

ENDOCARDIAL SOLUTIONS INC  
Form SC 13D/A  
February 17, 2004

**UNITED STATES  
SECURITIES AND EXCHANGE  
COMMISSION**

Washington, D.C. 20549

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 3)\***

**Endocardial Solutions, Inc.**

(Name of Issuer)

**Common Stock, \$.01 par value**

(Title of Class of Securities)

**292962 10 7**

(CUSIP Number)

**Carol E. Malkinson, Esq.  
Medtronic, Inc.  
710 Medtronic Parkway Northeast  
Minneapolis, Minnesota 55432  
(612) 514-4000**

(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**September 11, 2003**

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

Edgar Filing: ENDOCARDIAL SOLUTIONS INC - Form SC 13D/A

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

---

CUSIP No. 292962 10 7

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)  
Medtronic, Inc.  
41-0793183
2. Check the Appropriate Box if a Member of a Group (See Instructions)
  - (a)
  - (b)
 \*Joint Filing
3. SEC Use Only
4. Source of Funds (See Instructions)  
Not Applicable
5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)
6. Citizenship or Place of Organization  
Minnesota
7. Sole Voting Power  
0
8. Shared Voting Power  
0
9. Sole Dispositive Power  
0
10. Shared Dispositive Power  
0
11. Aggregate Amount Beneficially Owned by Each Reporting Person  
0
12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
13. Percent of Class Represented by Amount in Row (11)  
0%
14. Type of Reporting Person (See Instructions)  
CO

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

CUSIP No. 637184 10 8

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)  
Medtronic International, Ltd.  
41-1278948
  
2. Check the Appropriate Box if a Member of a Group (See Instructions)  
(a)   
(b)   
\*Joint Filing
  
3. SEC Use Only
  
4. Source of Funds (See Instructions)  
Not Applicable
  
5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)
  
6. Citizenship or Place of Organization  
Delaware
  
7. Sole Voting Power  
0
  
8. Shared Voting Power  
0
  
9. Sole Dispositive Power  
0
  
10. Shared Dispositive Power  
0
  
11. Aggregate Amount Beneficially Owned by Each Reporting Person  
0
  
12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)
  
13. Percent of Class Represented by Amount in Row (11)  
0%
  
14. Type of Reporting Person (See Instructions)  
CO

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

**Item 1.**

**Security and Issuer**

The class of equity security to which this statement relates is the Common Stock, \$0.01 par value per share, of Endocardial Solutions, Inc. ( ESI ). The name and address of the principal executive offices of the issuer of such securities are Endocardial Solutions, Inc., 1350 Energy Lane, Suite 110, St. Paul, Minnesota 55108.

**Item 2.**

**Identity and Background**

(a), (b) and (c):

Medtronic, Inc. ( Medtronic ), 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432, is a Minnesota corporation, principally engaged in the business of therapeutic medical technology, specializing in implantable and interventional therapies. Medtronic International, Ltd., 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432, a Delaware corporation ( MIL ), is a wholly-owned subsidiary of Medtronic through which Medtronic holds certain investments. Information is provided below with respect to persons who are directors and executive officers of the Reporting Persons.

Richard H. Anderson, Director, Medtronic, and Chief Executive Officer, Northwest Airlines, 2700 Lone Oak Parkway, Eagan, MN 55121;  
Michael R. Bonsignore, Director, Medtronic, Retired Chairman and CEO, Honeywell International, Inc., 101 Columbia Road, P. O. Box 4000, Morristown, New Jersey 07962-2497;

William R. Brody, M.D., Ph.D., Director, Medtronic, President, The Johns Hopkins University, 3400 North St. Charles St., 242 Garland Hall, Baltimore, MD 21218;

Arthur D. Collins, Jr., Chairman and Chief Executive Officer, Medtronic and President, MIL, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Antonio M. Gotto, Jr., M.D., Director, Medtronic, Dean, Cornell University Medical College, Medical Affairs Provost, Cornell University, Office of the Dean, 1300 York Avenue, New York, NY 10021;

Shirley A. Jackson, Ph.D., Director, Medtronic, President, Rensselaer Polytechnic Institute, 110 8th Street, Troy Building, Troy, NY 12180.

Denise M. O Leary, Director, Medtronic, private venture capital investor, 124 Warren Road, San Mateo, CA 94401.

