Investments, Inc.) from June 1999 until December 2001. Mr. Chase served as President and Chief Executive Officer of Trident Rowan Group, Inc. (TRGI) from September 1995 to March 1998 and Chairman of the Board of TRGI from March 1998 to December 1999. From 1984 to August 1995, Mr. Chase was a partner in the law firm of Morrison Cohen Singer &

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Weinstein, LLP in New York City. He acted as an advisor and as a special counsel to our Company from 1979 to 1995.

J. Daniel Cole became a director of our Company in June 1997. Since March 1997, Mr. Cole has been a general partner of the Spray Venture Fund of Boston. Mr. Cole was President and Chief Operating Officer of SciMed Life Systems Corporation from March 1993 to March 1995, and Senior Vice President and Group President of Boston Scientific Corporation's vascular business from March 1995 to March 1997. He has also held a number of senior executive positions at Baxter Healthcare Corporation, including President of its Edwards Less Invasive Surgery Division and its Critical Care Division. Mr. Cole also serves as a member of the board of directors of Closure Medical Corporation as well as several private companies.

Neil F. Dimick became a director of our Company in October 2003. Mr. Dimick was Executive Vice President and Chief Financial Officer of AmerisourceBergen Corporation, from August 2001 to May 2002, and served as Senior Executive Vice President and Chief Financial Officer and a director of Bergen Brunswig Corporation and was a member of that board's finance, investment and retirement committees for more than five years prior to its merger with AmeriSource Health in 2001. Mr. Dimick also spent eighteen years with the audit firm Deloitte & Touche LLP, where he was an audit partner and national director of the firm's real estate division. Mr. Dimick also serves as a member of the board of directors of Alliance Imaging, Inc., Resources Global Professionals, and WebMD Corporation.

William M. Hitchcock became a director of our Company in September 1996. Since December 1996, Mr. Hitchcock has served as President and director of Avalon Financial, Inc. Since 1998, Mr. Hitchcock has served as Principal of Pembroke Financial Partners, a NASD firm. From May 1992 to December 1996, Mr. Hitchcock was President of Plains Resources International Inc., a wholly owned subsidiary of Plains Resources Inc. Mr. Hitchcock also serves as a member of the board of directors of Telx Group, Inc., Luna Imaging, Inc., and Impulse Devices, Inc.

George W. Holbrook, Jr. became a director of our Company in June 1995. Since 1984, Mr. Holbrook has been the Managing Partner of Bradley Resources Company, a private investment partnership. Mr. Holbrook is a director of ThinGap and Vapore, Inc.

Daniel M. Mulvena became a director of our Company in May 1997. Mr. Mulvena is the founder and owner of Commodore Associates, a consulting company. Mr. Mulvena was Group Vice President Cardiac/ Cardiology and a member of the operating committee for Boston Scientific Corporation from February 1992 to May 1995. Prior to that, he was the President and Chief Executive Officer and Chairman of Lithox Systems, Inc. Prior to that, Mr. Mulvena held a number of executive positions, including President of the Implants Division and President of the Cardiosurgery Division, at C.R. Bard, Inc. Mr. Mulvena also serves as member of the board of directors of Zoll Medical Corporation.

Required Vote; Recommendation of the Board

The eight nominees receiving the highest number of affirmative votes of the shares present or represented and entitled to vote shall be elected as directors. Votes withheld from any director are counted for purposes of determining the presence or absence of a quorum for the transaction of business, but have no further legal effect under California law.

THE BOARD UNANIMOUSLY RECOMMENDS A VOTE FOR ELECTION TO THE BOARD OF EACH OF THE NOMINEES PROPOSED ABOVE.

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PROPOSAL TWO
RATIFICATION OF INDEPENDENT AUDITORS

In accordance with its charter, the Audit Committee has selected Deloitte & Touche LLP (Deloitte & Touche), independent auditors, to audit the Company's consolidated financial statements for fiscal 2005. The Audit Committee is asking the shareholders to ratify the appointment of Deloitte & Touche as the Company's independent auditors for the fiscal year ending December 31, 2005.

Deloitte & Touche has served as our independent auditors since our inception. In accordance with standing policy, Deloitte & Touche periodically changes the personnel who work on our audit. In addition to performing the audit of our consolidated financial statements, Deloitte & Touche provided various other services during fiscal years 2004 and 2003. Representatives of Deloitte & Touche are expected to be present at the Annual Meeting and will have the opportunity to make a statement if they wish to do so. Additionally, they will be available to respond to shareholder questions.

Fees Paid to Accountants for Services Rendered During Fiscal Year 2004

The fees billed to our Company for the fiscal year ended January 1, 2005 by Deloitte & Touche, along with the member firms of Deloitte & Touche Tohmatsu and their respective affiliates, are as follows:

Audit and Non-Audit Fees

The following table presents fees for professional audit services rendered by Deloitte & Touche for the audit of the Company's annual financial statements for the years ended January 1, 2005 and January 3, 2004 and fees billed for other services rendered by Deloitte & Touche, the member firms of Deloitte & Touche Tohmatsu and their respective affiliates during those periods. Amounts for 2003 include fees billed in 2003 and 2004 for work related to the 2003 audit. Amounts for 2004 include only those billings received during 2004 for work related to the 2004 audit.

