

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

FORM S-8
REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

ENTEROMEDICS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

48-1293684
(I.R.S. Employer
Identification No.)

2800 Patton Road
St. Paul, MN 55113
(Address, including zip code, of registrant's principal executive offices)

ENTEROMEDICS INC. 2003 STOCK INCENTIVE PLAN
(Full title of the plan)

Greg S. Lea
Chief Financial Officer and Secretary
EnteroMedics Inc.
2800 Patton Road
St. Paul, MN 55113
(651) 634-3003
(Name, address and telephone number, including area code, of agent for service)

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

Large accelerated filer Accelerated Filer
Non-accelerated filer Smaller Reporting Company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock (\$0.01 par value per share)	3,749,388	(2)	\$ 20,514,073(2)	\$ 807

- (1) The number of shares being registered consists of 3,080,734 shares of EnteroMedics Inc. ("EnteroMedics") common stock that are subject to previously granted stock options under the 2003 Stock Incentive Plan (the "2003 Plan") and 668,654 shares of EnteroMedics common stock to be issued pursuant to the future grant or exercise of options under the 2003 Plan. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers additional shares of EnteroMedics common stock that may become issuable in accordance with the adjustment and anti-dilution provisions of the 2003 Plan.
- (2) Estimated solely for the purpose of determining the registration fee pursuant to Rule 457(h)(1) and (c) under the Securities Act. The proposed maximum aggregate offering price is based upon: (i) the weighted average exercise price of \$4.84 for the 3,080,734 options previously granted under the 2003 Plan and (ii) the average of the high and low sale prices of EnteroMedics' common stock as reported on the Nasdaq Global Market on March 7, 2008, or \$8.38, for the 668,654 shares which are available for issuance under the 2003 Plan.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Securities and Exchange Commission by EnteroMedics Inc. (hereinafter “we,” “us” or “EnteroMedics”), are incorporated by reference in this registration statement:

- (a) Our Prospectus filed pursuant to Rule 424(b) under the Securities Act with the Securities and Exchange Commission (the “SEC”) on November 14, 2007;
- (b) Our Current Reports on Form 8-K filed with the SEC on December 6, 2007 and February 12, 2008; and
- (c) The description of our common stock contained in our Registration Statement on Form 8-A filed on November 8, 2007, including any amendment or report filed for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date hereof and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold shall be deemed to be incorporated by reference herein and to be a part hereof from the respective dates of filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

Article 6 of our amended and restated certificate of incorporation provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except for liability (i) for any breach of the director’s duty of loyalty to our company or its stockholders, (ii) for acts or omissions not in good faith or which involved intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit.

Article 8 of our bylaws provides that we will indemnify each person who was or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of our company or is or was serving at the request of our company as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent (all such persons are referred to as an indemnitee), shall be indemnified and held harmless by our company, against all expenses, liability and loss (including attorneys’ fees, judgments, fines, penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if such indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our bylaws provide that we will indemnify any indemnitee seeking indemnity in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by our board of directors. We will indemnify the indemnitee for expenses incurred in defending any such proceeding in advance of its final disposition to the extent not prohibited by law. Such indemnification will only be made if the indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Expenses must be advanced to an indemnitee under certain circumstances.

As a condition precedent to the right of indemnification, an indemnitee must give us notice of the action for which indemnity is sought and we have the right to participate in such action or assume the defense thereof.

Article 8 of our bylaws further provides that the indemnification provided therein is not exclusive, and provides that no amendment, termination or repeal of the relevant provisions of the Delaware law statute or any other applicable law will diminish the rights of any Indemnitee to indemnification under our certificate of incorporation.

Section 145 of the Delaware law statute provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or such other court shall deem proper.