Jean-Pierre Rosso, Director, Medtronic, Chairman, CNH Global N.V., 700 State Street, Racine, WI 53404;

Edgar Filing: ENDOCARDIAL SOLUTIONS INC - Form SC 13D/A

Jack W. Schuler, Director, Medtronic, Chairman, Stericycle, Inc. and Ventana Medical Systems, Inc., 28161 North Keith Drive, Lake Forest, IL 60045;

Gordon M. Sprenger, Director, Medtronic, Retired from Allina Health System, 800 E. 28th Street, Minneapolis, MN 55407;

Jeffrey Balagna, Senior Vice President and Chief Information Officer, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432;

Jean-Luc Butel, Senior Vice President and President, Asia Pacific, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Michael DeMane, Senior Corporate Vice President and President, Spinal, ENT, and Surgical Navigation Technologies, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Gary L. Ellis, Vice President, Controller, Treasurer and Director, MIL, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Michael D. Ellwein, Vice President, MIL, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Janet S. Fiola, Senior Vice President, Human Resources, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Robert Guezuraga, Senior Vice President and President, Cardiac Surgery, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

William A. Hawkins, Senior Vice President and President, Vascular, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Ronald Lund, Senior Vice President, General Counsel and Corporate Secretary, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Stephen H. Mahle, Senior Vice President and President, Cardiac Rhythm Management, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Stephen N. Oesterle, M.D., Senior Vice President for Medicine and Technology, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Margaret A. Osborne, Vice President, MIL, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Robert L. Ryan, Senior Vice President and Chief Financial Officer, Medtronic, and Vice President, Chief Financial Officer and Director, MIL, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Scott R. Ward, Senior Corporate Vice President and President, Medtronic Neurological and Diabetes, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;

Barry W. Wilson, Senior Vice President and President, International, Medtronic, 710 Medtronic Parkway N.E., Minneapolis, MN 55432;  
(d), (e) and (f): No change

**Item 3. Source and Amount of Funds or Other Consideration**

Not applicable.

**Item 4. Purpose of Transaction**

Pursuant to a License Agreement dated January 30, 1998 between Medtronic and ESI, ESI issued Medtronic a warrant to purchase 223,777 shares of ESI's Common Stock at an exercise price of \$3.81 per share. The Warrant is exercisable during the period beginning May 1, 2004 (or if earlier, upon a change of control of ESI) and ending May 1, 2008.

Based upon their evaluation of ESI's financial condition, market conditions and other factors they may deem material, the Reporting Persons may seek to acquire additional shares of ESI Common Stock in the open market or in private transactions. Except as set forth above, the Reporting Persons currently do not have any definitive plans that relate to or would result in transactions of the kind described in paragraphs (a) through (j) of Item 4 of Schedule 13D, but the Reporting Persons from time to time engage in discussions with ESI regarding potential business transactions that could result in the adoption of such plans.

**Item 5. Interest in Securities of the Issuer**

(a) Medtronic, through MIL, is the beneficial owner of 0 shares of Common Stock of ESI, which represents approximately 0% of the outstanding Common Stock of ESI. To the knowledge of the Reporting Persons, no other person named in Item 2 beneficially owns any ESI shares.

(b) Medtronic, through MIL, had the sole power to vote and the sole power to dispose of all shares of ESI Common Stock beneficially owned by it.

(c) No transactions in the Common Stock of ESI were effected by persons named in paragraph (a) above during the past sixty days. All transactions reducing the holdings of such persons since the most recent filing on Schedule 13D occurred more than sixty days before the date of this filing.

(d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds of the sale of, the subject securities.

(e) On or about September 23, 2003, the Reporting Persons ceased to be the beneficial owner of more than five percent of the subject securities.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer**

See Item 4.

**Item 7. Material to Be Filed as Exhibits**

Exhibit A Agreement by the persons filing this Schedule 13D Amendment to make a joint filing.

Exhibit B Warrant to purchase 223,777 shares of ESI Common Stock



## Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 13, 2004

MEDTRONIC, INC.

By: /s/ Carol E. Malkinson  
Carol E. Malkinson  
Senior Legal Counsel and Assistant  
Secretary

MEDTRONIC INTERNATIONAL, LTD.