	Fiscal Year 2004	Fiscal Year 2003
Audit Fees	\$ 766,000	\$ 552,000
Audit-Related Fees	221,000	60,000
Tax Fees	3,000	10,000
All Other Fees	5,000	5,000
Total	\$ 995,000	\$ 627,000

Audit Fees primarily represent amounts to be paid for the audit of the Company's annual financial statements, reviews of SEC Forms 10-Q and 10-K and statutory audit requirements at non-U.S. locations.

Audit-Related Fees primarily relate to assurance and related services for acquisition due diligence, internal control reviews, review of regulatory and statutory filings, and filings relating to debt and equity offerings.

Tax Fees are for services related to tax compliance, particularly for employment tax issues related to our foreign operations.

All Other Fees related primarily to payroll services for our foreign operations.

Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services of Independent Auditor

It is the policy of the Audit Committee to approve in advance all audit and permissible non-audit services to be provided to the Company by its independent auditors. The Audit Committee may delegate the authority to pre-approve such services to a designated member or members of the Audit Committee, so long as any such delegated approvals are disclosed to the full Audit Committee at its next scheduled meeting. The Audit Committee approved all audit, audit-related, tax and other services provided by Deloitte & Touche for fiscal

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years 2004 and 2003 and the estimated costs of those services. Actual amounts billed, to the extent in excess of the estimated amounts, were periodically reviewed and approved by the Audit Committee. The Audit Committee reviews any non-audit procedures on an ongoing basis to ensure that the rendering of any such services is compatible with maintaining Deloitte & Touche's independence.

Shareholder ratification of the selection of Deloitte & Touche as the Company's independent auditors is not required by the Company's By-Laws or other applicable legal requirements. However, the Audit Committee is submitting the selection of Deloitte & Touche to the shareholders for ratification as a matter of good corporate practice. In the event the shareholders fail to ratify the appointment, the Audit Committee may reconsider this appointment. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent accounting firm at any time during the year if the Audit Committee determines that such a change would be in the Company's and the shareholders' best interests.

Required Vote; Recommendation of the Board

The affirmative vote of the holders of a plurality of the shares represented and entitled to vote at the Annual Meeting will be required to ratify the selection of Deloitte & Touche as the Company's independent auditors for the fiscal year ending December 31, 2005. Abstentions and broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matters has been approved.

**THE BOARD AND THE AUDIT COMMITTEE UNANIMOUSLY RECOMMEND A VOTE FOR
THE RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE AS
THE COMPANY'S INDEPENDENT AUDITORS**

Table of Contents**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth certain information regarding the beneficial ownership of our Common Stock as of April 1, 2005 by:

Each of our directors;

Each Named Executive Officer, as defined in the Executive Compensation section below;

All individuals who served as directors or executive officers at fiscal year end as a group; and

Each person who is known by us to own beneficially more than 5% of our Common Stock.

Name and Address(1)	Number of Shares Beneficially Owned(2)	Percent of Shares Beneficially Owned(2)
Massachusetts Financial Services Company(3) 500 Boylston Street Boston, MA 02116	4,500,860	9.3%
FMRCorp(3) 82 Devonshire Street Boston, MA 02109	4,436,609	9.2%
Thermo Electron Corporation(4) 81 Wyman Street, P.O. Box 9046 Waltham, MA 02454-9046	4,435,544	9.2%
Royce & Associates(3) 1414 Avenue of the Americas New York, NY 10019	4,354,600	9.0%
Peter R. Kellogg(3) c/o Spear, Leeds & Kellogg 120 Broadway New York, NY 10271	3,822,670	7.9%
D. Keith Grossman(5)	1,061,833	2.2%
J. Donald Hill(6)	955,128	2.0%
William M. Hitchcock(7)	439,498	*
George W. Holbrook, Jr.(8)	395,549	*
Lawrence Cohen(9)	192,095	*
Jeffrey Nelson(10)	146,000	*
Howard E. Chase(11)	56,551	*
Daniel M. Mulvena(12)	54,375	*
J. Daniel Cole(13)	49,688	*
M. Wayne Boylston	28,447	*
Neil F. Dimick(14)	26,250	*
Directors and Executive Officers as a Group (11 persons)(15)	3,405,414	6.9%

* Less than 1%

(1)

Unless otherwise indicated, the address of the persons set forth above is the address of our Company appearing elsewhere in this Proxy Statement.

- (2) Applicable percentage ownership for each shareholder is based on 48,206,860 shares of Common Stock outstanding as of April 1, 2005, together with applicable options for such shareholder. Beneficial ownership is determined in accordance with the rules of the SEC, and includes voting and investment power with respect to the shares. Beneficial ownership also includes shares of Common Stock subject to options and warrants exercisable or convertible within 60 days of April 1, 2005. Shares of Common Stock subject to outstanding options are deemed outstanding for computing the percentage of ownership of the person holding such options, but are not deemed outstanding for computing the percentage ownership of any other person. Except pursuant to applicable community property laws or as indicated in the footnotes to this table, to our knowledge, each shareholder identified in the table possesses sole

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voting and investment power with respect to all shares of Common Stock shown as beneficially owned by such shareholder.

