

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

SCHEDULE 14A

(Rule 14a-101)
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

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 Rule 14a-12

EnteroMedics Inc.

(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:

Fee paid previously with preliminary materials.

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.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:



2800 Patton Road
St. Paul, MN 55113
(651) 634-3003

October 1, 2010

Dear Stockholders:

You are cordially invited to join us for a special meeting of stockholders, which will be held on Friday, October 22, 2010, at 8:00 a.m., Central Time, at the headquarters of EnteroMedics, 2800 Patton Road, St. Paul, Minnesota 55113. For your convenience, a map showing the location of the Company's headquarters is provided on the back of the accompanying proxy statement. Holders of record of our common stock as of September 24, 2010, are entitled to notice of and to vote at the special meeting.

The Notice of Special Meeting of Stockholders and the proxy statement that follow describe the business to be conducted at the meeting.

We hope you will be able to attend the meeting. However, even if you plan to attend in person, please vote your shares promptly to ensure that they are represented at the meeting. You may submit your proxy vote by telephone or internet as described in the following materials or by completing and signing the enclosed proxy card and returning it in the envelope provided. If you decide to attend the meeting and wish to change your proxy vote, you may do so automatically by voting in person at the meeting.

We look forward to seeing you at the special meeting.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark B. Knudson', with a long, sweeping underline.

*Mark B. Knudson, Ph.D.
President and Chief Executive Officer*



NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

Date and Time: Friday, October 22, 2010 at 8:00 a.m., Central Time

Place: Enteromedics Inc.
2800 Patton Road
St. Paul, Minnesota 55113

- Item of Business:**
1. Approve an amendment to the 2003 Stock Incentive Plan to increase the number of shares authorized under the plan by 1,149,817 from 1,150,183 to 2,300,000.
 2. Approve an amendment to the 2003 Stock Incentive Plan to allow for a one-time stock option exchange program.
 3. Such other matters as may properly come before the special meeting or any adjournment thereof.

Record Date: You may vote at the meeting if you were a stockholder of record at the close of business on September 24, 2010.

Voting by Proxy: If you cannot attend the special meeting in person, you may vote your shares by telephone or internet by no later than 12:00 p.m. Central Time on October 21, 2010 (as directed on the enclosed proxy card), or by completing, signing and promptly returning the enclosed proxy card by mail. We encourage you to vote by telephone or internet in order to reduce our mailing and handling expenses. If you choose to submit your proxy by mail, we have enclosed an envelope addressed to our transfer agent, Wells Fargo Shareowner Services, for which no postage is required if mailed in the United States.

By Order of the Board of Directors:

Greg S. Lea
Secretary

October 1, 2010

**PROXY STATEMENT
2010 SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON OCTOBER 22, 2010**

The Board of Directors of EnteroMedics Inc. (the "Company") is soliciting proxies for use at the special meeting of stockholders to be held on October 22, 2010, and at any adjournment of the meeting. This proxy statement and the enclosed proxy card are first being mailed or given to stockholders on or about October 1, 2010.

QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETING AND VOTING

What is the purpose of the meeting?

At our special meeting, stockholders will act upon the matters outlined in the Notice of Special Meeting of Stockholders, including approving amendments to our 2003 Stock Incentive Plan to (i) increase the number of shares authorized under the plan by 1,149,817 and (ii) allow for a one-time stock option exchange program.

Who is entitled to vote at the meeting?

The Board has set September 24, 2010, as the record date for the special meeting. If you were a stockholder of record at the close of business on September 24, you are entitled to vote at the meeting.

As of the record date, _____ shares of our common stock were issued and outstanding and, therefore, eligible to vote at the meeting.

What are my voting rights?

Holders of our common stock are entitled to one vote per share. Therefore, a total of _____ votes are entitled to be cast at the meeting. There is no cumulative voting.

How many shares must be present to hold the meeting?

In accordance with our bylaws, shares equal to a majority of all of the shares of the outstanding common stock as of the record date must be present at the meeting in order to hold the meeting and conduct business. This is called a quorum. Your shares are counted as present at the meeting if:

- you are present and vote in person at the meeting; or
- you have properly submitted a proxy card by mail, telephone or internet.

How do I vote my shares?

If you are a stockholder of record as of the record date, you can give a proxy to be voted at the meeting in any of the following ways:

- over the telephone by calling a toll-free number;
- electronically, using the internet; or
- by completing, signing and mailing the enclosed proxy card.