By: /s/ Carol E. Malkinson  
Carol E. Malkinson  
Assistant Secretary

EXHIBIT INDEX

| Exhibit | Description   |
|---------|---|
| A       | Agreement by the persons filing this Schedule 13D Amendment to make a joint filing. |
| B       | Warrant to purchase 223,777 shares of ESI Common Stock                              |

---

Exhibit A

The undersigned hereby agree to file the attached joint Schedule 13D Amendment and any future Amendments hereafter with respect to the interests of the undersigned in Endocardial Solutions, Inc. The Schedule 13D Amendment to which this Exhibit A is attached has been filed on behalf of each of the undersigned and any future Schedule 13D Amendments filed hereafter shall be filed on behalf of each of the undersigned.

Dated: February 13, 2004.

MEDTRONIC, INC.

By: /s/ Carol E. Malkinson  
Carol E. Malkinson, Senior Legal  
Counsel and Assistant Secretary

MEDTRONIC INTERNATIONAL, LTD.

By: /s/ Carol E. Malkinson  
Carol E. Malkinson, Senior Legal  
Counsel and Assistant Secretary

---

Exhibit B

THIS WARRANT, AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE HEREOF, HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS AND MAY NOT BE REOFFERED OR SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF, EXCEPT PURSUANT TO (1) REGISTRATION OR (2) AN OPINION OF COUNSEL FOR THE COMPANY OR OTHER COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT SUCH REGISTRATION IS NOT REQUIRED.

**WARRANT**

To Purchase 223,777

Shares of Common Stock of

**ENDOCARDIAL SOLUTIONS, INC.**

Effective May 1, 2003

Endocardial Solutions, Inc., a Delaware corporation (the "Company"), for value received, hereby certifies that Medtronic International, Ltd., a Delaware corporation, or its registered assigns (the "Holder"), is entitled, subject to the terms set forth below, upon exercise of this Warrant to purchase from the Company, at any time or from time to time on or after the earlier of May 1, 2004 or a Change of Control of Licensee (as defined in the License Agreement between Medtronic, Inc. and the Company dated January 30, 1998), and on or before 11:59 p.m. (Minneapolis, Minnesota time) on the five-year anniversary of the date hereof, up to Two Hundred Twenty-three Thousand Seven Hundred Seventy-seven (223,777) shares of Common Stock, \$.01 par value, of the Company ("Common Stock") at a purchase price per share equal to \$3.81 (subject to adjustment in accordance with Section 4 hereof), which number of shares the Company hereby represents and warrants to equal two and one-half percent (2.5%) of the total number of shares of Common Stock issued and outstanding on January 30, 1998, and which per share purchase price the Company hereby represents and warrants to equal 1.25 times the average closing price of Common Stock for the twenty (20) trading days ending on and including the trading day immediately preceding the effective date hereof. The shares issuable upon exercise or conversion of this Warrant, and the purchase price per share, each as adjusted from time to time pursuant to the provisions of this Warrant, are hereinafter referred to as the "Warrant Shares" and the "Exercise Price", respectively.

This Warrant is further subject to the following provisions, terms and conditions:

1. **Exercise of Warrant.** This Warrant may be exercised by the Holder, in whole or in part (but not as to any fraction of a share of Common Stock), by surrendering this Warrant, with the Exercise Form attached hereto as Exhibit A filled-in and duly executed by such Holder or by such Holder's duly authorized attorney, to the Company at its principal office accompanied by payment of the Exercise Price in the form of a check or wire transfer in the amount of the Exercise Price multiplied by the number of shares as to which the Warrant is being exercised.

1. Exercise of Warrant. This Warrant may be exercised by the Holder, in whole or in part (but not ~~as~~ to any







2. Conversion of Warrant. The Holder shall also have the right (the Conversion Right ) to convert all or any portion of this Warrant into such number of shares (rounded to the nearest whole share) of Company Common Stock equal to the quotient obtained by dividing (i) the Aggregate Warrant Spread as of the date the Conversion Right is exercised, by (ii) the Market Price of the Common Stock as of the date the Conversion Right is exercised. The Conversion Right shall be exercisable at any time on or after the earlier of May 1, 2004 or a Change of Control of Licensee (as defined in the License Agreement between Medtronic, Inc. and the Company dated January 30, 1998), or from time to time thereafter prior to expiration of this Warrant, by surrendering this Warrant with the Conversion Form attached hereto as Exhibit B filled-in and duly executed by such Holder or by such Holder's duly authorized attorney to the Company at its principal office.