- (3) The number of shares beneficially owned is based on the named shareholder's most recent filings with the SEC on Schedule 13G as of December 31, 2004 for each of FMR Corp., Peter R. Kellogg, Royce & Associates, and Massachusetts Financial Services Company.
- (4) The number of shares beneficially owned is based on the named shareholder's most recent filings with the SEC on Schedule 13D as of March 16, 2005. Includes 2,731,779 shares subject to a Shareholder Agreement between our Company and Thermo Electron. The Shareholder Agreement was entered into in connection with our merger with Thermo Cardiosystems Inc. (Thermo Cardiosystems) and obligates Thermo Electron to cause such shares to be voted in the manner directed by our management at any meeting of our shareholders and with respect to any consent of our shareholders.
- (5) Includes 753,325 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005. Also includes 250,000 shares of restricted stock.
- (6) Includes 50,833 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (7) Includes 50,833 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (8) Includes 166,666 shares of Common Stock held by Bradley Resources Company, an investment partnership. Mr. Holbrook is a general partner of Bradley Resources Company. Includes 50,833 shares of Common Stock issuable upon exercise of options, by Mr. Holbrook, within 60 days of April 1, 2005.
- (9) Includes 500 shares held by Mr. Cohen's son, as to which Mr. Cohen disclaims beneficial ownership. Includes 187,250 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (10) Includes 146,000 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (11) Includes 50,833 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (12) Includes 52,500 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (13) Includes 36,563 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (14) Includes 26,250 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.
- (15) Includes 1,405,220 shares of Common Stock issuable upon exercise of options exercisable within 60 days of April 1, 2005.

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EQUITY COMPENSATION PLANS**

The following table provides information as of January 1, 2005 regarding securities authorized for issuance under the Company's equity compensation plans. The equity compensation plans of the Company include the 1984 Incentive Stock Option Plan, the 1993 Stock Option Plan, the 1996 Stock Option Plan, the 1996 Nonemployee Directors Stock Option Plan, the 1997 Stock Option Plan, and the 2002 Employee Stock Purchase Plan (the "ESPP"). Each of these equity compensation plans was approved by the Company's shareholders.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants, and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in the First Column)
Equity compensation plans approved by security holders	10,276,129(1)	\$ 11.97	2,077,184(2)
Equity compensation plans not approved by security holders			
Total	10,276,129	\$ 11.97	2,077,184

(1) Does not include 275,000 issued shares of restricted stock, with a weighted average price at issue of \$15.94, which were issued under the 1997 Plan.

(2) Includes 229,929 shares available for future issuance under the ESPP.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Such officers, directors and ten percent shareholders are also required by SEC rules to furnish us with copies of all Section 16(a) forms that they file.

Based solely on our review of copies of such reports received by us, we believe that during the fiscal year ended January 1, 2005 all Section 16(a) filing requirements applicable to our officers, directors and ten percent shareholders were satisfied.

CERTAIN TRANSACTIONS**Indemnification Agreements**

Our Company's bylaws provide for the indemnification by us of our agents, including our directors and officers, to the maximum extent permitted under California law. Our Company also has indemnity agreements with our directors

and certain of our officers. These indemnity agreements permit us to indemnify an officer or director to the maximum extent permitted under California law and prohibit us from terminating our indemnification obligations as to acts of any officer or director that occur before the termination. We believe the indemnity agreements assist us in attracting and retaining qualified individuals to serve as directors and officers of our Company. The indemnifications and limitations on liability permitted by the bylaws and the indemnity agreements are subject to the limitations set forth by California law.

Table of Contents**EXECUTIVE COMPENSATION**

The following table presents information concerning compensation received by our Company's chief executive officer and each of our Company's three other executive officers during the fiscal year ended January 1, 2005 (collectively, the "Named Executive Officers").

Summary Compensation Table

Name and Principal Position	Year	Annual Compensation			Long-Term Compensation		All Other Compensation	
		Salary	Bonus	Other(1)	Restricted Stock Awards	Securities Underlying Options	Life Insurance Premiums Paid by the Company(2)	Other
		\$	\$	\$	\$	#	\$	\$
D. Keith Grossman President, Chief Executive Officer, and Director	2004	420,000	154,581			126,000	19,962	6,150(4)
	2003	410,577	315,900			72,000	19,645	6,000(4)
	2002	380,000	190,238				22,219	224,250(3)
M. Wayne Boylston(5) Senior Vice President, Chief Financial Officer, and Secretary	2004	268,832	76,950	26,271		84,000	1,799	6,150(4)
	2003	250,160	132,538	29,847		48,000	1,932	6,000(4)
	2002	236,000	81,125	39,436	328,000(6)	70,000	2,033	4,570(4)
Jeffrey Nelson(7) President Cardiovascular Division	2004	266,500	72,288			84,000	1,808	6,150(4)
	2003	259,904	157,223			48,000	1,949	4,607(4)
	2002	91,346	98,735			175,000	697	
Lawrence Cohen President International Technidyne Corporation	2004	270,960	91,826			84,000	1,808	6,150(4)
	2003	261,692	118,326			48,000	1,802	6,000(4)
	2002	236,250	101,588			75,000	2,039	5,500(4)

(1) In accordance with the rules of the SEC, other annual compensation in the form of perquisites and other personal benefits has been omitted where the aggregate amount of such perquisites and other personal benefits constituted less than the lesser of \$50,000 or 10% of the total annual salary and bonus for the Named Executive Officer for the fiscal year.

(2) Amount represents premiums paid for term life insurance for the benefit of the Named Executive Officer.