The telephone and internet procedures have been set up for your convenience. We encourage you to save corporate expense by submitting your vote by telephone or internet. The procedures have been designed to authenticate your identity, to allow you to give voting instructions, and to confirm that those instructions have been recorded properly. If you are a stockholder of record and you would like to submit your proxy by telephone or internet, please refer to the specific instructions provided on the enclosed proxy card. If you wish to submit your proxy by mail, please return your signed proxy card to us before the special meeting.

If you hold your shares in “street name,” you must vote your shares in the manner prescribed by your broker or other nominee. Your broker or other nominee has enclosed or otherwise provided a voting instruction card for you to use in directing the broker or nominee how to vote your shares, and telephone and internet voting is also encouraged for stockholders who hold their shares in street name.

What is the difference between a stockholder of record and a “street name” holder?

If your shares are registered directly in your name, you are considered the stockholder of record with respect to those shares.

If your shares are held in a stock brokerage account or by a bank, trust or other nominee, then the broker, bank, trust or other nominee is considered to be the stockholder of record with respect to those shares. However, you still are considered the beneficial owner of those shares, and your shares are said to be held in “street name.” Street name holders generally cannot vote their shares directly and must instead instruct the broker, bank, trust or other nominee how to vote their shares using the method described above.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, it means that you hold shares registered in more than one account. To ensure that all of your shares are voted, sign and return each proxy card or, if you submit your proxy vote by telephone or internet, vote once for each proxy card you receive.

Can I vote my shares in person at the meeting?

If you are a stockholder of record, you may vote your shares in person at the meeting by completing a ballot at the meeting. Even if you currently plan to attend the meeting, we recommend that you also submit your proxy as described above so that your vote will be counted if you later decide not to attend the meeting.

If you are a street name holder, you may vote your shares in person at the meeting only if you obtain a signed letter or other proxy from your broker, bank, trust or other nominee giving you the right to vote the shares at the meeting.

What vote is required for a proposal to be approved?

The approval of the amendments to the 2003 Stock Incentive Plan to (i) increase the number of shares authorized under the plan by 1,149,817 and (ii) allow for a one-time stock option exchange program and each other matter that may be acted upon at the meeting will be determined by the affirmative vote of the holders of a majority of the shares of our common stock present in person or by proxy at the meeting and entitled to vote.

How are votes counted?

You may vote “FOR,” “AGAINST” or “ABSTAIN” on the proposals to amend the 2003 Stock Incentive Plan and to approve the one-time stock option exchange program.

If you submit your proxy but abstain from voting on the matter, your shares will be counted as present at the meeting for the purpose of determining a quorum. Your shares also will be counted as present at the meeting for the purpose of calculating the vote on the particular matter with respect to which you abstained from voting or withheld authority to vote.

If you abstain from voting on a proposal, your abstention has the same effect as a vote against that proposal.

If you hold your shares in street name and do not provide voting instructions to your broker or other nominee, your shares will be considered to be “broker non-votes” and will not be voted on any proposal on which your broker or other nominee does not have discretionary authority to vote under the rules of the Securities and Exchange Commission (“SEC”) and the NASDAQ Stock Market. If you hold your shares in street name and do

not instruct your broker or nominee how to vote on the two proposals to be addressed at the special meeting, no votes will be cast on your behalf on the approval of either of the amendments to the 2003 Stock Incentive Plan to (i) increase the number of shares authorized under the plan by 1,149,817 or (ii) allow for a one-time stock option exchange program. If you are a stockholder of record and you do not cast your vote, no votes will be cast on your behalf on any item of business at the special meeting.

How will the proxies vote on any other business brought up at the meeting?

By submitting your proxy card, you authorize the proxies to use their judgment to determine how to vote on any other matter brought before the meeting. We do not know of any other business to be considered at the meeting.

The proxies' authority to vote according to their judgment applies only to shares you own as the stockholder of record.

Who will count the vote?

Representatives of Wells Fargo Shareowner Services, our transfer agent, will tabulate votes and act as independent inspectors of election.

How does the Board recommend that I vote?

You will vote on the following management proposals:

- Amendment to the 2003 Stock Incentive Plan to increase the number of shares authorized for issuance by 1,149,817 shares from 1,150,183 to 2,300,000.
- Amendment to the 2003 Stock Incentive Plan to allow for a one-time stock option exchange program.

The Board of Directors recommends that you vote **FOR** both of the proposed amendments to the 2003 Stock Incentive Plan.

What if I do not specify how I want my shares voted?

If you submit a signed proxy card or submit your proxy by telephone and do not specify how you want to vote your shares, we will vote your shares **FOR** both of the amendments to the 2003 Stock Incentive Plan.