We have obtained director and officer insurance providing for indemnification for our directors and officers for certain liabilities and such insurance provides for indemnification of our directors and officers for liabilities under the Securities Act.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

- 4.1 Amended and Restated Certificate of Incorporation (Incorporated by reference to Exhibit 3.2 to the Company's Amendment No. 6 to Form S-1, Registration Statement No. 333-143265, filed November 9, 2007).
- 4.2 Amended and Restated Bylaws (Incorporated by reference to Exhibit 3.4 to the Company's Amendment No. 1 to Form S-1, Registration Statement No. 333-143265, filed July 6, 2007).
- 5.1 Opinion of Dorsey & Whitney LLP.
- 23.1 Consent of Deloitte & Touche LLP.
- 23.2 Consent of Dorsey & Whitney LLP (contained in Exhibit 5.1 to this Registration Statement).
- 24.1 Power of Attorney (contained on signature page).

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of St. Paul, State of Minnesota, on the 12th day of March, 2008.

ENTEROMEDICS INC.

By /s/ Mark B. Knudson, Ph.D.

Mark B. Knudson, Ph.D.

President and Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark B. Knudson and Greg S. Lea, and each of them, his true and lawful attorneys-in-fact and agents, each acting alone, with the powers of substitution and revocation, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8, and any and all amendments (including post-effective amendments) thereto, relating to the issuance of shares of common stock of EnteroMedics Inc. pursuant to the EnteroMedics Inc. 2003 Stock Incentive Plan and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto such attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that all such attorneys-in-fact and agents or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on the 12th day of March, 2008.

<u>Signature</u>	<u>Title</u>
<u>/s/ Mark B. Knudson, Ph.D.</u> Mark B. Knudson, Ph.D.	President, Chief Executive Officer, Chairman of the Board and Director (principal executive officer)
<u>/s/ Greg S. Lea</u> Greg S. Lea	Senior Vice President, Chief Financial Officer and Secretary (principal financial and accounting officer)
<u>/s/ Luke Evnin, Ph.D.</u> Luke Evnin, Ph.D.	Director
<u>/s/ Catherine Friedman</u> Catherine Friedman	Director
<u>/s/ Carl Goldfischer, M.D.</u> Carl Goldfischer, M.D.	Director
<u>/s/ Bobby I. Griffin</u> Bobby I. Griffin	Director
<u>/s/ Donald C. Harrison, M.D.</u> Donald C. Harrison, M.D.	Director
<u>/s/ Paul H. Klingenstein</u> Paul H. Klingenstein	Director
<u>/s/ Ellen Koskinas</u> Ellen Koskinas	Director
<u>/s/ Nicholas L. Teti, Jr.</u> Nicholas L. Teti, Jr.	Director

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[Dorsey and Whitney LLP Letterhead]

March 12, 2008

EnteroMedics Inc.
2800 Patton Road
St. Paul, MN 55113

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to EnteroMedics Inc., a Delaware corporation (the "Company"), in connection with the registration under the Securities Act of 1933, as amended, on a registration statement on Form S-8 (the "Registration Statement") of an aggregate of 3,749,388 shares of the Company's common stock, \$0.01 par value per share (the "Shares"), issuable under the EnteroMedics Inc. 2003 Stock Incentive Plan (the "Plan").

We have examined such documents and have reviewed such questions of law as we have considered necessary and appropriate for the purposes of this opinion. In rendering our opinion set forth below, we have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures and the conformity to authentic originals of all documents submitted to us as copies. We have also assumed the legal capacity for all purposes relevant hereto of all natural persons. As to questions of fact material to our opinion, we have relied upon certificates of officers of the Company and of public officials.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance, delivery and payment therefor in accordance with the terms of the Plan, and any relevant agreements thereunder, will be validly issued, fully paid and nonassessable.

Our opinion expressed above is limited to the Delaware General Corporation Law.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. The foregoing opinion is being furnished to you solely for your benefit and may not be relied upon by, nor may copies be delivered to, any other person without our prior written consent.

Very truly yours,

/s/ Dorsey & Whitney LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated May 21, 2007 (which report expresses an unqualified opinion and includes an explanatory paragraph related the January 1, 2006 adoption of the provisions of Financial Accounting Standards Board No. 123(R), *Share-Based Payment*), relating to the consolidated financial statements of EnteroMedics Inc. and subsidiary appearing in the prospectus included in Registration Statement No. 333-143265.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
March 12, 2008