- (3) Includes accrual in the amount of \$218,750 during 2002 pursuant to a waiver and retention agreement that Thoratec entered into with Mr. Grossman in exchange for the waiver of Mr. Grossman's rights to immediately exercise stock options to purchase 270,000 shares of Common Stock which accelerated fully upon consummation of the merger between Thoratec and Thermo Cardiosystems. The total amount became due upon Mr. Grossman's continued employment for 12 months following the merger and was paid in 2002. Also includes employer contributions to a 401(k) retirement plan of \$5,500 during 2002.
- (4) Represents employer contributions to a 401(k) retirement plan.
- (5) The amounts included in Other Annual Compensation represents certain expenses incurred by Mr. Boylston in connection with his relocation. Mr. Boylston resigned from the Company on December 17, 2004.
- (6) In August 2002, a stock bonus award of 50,000 shares of restricted Common Stock was granted to Mr. Boylston. The award provided that the restrictions would lapse with respect to 25,000 restricted shares on August 13, 2005 and with respect to the remaining 25,000 restricted shares on August 13, 2006. At the time of grant, these shares had a value of \$328,000. In connection with Mr. Boylston's resignation and certain ongoing consulting services to be provided by Mr. Boylston, the Company amended Mr. Boylston's restricted stock grant agreement. The amendment provides that Mr. Boylston has forfeited his right to 25,000 of the restricted shares and the restrictions on the remaining 25,000 restricted shares will lapse in three equal installments on January 1, 2006, 2007 and 2008, provided that on each such lapsing date, Mr. Boylston's consulting services to the Company are continuing. As of January 1, 2005, the aggregate value of the 25,000 restricted stock shares was \$260,500 based on our closing stock price on December 31, 2004.
- (7) Mr. Nelson commenced employment with us and became a Named Executive Officer in 2002.

Table of Contents**Option Grants**

The following table provides information concerning grants of options to purchase Common Stock made to each of the Named Executive Officers during our 2004 fiscal year. No stock appreciation rights were granted to these individuals during fiscal 2004.

Fiscal Year 2004 Option Grants

Name	Grant Date	Number of Securities Underlying Options Granted(2)	Individual Grants			Potential Realized Value at Assumed Annual Rates of Stock Price Appreciation for Option Term(1)	
			Percent of Total Options Granted to Employees in 2004	Exercise Price (\$/Sh)	Expiration Date	5%	10%
D. Keith Grossman	4/14/2004	126,000	4.1%	\$ 12.45	4/14/2014	\$ 987,000	\$ 2,500,000
M. Wayne Boylston(3)	4/14/2004	84,000	2.7%	12.45	4/14/2014	658,000	1,667,000
Jeffrey Nelson	4/14/2004	84,000	2.7%	12.45	4/14/2014	658,000	1,667,000
Lawrence Cohen	4/14/2004	84,000	2.7%	12.45	4/14/2014	658,000	1,667,000

(1) Amounts represent hypothetical gains that could be achieved for the respective options if exercised at the end of the option term. The assumed 5% and 10% rates of stock price appreciation are mandated by rules of the SEC and do not represent our estimate or projection of the future price of our Common Stock.

(2) Options vest in six equal parts over three years from the grant date.

(3) In connection with Mr. Boylston's resignation on December 17, 2004, options that were unexercisable on that date terminated and options that were exercisable on that date terminated if not exercised within 3 months after his termination of employment. Mr. Boylston exercised options for 4,600 shares of our Common Stock within the 3 month period with all remaining options terminating.

Option Exercises and Holdings

The following table presents certain information regarding the value of options exercised during fiscal year 2004 and the value of unexercised stock options held by each of the Named Executive Officers as of January 1, 2005.

Aggregated Option Exercises in Fiscal Year 2004 and Fiscal Year 2004 Year-End Option Values

Name	Shares Acquired on Exercise(#)	Value Realized(1)	Number of Securities Underlying Unexercised Options at Fiscal Year End		Value of Unexercised In-the-Money Options at Fiscal Year End(2)	
			Exercisable	Unexercisable	Exercisable	Unexercisable

D. Keith Grossman	\$	700,825	231,500	\$ 1,548,658	\$ 67,793
M. Wayne Boylston(3)		186,000		9,840	
Jeffrey Nelson		126,000	181,000	472,840	376,770
Lawrence Cohen		127,250	164,750	42,353	40,358

- (1) Calculated by determining the market price of the purchased shares on the exercise date less the option exercise price paid for such shares.
- (2) Calculated by determining the difference between the fair market value of the securities underlying the options as of December 31, 2004 (\$10.42 per share), the last trading day in our 2004 fiscal year, and the exercise price of the options.
- (3) In connection with Mr. Boylston's resignation on December 17, 2004, options that were unexercisable on that date terminated and options that were exercisable on that date terminated if not exercised within 3 months after his termination of employment. Mr. Boylston exercised options for 4,600 shares of our Common Stock within the 3 month period with all remaining options terminating.