Can I change my vote after submitting my proxy?

Yes. You may revoke your proxy and change your vote at any time before your proxy is voted at the special meeting. If you are a stockholder of record, you may revoke your proxy and change your vote by submitting a later-dated proxy by telephone, internet or mail, or by voting in person at the meeting. To request an additional proxy card, or if you have any questions about the special meeting or how to vote or revoke your proxy, you should contact Wells Fargo Shareowner Services at 1-800-468-9716.

Where and when will I be able to find the results of the voting?

Preliminary results will be announced at the meeting. We will publish the final results in a Current Report on Form 8-K to be filed with the SEC no later than four business days after the date of the special meeting.

Who pays for the cost of proxy preparation and solicitation?

We pay for the cost of proxy preparation and solicitation, including the reasonable charges and expenses of brokerage firms, banks or other nominees for forwarding proxy materials to street name holders.

We are soliciting proxies primarily by mail. In addition, our directors, officers and regular employees may solicit proxies by telephone, facsimile or personally. These individuals will receive no additional compensation for their services other than their regular salaries.

How can I communicate with EnteroMedics' Board of Directors?

Stockholders may communicate with our Board of Directors by sending a letter addressed to the Board of Directors, all independent directors or specified individual directors to: EnteroMedics Inc., c/o Corporate Secretary, 2800 Patton Road, St. Paul, Minnesota 55113. All communications will be compiled by the Corporate Secretary and submitted to the Board or the specified directors on a periodic basis.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows the beneficial ownership of our common stock by each person or group who beneficially owned five percent or more of our common stock, each of our directors, each of the executive officers named in the Summary Compensation Table in this proxy statement and our directors and executive officers as a group, as of August 31, 2010. Percentage ownership calculations for beneficial ownership are based on 7,478,079 shares outstanding as of August 31, 2010. The information regarding the beneficial owners of more than 5% of our common stock is based upon information supplied to us by our directors, officers and principal stockholders or on Schedules 13G filed with the SEC. Unless otherwise noted, the stockholders listed in the table have sole voting and investment power with respect to the shares of common stock owned by them and their address is c/o EnteroMedics Inc., 2800 Patton Road, St. Paul, Minnesota 55113.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership ⁽¹⁾	Percent of Class
MPM Capital Funds ⁽³⁾⁽⁴⁾ c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 54 th Floor Boston, MA 02116	1,133,254	14.8%
Bay City Capital ⁽²⁾⁽³⁾⁽⁵⁾ 750 Battery Street, Suite 400 San Francisco, CA 94111	885,047	11.6
T. Rowe Price ⁽³⁾⁽⁶⁾ 100 E. Pratt Street Baltimore, MD 21202	722,829	9.4
Aberdare Ventures ⁽³⁾⁽⁷⁾ One Embarcadero Center, Suite 4000 San Francisco, CA 94111	640,394	8.4
Mark B. Knudson, Ph.D. ⁽²⁾⁽³⁾	181,366	2.4
Greg S. Lea ⁽²⁾⁽³⁾	46,145	*
Adrianus (Jos) Donders ⁽²⁾	50,841	*
Katherine S. Tweden, Ph.D. ⁽²⁾	30,458	*
Daniel L. Cohen ⁽²⁾	17,301	*
Luke Evnin, Ph.D. ⁽²⁾⁽³⁾⁽⁴⁾	1,138,583	14.9
Catherine Friedman ⁽²⁾	11,022	*
Carl Goldfischer, M.D. ⁽²⁾⁽³⁾⁽⁵⁾	890,376	11.7
Bobby I. Griffin ⁽²⁾⁽³⁾	104,943	1.4
Donald C. Harrison, M.D. ⁽²⁾⁽³⁾	131,658	1.8
Paul H. Klingenstein ⁽²⁾⁽³⁾⁽⁷⁾	655,685	8.6
Nicholas L. Teti, Jr. ⁽²⁾	24,727	*
Jon T. Tremmel ⁽²⁾	6,874	*
All directors and executive officers as a group (13 persons)⁽⁸⁾	3,289,979	39.6

* The percentage of shares of common stock beneficially owned does not exceed one percent of the outstanding shares of common stock.