2. Conversion of Warrant. The Holder shall also have the right (the Conversion Right ) to convert all or any





(b) For purposes of this Section 2, the **Aggregate Warrant Spread** of all or a portion of this Warrant as of a particular date shall equal (i) the **Market Price of the Common Stock** multiplied by the number of shares of **Common Stock** purchasable upon exercise of all or such portion of this Warrant on such date, minus (ii) the **Exercise Price** multiplied by the number of shares of **Common Stock** purchasable upon exercise of all or such portion of this Warrant on such date. For purposes of this Section 2, the **Market Price of the Common Stock** as of a particular date shall equal: (i) if the **Common Stock** is traded on an exchange or is quoted on either the **Nasdaq National Market** or **Small-Cap Market**, then the average of the closing or last sale prices, respectively, reported for the ten (10) trading days immediately preceding such date, or (ii) if the **Common Stock** is not traded on an exchange, the **Nasdaq National Market**, or the **Nasdaq Small-Cap Market** but is traded in the local over-the-counter market, then the average of the mid-points between the highest bid and lowest asked quotations for each of the ten (10) trading days immediately preceding such date.

(b) For purposes of this Section 2, the **Aggregate Warrant Spread** of all or a portion of this Warrant as of a



3. **Effective Date of Exercise or Conversion.** Each exercise or conversion of this Warrant shall be deemed effective as of the close of business on the day on which this Warrant is surrendered to the Company as provided in Section 1 or Section 2(a) above. At such time, the person or persons in whose name or names any certificates for Warrant Shares shall be issuable upon such exercise or conversion shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates. Within ten (10) days after the exercise or conversion of this Warrant in full or in part, the Company will, at its expense, cause to be issued in the name of and delivered to the Holder or such other person as the Holder may (upon payment by such Holder of any applicable transfer taxes) direct: (i) a certificate or certificates for the number of full Warrant Shares to which such Holder is entitled upon such exercise or conversion, and (ii) unless this Warrant has expired, a new Warrant or Warrants (dated the date hereof and in form identical hereto) representing the right to purchase the remaining number of shares of Common Stock, if any, with respect to which this Warrant has not then been exercised or converted.**Adjustments to Exercise Price.** The above provisions are, however, subject to the following:(i) If the Company shall at anytime after the date of this Warrant subdivide or combine the outstanding shares of Common Stock or declare a dividend payable in Common Stock, then the number of shares of Common Stock for which this Warrant may be exercised as of immediately prior to the subdivision, combination or record date for such dividend payable in













**Common Stock shall forthwith be proportionately decreased, in the case of combination, or increased, in the case of subdivision or dividend payable in Common Stock.**



Edgar Filing: ENDOCARDIAL SOLUTIONS INC - Form SC 13D/A

(ii) If the Company shall at anytime after the date of this Warrant subdivide or combine the outstanding shares of Common Stock or declare a dividend payable in Common Stock, the Exercise Price in effect immediately prior to the subdivision, combination or record date for such dividend payable in Common Stock shall forthwith be proportionately increased, in the case of combination, or decreased, in the case of subdivision or dividend payable in Common Stock.

**(b) If any capital reorganization or reclassification of the capital stock of the Company, or share exchange, combination, consolidation or merger of the Company with another corporation, or the sale of all or substantially all of its assets to another corporation shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such reorganization, reclassification, share exchange, combination, consolidation, merger or sale, lawful and adequate provision shall be made whereby the Holder shall thereafter have the right to receive upon exercise of this Warrant upon the basis and upon the terms and conditions specified in this Warrant and in lieu of the shares of the Common Stock of the Company into which this Warrant was immediately theretofore exercisable or convertible, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such stock into which this Warrant was immediately theretofore exercisable had such reorganization, reclassification, share exchange, combination, consolidation, merger or sale not taken place, and in any such case appropriate provisions shall be made with respect to the rights and interests of Holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Exercise Price and of the number of shares purchasable upon exercise or conversion of this Warrant) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise or conversion hereof. The Company shall not effect any such share exchange, combination, consolidation, merger or sale, unless prior to the consummation thereof the successor corporation (if other than the Company) resulting from such share exchange, combination, consolidation or merger or the corporation purchasing such assets shall assume by written instrument executed and mailed to the Holder at the last address of such Holder appearing on the books of the Company, the obligation to deliver to such Holder such shares of stock, securities or assets which, in accordance with the foregoing provisions, such Holder may thereafter be entitled to receive upon exercise or conversion of this Warrant.**