Table of Contents**Employment Contracts, Termination of Employment and Change-in-Control Agreements**

D. Keith Grossman. Effective December 6, 2001, our Company entered into a five-year employment agreement with Mr. Grossman, which superseded an employment agreement with Mr. Grossman entered into on January 31, 1996. The current employment agreement provides, among other things, for Mr. Grossman's employment as President and Chief Executive Officer at an initial base salary of \$350,000 per year, which the Compensation and Option Committee may increase from time to time. Under the employment agreement, Mr. Grossman is also eligible for a bonus with an annual target equal to 75% of his base salary each year. The employment agreement also provides for the granting to Mr. Grossman of restricted Common Stock as well as annual grants of options to purchase Common Stock. The quantity of shares to be covered under these grants will be determined by the Board and the Compensation and Option Committee. On December 6, 2001, an award of 250,000 shares of restricted Common Stock was granted to Mr. Grossman. Additionally, the employment agreement provides that Mr. Grossman will receive such benefits as the Board may, from time to time, determine to provide for our Company's key executives.

Under the employment agreement, Mr. Grossman's employment by our Company terminates immediately upon his receipt of a written notice of termination by our Company or upon his permanent disability or death. The employment agreement may be terminated by Mr. Grossman at any time and for any reason upon at least 30 days' prior written notice to our Company. In the event of termination of his employment other than:

for cause, such as gross misconduct, fraud, or material breach;

on account of permanent disability; or

by voluntary termination other than for good reason, defined in the employment agreement as any material reduction in duties or salary or bonus or a requirement to work more than 25 miles from our Company's current headquarters;

the employment agreement provides that our Company will pay an amount equal to two times his then current base salary, payable ratably during the 12 months after termination or within 30 days after termination as a lump sum payment at Mr. Grossman's discretion communicated by him to our Company in writing. Additionally, all outstanding stock options held by Mr. Grossman will immediately vest and become exercisable upon his death or disability, as defined in the employment agreement.

The employment agreement provides that, should a change of control in the ownership of our Company occur and Mr. Grossman's employment with our Company is terminated for any reason, except for cause (as defined in the employment agreement), after the change in control, then he will receive a termination payment of two and one-half times the sum of (i) his then current base salary, and (ii) the greatest of (a) the prior year's target bonus, (b) the current year's actual bonus, or (c) the current year's target bonus. This termination payment shall be payable ratably during the 12 months after termination or within 30 days after termination as a lump sum payment, at Mr. Grossman's discretion. In addition, all outstanding stock options held by Mr. Grossman will immediately vest and become exercisable. The restrictions on each share of restricted stock granted to Mr. Grossman shall, upon a change in control, immediately lapse as to fifty percent (50%) of the number of shares thereunder that at such date are still restricted, and (b) upon the earlier of (i) the one (1) year anniversary of the effective date of such change in control, or (ii) such date after the date of such change in control as Mr. Grossman's employment is voluntarily terminated for good reason (as defined in the employment agreement) or his employment is involuntarily terminated for any reason, the restrictions on each share of restricted stock shall immediately lapse as to the remainder, if any, of the shares under such grant that are then still otherwise restricted.

Separation Benefits Agreements. The Company has entered into Separation Benefits Agreements (the "Separation Agreements") with certain officers of the Company, including the Company's executive officers, each of which provides for severance payments and benefits under certain circumstances. An executive officer could be entitled to a severance payment equal to one times his or her current annual cash compensation for termination by the Company without cause. In the case of a termination of employment in connection with a change in control of the Company, if an executive officer is terminated without cause or resigns for good

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reason, each as defined in the Separation Agreements, the executive officer could be entitled to a severance payment equal to two times his or her current annual cash compensation plus the greatest of (a) the prior year's target bonus, (b) the current year's actual bonus, or (c) the current year's target bonus. In the event that any payments made in connection with a change in control would be subject to the excise tax imposed under Section 4999 of the Internal Revenue Code of 1986, as amended, the Company is obligated to make whole the individual with respect to such excise tax.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During fiscal 2004, none of our executive officers served on the board of directors or compensation committee of another company that had an executive officer serve on our Board or our Compensation and Option Committee. In addition, none of the members of our Compensation and Option Committee was an officer or employee of Thoratec or any of our subsidiaries during fiscal 2004 or was formerly an officer of Thoratec or any of our subsidiaries at any time in the past.

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**REPORT OF THE COMPENSATION AND OPTION COMMITTEE
OF THE BOARD OF DIRECTORS(1)**

During fiscal 2004, management compensation issues were reviewed by the Compensation and Option Committee, which consisted of Dr. Hill and Messrs. Holbrook and Mulvena. The function of the Compensation and Option Committee is to review and recommend management compensation to the Board. The Compensation and Option Committee met four times during fiscal 2004.

We believe that our ability to achieve the objectives of obtaining regulatory approval for and commercializing our products, and improving profitability, is dependent largely upon our ability to recruit and retain qualified executives with substantive experience in the development, regulatory approval, manufacture, marketing and sale of new medical devices. We are competing for experienced executives within areas where many biotechnology/biomedical/pharmaceutical companies are located. These areas include the San Francisco Bay Area, where our headquarters are located, as well as central New Jersey and the greater Boston area where additional Company operations are located.

We have a policy designed to control the base salaries of our executives while providing sufficient incentives to attract and retain qualified personnel. In accordance with this policy, we strive to set executive base salaries by considering relative contribution of the position to achievement of our Company's goals and objectives, market value as defined by salaries of executives within the San Francisco Bay Area with comparable experience in similar positions, and job-related responsibilities with respect to size of budget, number of subordinates and scope of activities. In general, we strive to set base salaries of new executives at market, which is defined as the average base salary of incumbents in comparable positions. We review surveys of peer group compensation levels and from time to time we engage third party compensation consulting services to assist us. The Company's executive officers also participate in an executive bonus program which awards annual cash bonuses based on the achievement of both individual and corporate performance goals. Additionally, the Company uses our 1997 Stock Option Plan to facilitate recruiting and to retain qualified executives by providing long-term incentives. Typically, new executives are granted stock options as part of their initial employment package. The Company also has separation benefits agreements with certain officers that provide for separation benefits to these officers under certain circumstances.

The Internal Revenue Code of 1986, as amended, includes a provision that denies a deduction to publicly held corporations for compensation paid to covered employees (defined as the chief executive officer and the next four most highly compensated officers as of the end of the taxable year) to the extent that compensation paid to any covered employee exceeds \$1 million in any taxable year of the corporation. Certain performance-based compensation qualifies for an exemption from the limits on deductions. It is our policy to attempt to qualify compensation paid to our top executives for deductibility in order to maximize our income tax deductions, to the extent that so qualifying the compensation is consistent with our fundamental compensation policies. Based upon the Internal Revenue Service's regulations and compensation paid to our covered employees for the 2004 tax year, all compensation paid by our Company in 2004 to such covered employees was deductible by us.

Stock Options. We have determined that stock options are an important incentive for attracting and retaining qualified personnel, including executive-level personnel.

Corporate Performance Criteria. Management presents to us a set of corporate goals for a succeeding period, generally ranging from 12 to 18 months, as part of the annual plan and budget process. These goals establish benchmarks for assessing overall corporate performance. Given the dynamic nature of the new medical device development process, we review progress toward the achievement of corporate goals periodically, together with a description of any change in circumstances that management believes may warrant an update to or revision of these goals. The principal corporate goals for 2004 were to achieve revenue and net income targets, make progress with clinical trials and regulatory submissions, procure an increase in

1 The Compensation and Option Committee Report will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or under the Exchange Act, except to the extent that our Company specifically incorporates such reports by reference, and such reports will not otherwise be deemed to be soliciting materials to be filed under such Acts.

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the rate of reimbursement provided by the Centers for Medicare & Medicaid Services for the use of left ventricular assist systems (LVAS) that are approved by the FDA for treating Destination Therapy in end-stage heart failure patients, achieve developments in product improvement and quality programs, and implement the launch of Destination Therapy.

Periodic Salary Adjustments. Generally, executive salaries are reviewed annually, and salary adjustments may be awarded on the basis of increased responsibilities of individual executives over a period of time or the outstanding performance of individual executives as exhibited by consistently high standards in the execution of established duties. Company performance as a whole is a major consideration in our decision to award any salary increases and, to a lesser extent, we also consider general economic conditions and trends.

Chief Executive Officer Compensation. Compensation for the Chief Executive Officer is determined by the Compensation and Option Committee based on his leadership and achievements of key strategic and regulatory objectives for the year. For the 2004 fiscal year, Mr. Grossman's salary was increased to \$420,000 per year. In addition, based on achievement of certain bonus-related objectives, Mr. Grossman was awarded a bonus of \$154,581 for the 2004 fiscal year. During the fiscal year 2004, Mr. Grossman received a stock option grant to purchase 126,000 shares of the Company's common stock at a price equal to the fair market value on the date of grant. These options vest in six equal installments over three years. In fiscal year 2001, Mr. Grossman received a grant of 250,000 shares of restricted stock. The restrictions on 125,000 of these shares lapse on December 6, 2005 and on December 6, 2006 for the remaining 125,000 shares. The restrictions are subject to acceleration under certain conditions in the event of a change in control of our Company. If Mr. Grossman's services to Thoratec as an employee cease for any reason not related to a change in control, including death or disability, all restricted shares for which restrictions have not then lapsed will be forfeited by Mr. Grossman.

Summary. We believe that we have established a program for compensation of our executives which is fair and which aligns the financial incentives for executives with the interests of our shareholders.

Submitted By:
The Compensation and Option Committee

Daniel M. Mulvena, Chairman
George W. Holbrook, Jr.
J. Donald Hill, M.D.

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REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS(2)

The Audit Committee of the Board serves as the representative of the Board for general oversight of our Company's financial accounting and reporting process, system of internal control and audit process.

Management has primary responsibility for preparing our Company's financial statements and for our financial reporting process. Our Company's independent auditors, Deloitte & Touche LLP, are responsible for expressing an opinion on the conformity of our Company's audited financial statements to accounting principles generally accepted in the United States of America.

The Audit Committee hereby reports as follows:

The Audit Committee has reviewed and discussed the audited financial statements with management.

The Audit Committee has discussed with the independent auditors the matters required to be discussed by Statement of Auditing Standards No. 61, as modified or supplemented.

The Audit Committee has received the written disclosures and the letter from the independent auditors required by the Independence Standards Board Standard No. 1, as modified or supplemented, and has discussed with the independent auditors their independence.

The Audit Committee has also considered whether the provision of other non-audit services by Deloitte & Touche to the Company is compatible with the auditors' independence.

Based on the review and discussions with management and the independent auditors referred to above, the Audit Committee recommended to the Board that our Company's audited financial statements for the fiscal year ended January 1, 2005 be included in our 2004 Annual Report on Form 10-K for filing with the Securities and Exchange Commission.

Each of the members of the Audit Committee is independent as defined under the listing standards of the Nasdaq National Market.