(b) If any capital reorganization or reclassification of the capital stock of the Company, or share exchange, combination, consolidation or merger of the Company with another corporation, or the sale of all or substantially all of its assets to another corporation shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such reorganization, reclassification, share exchange, combination, consolidation, merger or sale, lawful and adequate provision shall be made whereby the Holder shall thereafter have the right to receive upon exercise of this Warrant upon the basis and upon the terms and conditions specified in this Warrant and in lieu of the shares of the Common Stock of the Company into which this Warrant was immediately theretofore exercisable or convertible, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such stock into which this Warrant was immediately theretofore exercisable had such reorganization, reclassification, share exchange, combination, consolidation, merger or sale not taken place, and in any such case appropriate provisions shall be made with respect to the rights and interests of Holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Exercise Price and of the number of shares purchasable upon exercise or conversion of this Warrant) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise or conversion hereof. The Company shall not effect any such share exchange, combination, consolidation, merger or sale, unless prior to the consummation thereof the successor corporation (if other than the Company) resulting from such share exchange, combination, consolidation or merger or the corporation purchasing such assets shall assume by written instrument executed and mailed to the Holder at the last address of such Holder appearing on the books of the Company, the obligation to deliver to such Holder such shares of stock, securities or assets which, in accordance with the foregoing provisions, such Holder may thereafter be entitled to receive upon exercise or conversion of this Warrant.



(c) If at anytime after the date of this Warrant the Company distributes to all holders of Common Stock any assets (excluding ordinary cash dividends), debt securities, or any rights or warrants to purchase debt securities, assets or other securities (including Common Stock), the Exercise Price shall be adjusted in accordance with the formula:

(c) If at anytime after the date of this Warrant the Company distributes to all holders of Common Stock any as



$$E^1 = \underline{E_x(O_x M)} - F$$

O x M

where:



$E^1$  = the adjusted Exercise Price.

$E$  = the current Exercise Price.

$M$  = the average market price of Common Stock for the 30 consecutive trading days commencing 45 trading days before the record date mentioned below.

$O$  = the number of shares of Common Stock outstanding on the record date mentioned below.

$F$  = the fair market value on the record date of the aggregate of all assets, securities, rights or warrants distributed. The Company's Board of Directors shall determine the fair market value in the exercise of its reasonable judgment.

The adjustment shall be made successively whenever any such distribution is made and shall become effective immediately after the record date for the determination of stockholders entitled to receive the distribution.

**(d) Upon any adjustment of the Exercise Price, then and in each such case, the Company shall give written notice thereof, by first class mail, postage prepaid, addressed to the Holder of this Warrant at the address of such Holder as shown on the books of the Company, which notice shall state the Exercise Price resulting from such adjustment and the increase or decrease, if any, in the number of shares for which this Warrant may be exercised, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based.**

(d) Upon any adjustment of the Exercise Price, then and in each such case, the Company shall give written notice



(5) Common Stock. As used herein, the term Common Stock shall mean and include the Company's presently authorized shares of common stock and shall also include any capital stock of any class of the Company hereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends or in the distribution, dissolution or winding up of the Company. No Voting Rights. This Warrant shall not entitle the Holder to any voting rights or other rights as a shareholder of the Company unless and until exercised or converted pursuant to the provisions hereof. Exercise or Transfer of Warrant or Resale of Common Stock. The Holder, by acceptance hereof, agrees to give written notice to the Company before transferring this Warrant, in whole or in part, or transferring any shares of Common Stock issued upon the exercise or conversion hereof, of such Holder's intention to do so, describing briefly the manner of any proposed transfer. Such notice shall include an opinion of counsel reasonably satisfactory to the Company that (i) the proposed exercise or transfer may be effected without registration or qualification under the Securities Act of 1933, as amended (the "Act") and any applicable state securities or blue sky laws, or (ii) the proposed exercise or transfer has been registered under such laws. Upon delivering such notice, such Holder shall be entitled to transfer this Warrant or such Warrant Shares, all in accordance with the terms of the notice delivered by such Holder to the Company, provided that an appropriate legend may be endorsed on the certificates for such shares respecting restrictions upon transfer thereof necessary or advisable in the opinion of counsel to the Company to prevent further transfer which would be in violation of Section 5 of the Act and applicable state securities or blue sky laws. If in the opinion of counsel to the Company or other counsel reasonably acceptable to the Company the proposed transfer or disposition of this Warrant or the Warrant Shares described in the written notice given pursuant to this Section 7 may not be effected without