Submitted By:
The Audit Committee

Neil F. Dimick, Chairman
J. Daniel Cole
William M. Hitchcock

² The Audit Committee Report will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or under the Exchange Act, except to the extent that our Company specifically incorporates such reports by reference, and such reports will not otherwise be deemed to be soliciting materials to be filed under such Acts.

Table of Contents**STOCK PRICE PERFORMANCE GRAPH**

The graph below compares the cumulative total shareholder return on an investment in our Common Stock, the NASDAQ Stock Market Index (U.S. companies only) and an index of a peer group of medical device companies similar in size and stage of commercialization to us (the Peer Group Index) for the five-year period ended December 31, 2004, the last trading day in our 2004 fiscal year.

The Peer Group consists of the following 10 companies: Abiomed, Inc., Advanced Neuromodulation Systems, Inc., American Medical Systems Holdings, Inc., Arrow International, Inc., Cyberonics, Inc., Datascope Corporation, Edwards Lifesciences Corporation, Haemonetics Corporation, Possis Medical, Inc. and Wilson Greatbatch Technologies, Inc.

The graph assumes the value of an investment in our Common Stock and each index was \$100 at December 31, 1999 and the reinvestment of all dividends, if any.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
AMONG THORATEC CORPORATION,
THE NASDAQ STOCK MARKET (U.S.) INDEX, AND
A PEER GROUP

	Cumulative Total Return					
	12/99	12/00	12/01	12/02	12/03	12/04
THORATEC CORPORATION	100	113	174	78	133	107
NASDAQ STOCK MARKET (U.S.)	100	60	45	26	38	41
PEER GROUP	100	121	149	121	164	191

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AVAILABLE INFORMATION

Additional information concerning Thoratec is available on our website, www.thoratec.com.

OTHER MATTERS

We know of no other matters to be submitted at the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed Proxy to vote the shares they represent as the Board may recommend.

It is important that your stock be represented at the Annual Meeting, regardless of the number of shares that you hold. Therefore, you are urged to execute and return the accompanying Proxy in the envelope which has been enclosed.

For the Board of Directors

David A. Lehman
Secretary

Pleasanton, California
April 22, 2005

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APPENDIX A

**THORATEC CORPORATION
AUDIT COMMITTEE CHARTER
Adopted, as amended, February 25, 2005**

Purpose

The purpose of the Audit Committee (the Committee) of the board of directors (the Board) of Thoratec Corporation (the Company) includes overseeing: (1) the accounting and financial reporting processes of the Company and audits of its financial statements; (2) the Company's relationship with its independent auditor; and (3) the Company's system of internal controls.

Composition

The Committee shall be composed of three or more directors, as determined by the Board, each of whom shall be independent, as that term is defined in Section 10A(m) of the Securities Exchange Act of 1934, as amended (the Exchange Act), and the rules and regulations of the Securities and Exchange Commission (the Commission) under the Exchange Act, and shall meet the director independence and financial literacy requirements of Nasdaq. In addition, no member of the Committee may have participated in the preparation of the financial statements of the Company or any of its current subsidiaries at any time during the last three years. At least one member of the Committee shall have past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities.

Responsibilities

The Committee is charged by the Board with the responsibility to, among other things:

1. Appoint and provide for the compensation of the Company's independent auditor, oversee the work of the independent auditor (including resolution of any disagreements between management and the independent auditor regarding financial reporting), evaluate the performance of the independent auditor and, if so determined by the Committee, replace the independent auditor; it being acknowledged that the independent auditor is ultimately accountable to the Committee, as representatives of the shareholders.
2. Ensure the receipt of, and evaluate the written disclosures and the letter that the independent auditor submits to the Committee regarding the auditor's independence in accordance with Independence Standards Board Standard No. 1, discuss such reports with the auditor, oversee the independence of the independent auditor and, if so determined by the Committee in response to such reports, take appropriate action to address issues raised by such evaluation.
3. Discuss with the independent auditor the matters required to be discussed by SAS 61, as it may be modified or supplemented.
4. Instruct the independent auditor and the internal auditor, if any, to advise the Committee if there are any subjects that require special attention.
5. Receive from the independent auditor reports on all critical accounting policies of the Company, all alternative treatments of financial information within generally accepted accounting principles for policies and practices related to material items that have been discussed with management, ramifications of the use of such alternative disclosures and treatments and the treatment preferred by the auditors, and other material written communications between the auditors and management.
6. Meet with management and the independent auditor to discuss the annual financial statements and the report of the independent auditor thereon, and to discuss: significant issues encountered in the course of the audit work, including restrictions on the scope of activities or on access to required information; the

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adequacy of the disclosure of off-balance sheet transactions, arrangements, obligations and relationships in reports filed with the Commission; and the appropriateness of the presentation of any non-GAAP financial measures (as defined in Commission regulations) included in any report filed with the Commission or in any public disclosure or release.

7. Approve in advance all audit and permissible non-audit services to be provided to the Company by its independent auditor. The Committee may adopt policies and procedures for the approval of such services which may include delegation of authority to a designated member or members of the Committee to approve such services so long as any such approvals are disclosed to the full Committee at its next scheduled meeting.

8. Review the management letter delivered by the independent auditor in connection with the audit.

9. Following such review and discussions, if so determined by the Committee, recommend to the Board that the annual financial statements be included in the Company's annual report. Meet quarterly with management and the independent auditor to discuss the quarterly financial statements prior to the filing of the Form 10-Q; provided that this responsibility may be delegated to the chairman of the Committee or a member of the Committee who is an audit committee financial expert.

10. Review significant changes to the Company's accounting principles and practices proposed by the independent auditor, the internal auditor, if any, or management.

11. Receive reports from the independent auditor and management regarding, and review and discuss the adequacy and effectiveness of, the Company's internal controls, including any significant deficiencies or material weaknesses in internal controls and significant changes in internal controls reported to the Committee by the independent auditor or management.

12. Receive reports from management regarding, and review and discuss the adequacy and effectiveness of, the Company's disclosure controls and procedures.

13. Review the scope and results of internal audits, if any.

14. Evaluate the performance of the internal auditor, if any, and, if so determined by the Committee, recommend replacement of the internal auditor.

15. Conduct or authorize such inquiries into matters within the Committee's scope of responsibility as the Committee deems appropriate.

16. Provide minutes of Committee meetings to the Board, and report regularly to the Board with respect to the Committee's activities.

17. At least annually, review and reassess this Charter and, if appropriate, recommend changes to the Board.

18. Prepare the Committee report required by Commission regulations to be included in the Company's annual proxy statement.

19. Establish and oversee a procedure for receipt, retention and treatment of any complaints received by the Company about its accounting, internal accounting controls or auditing matters and for the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters.

20. Review and approve all related party transactions, as defined in Nasdaq listing standards.

Meetings

The Committee shall meet at least four times per year, either in person or telephonically, and at such times and places as the Committee shall determine. The Committee shall meet in separate executive sessions, periodically, with each of management, the internal auditor, if any, and the independent auditor.

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Authority

By adopting this Charter, the Board delegates to the Committee full authority in its discretion to:

1. Perform each of the responsibilities of the Committee described above.
2. Appoint a chair of the Committee, unless a chair is designated by the Board.
3. Engage legal counsel and other advisers as the Committee determines necessary to carry out its responsibilities.
4. Receive from the Company such funding as the Committee shall determine to be appropriate for payment of compensation to the Company's independent auditor and any legal counsel or other advisers engaged by the Committee, and payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

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THORATEC CORPORATION PROXY CARD

**THIS PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
2005 Annual Meeting of Shareholders to be Held on May 25, 2005**

The undersigned, revoking all prior proxies, hereby appoint(s) D. Keith Grossman and David A. Lehman, and each of them, with full power of substitution and revocation, to represent the undersigned, with all powers which the undersigned would possess if personally present, and to vote as set forth below all shares of stock of THORATEC CORPORATION (the Company) which the undersigned would be entitled to vote if personally present at the 2005 Annual Meeting of Shareholders of the Company to be held at the Company s headquarters at 6035 Stoneridge Drive, Pleasanton, California 94588, on Wednesday, May 25, 2005 at 9:00 a.m., Pacific Daylight Time, and at any postponements or adjournments of that meeting.

WHEN THIS PROXY IS PROPERLY EXECUTED, THE SHARES REPRESENTED HEREBY WILL BE VOTED AS SPECIFIED. IF NO SPECIFICATION IS MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF ALL NOMINEES AS DIRECTORS IN RESPECT OF THE ELECTION PROPOSAL, FOR PROPOSAL 2, AND, IN THE DISCRETION OF THE PROXIES, WITH RESPECT TO ALL OTHER MATTERS WHICH MAY PROPERLY COME BEFORE THE MEETING AND ANY AND ALL ADJOURNMENTS THEREOF. THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THE ACCOMPANYING NOTICE OF ANNUAL MEETING AND PROXY STATEMENT.

WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, YOU ARE URGED TO SIGN AND PROMPTLY MAIL THIS PROXY IN THE RETURN ENVELOPE SO THAT YOUR STOCK MAY BE REPRESENTED AT THE MEETING.

SEE REVERSE SIDE

CONTINUED AND TO BE SIGNED ON REVERSE SIDE

SEE REVERSE SIDE

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**x Please mark your votes
as in this example**

1. Election of Directors:

Name of Nominee:

- | | |
|-----------------------|-----------------------------|
| 01) J. Donald Hill | 05) Neil F. Dimick |
| 02) D. Keith Grossman | 06) William M. Hitchcock |
| 03) Howard E. Chase | 07) George W. Holbrook, Jr. |
| 04) J. Daniel Cole | 08) Daniel M. Mulvena |

For All Withhold For All To withhold authority to vote, mark For All Except and write the
 o All Except: nominee's number on the line below.
 o o o

THE DIRECTORS RECOMMEND A VOTE FOR EACH OF THE ABOVE NOMINEES

2. Ratification of the appointment of Deloitte & Touche LLP as the Company's independent auditors for its fiscal year ending December 31, 2005:

- FOR AGAINST ABSTAIN

**THE DIRECTORS AND THE AUDIT COMMITTEE RECOMMEND A VOTE FOR THE
RATIFICATION OF THE ABOVE APPOINTMENT OF INDEPENDENT AUDITORS**

Dated: _____, 2005

(Signature)

(Signature)

(Title)

(If Shareholder is not an Individual)

(This Proxy should be marked, dated and signed by the shareholder(s) **exactly** as his or her name appears on the stock records of the Company and returned promptly in the enclosed envelope. Persons signing in a fiduciary capacity should so indicate. If shares are held by joint tenants or as community property, both should sign.)