**registration of this Warrant or the Warrant Shares, the Company shall promptly give written notice thereof to the Holder within 10 days after the Company receives such notice, and such holder will limit its activities in respect to such as, in the opinion of such counsel, is permitted by law.**

8. **Covenants of the Company.** The Company covenants and agrees that all shares which may be issued upon conversion of this Warrant will, upon issuance, be duly authorized and issued, fully paid, nonassessable and free from all taxes, liens and charges with respect to the issue thereof. The Company further covenants and agrees that the Company will at all times have authorized, and reserved for the purpose of issue upon exercise hereof, a sufficient number of shares of its Common Stock to provide for the exercise of this Warrant.**Certain Notices.** The Holder shall be entitled to receive from the Company immediately upon declaration thereof and at least thirty (30) days prior to the record date for determination of shareholders entitled thereto or to vote thereon (or if no record date is set, prior to the event), written notice of any event which could require an adjustment pursuant to Section 4 hereof or of the dissolution or liquidation of the Company. All notices hereunder shall be in writing and shall be delivered personally or by telecopy (receipt confirmed) to such party (or, in the case of an entity, to an executive officer of such party) or shall be sent by a reputable express delivery service or by certified mail, postage prepaid with return receipt requested, addressed as follows:if to Medtronic, to:

Medtronic, Inc.

World Headquarters

710 Medtronic Parkway, N.E.

Minneapolis, MN 55432-5604

with separate copies thereof addressed to:

Attention: General Counsel

FAX (763) 572-5459

Attention: Vice President, Chief Development Officer

FAX (763) 505-2542

if to the Company to:

Endocardial Solutions, Inc.

1350 Energy Lane, Suite 110

St. Paul, MN 55108-5254

Attention: Chief Financial Officer

FAX (651) 644-7897

Any party may change the above-specified recipient and/or mailing address by notice to all other parties given in the manner herein prescribed. All notices shall be deemed given on the day when actually delivered as provided above (if delivered personally or by telecopy) or on the day shown on the return receipt (if delivered by mail or delivery service).



10. **Registration Rights.** The Holders of this Warrant and the Warrant Shares are entitled to the rights and benefits of all of the terms, provisions and conditions of that certain Registration Rights Agreement dated January 30, 1998 between Medtronic, Inc. and the Company, provided an express sharing or assignment of such rights and benefits is made to each such Holder by such Holder's transferor. Miscellaneous. No amendment, modification or waiver of any provision of this Warrant shall be effective unless the same shall be in writing and signed by the holder hereof.



(b) **This Warrant shall be governed by and construed in accordance with the laws of the State of Minnesota.**

(b) This Warrant shall be governed by and construed in accordance with the laws of the State of Minnesota.



(Signatures on the following page)

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its authorized officer and dated to be effective as of the date stated above.

ENDOCARDIAL SOLUTIONS, INC.

By:                   /s/ J. Robert Paulson, Jr.  
                          J. Robert Paulson, Jr.  
                          Chief Financial Officer

NOTICE OF EXERCISE OF WARRANT

To Be Executed by the Registered Holder in Order to Exercise the Warrant

The undersigned hereby irrevocably elects to exercise the attached Warrant to purchase, for cash pursuant to Section 1 thereof, shares of Common Stock issuable upon the exercise of such Warrant. The undersigned requests that certificates for such shares be issued in the name of . If this Warrant is not fully exercised, the undersigned requests that a new Warrant to purchase the balance of shares remaining purchasable hereunder be issued in the name of .

Date: ,

[name of registered Holder]

[signature]

[street address]

[city, state, zip]

[tax identification number]

---

NOTICE OF CONVERSION OF WARRANT

To Be Executed by the Registered Holder in Order to Convert the Warrant on a Cashless Basis

The undersigned hereby irrevocably elects to convert, on a cashless basis, a total of \_\_\_\_\_ shares of Common Stock otherwise purchasable upon exercise of the attached Warrant into such lesser number of shares of Common Stock as determined by Section 2 of the Warrant. The undersigned requests that certificates for such shares be issued in the name of \_\_\_\_\_. If this Warrant is not fully converted, the undersigned requests that a new Warrant to purchase the balance of shares remaining purchasable hereunder be issued in the name of \_\_\_\_\_.

Date: \_\_\_\_\_,

[name of registered Holder]

[signature]

[street address]

[city, state, zip]

[tax identification number]