- (1) For purposes of this table, a person or group of persons is deemed to have “beneficial ownership” of any shares of common stock which that person has the right to acquire within 60 days following August 31, 2010. For purposes of computing the percentage of outstanding shares of common stock held by each person or group of persons named above, any shares which that person or persons has or have the right to acquire within 60 days following August 31, 2010, is deemed to be outstanding, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person.
- (2) Includes the following shares subject to options exercisable currently or within 60 days of August 31, 2010: Dr. Knudson, 138,194 shares; Mr. Lea, 41,521 shares; Mr. Donders, 50,841 shares; Dr. Tweden, 29,405 shares; Mr. Cohen 17,301 shares; Dr. Evnin, 5,329 shares; Ms. Friedman, 9,022 shares; Dr. Goldfischer,

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- 5,329 shares; Mr. Griffin, 32,801 shares; Dr. Harrison, 5,329 shares; Mr. Klingenstein, 5,329 shares; Mr. Teti, 24,727 shares; and Mr. Tremmel, 4,461 shares. Dr. Goldfischer has assigned the shares underlying his options to Bay City Capital Fund IV upon the exercise of these options.
- (3) Includes warrants exercisable currently or within 60 days of August 31, 2010 as follows: MPM Capital (see footnote (4)), 168,107 shares; Bay City Capital (see footnote (5)), 146,613 shares; T. Rowe Price (see footnote (6)), 210,007 shares; Aberdare Ventures (see footnote (7)), 110,130 shares; Dr. Knudson, 6,004 shares; Mr. Lea, 1,374 shares; Dr. Evnin, 168,107 shares; Dr. Goldfischer, 146,613 shares; Mr. Griffin, 17,182 shares; Dr. Harrison, 2,916 shares; and Mr. Klingenstein, 110,410 shares.
 - (4) Consists of information supplied to us or filed with the SEC by MPM BioVentures III, L.P. (“BV III”), MPM BioVentures III-QP, L.P. (“BV III QP”), MPM BioVentures III Parallel Fund L.P. (“BV III PF”), MPM Bio Ventures III GmbH & Co. Beteiligungs KG (“BV III KG”), MPM Asset Management Investors 2002 BV III LLC (“AM LLC”), MPM BioVentures III GP, L.P. (“BV III GP”), MPM BioVentures III LLC (“BV III LLC”), and Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III, and Dennis Henner. BV III has the sole power to vote and sole power to dispose of 63,405 shares, BV III QP has the sole power to vote and sole power to dispose of 943,042 shares, BV III PF has the sole power to vote and sole power to dispose of 28,489 shares, BV III KG has the sole power to vote and sole power to dispose of 79,689 shares and AM LLC has the sole power to vote and sole power to dispose of 18,629 shares. BV III GP and BV III LLC each have shared power to vote and shared power to dispose of 1,114,625 shares. BV III GP and BV III LLC are the direct and indirect general partners of BV III QP, BV III, BV III PF and BV III KG. Dr. Evnin and Messrs. Gadicke, Galakatos, Steinmetz, Wheeler, Simon and Henner each have shared power to vote and shared power to dispose of 1,133,254 shares. Dr. Evnin and Messrs. Gadicke, Galakatos, Steinmetz, Wheeler, Simon and Henner are each a member of BV III LLC and a manager of AM LLC, and each disclaims beneficial ownership of all such shares except to the extent of his proportionate pecuniary interests therein. Dr. Evnin is a member of our Board of Directors and has sole voting and dispositive power of 5,329 shares.
 - (5) Consists of information supplied to us or filed with the SEC by Bay City Capital LLC (“BCC”) on behalf of Bay City Capital Fund IV, L.P. (“Fund IV”), Bay City Capital Fund IV Co-Investment Fund, L.P. (“Co-Investment IV”) and Bay City Capital Management IV LLC (“Management IV”), each of which has shared voting power and shared dispositive power of 885,047 shares. BCC is the manager of Management IV, which is the general partner of Fund IV and Co-Investment IV. BCC is also an advisor to Fund IV and Co-Investment IV. Carl Goldfischer, a Managing Director of BCC and a member of Management IV, is a member of our Board of Directors and has sole voting and dispositive power of 5,329 shares.
 - (6) Consists of information supplied to us or filed with the SEC by T. Rowe Price Associates, Inc. (“Price Associates”). These securities are owned by various individual and institutional investors including T. Rowe Health Sciences Fund, Inc. (which beneficially owns 420,834 shares and 166,666 warrants exercisable within 60 days of August 31, 2010, representing 7.7% beneficial ownership), which Price Associates serves as investment adviser with power to direct investments and/or sole power to vote the securities. For purposes of the reporting requirements of the Securities Exchange Act of 1934, as amended, Price Associates is deemed to be a beneficial owner of such securities; however, Price Associates expressly disclaims that it is, in fact, the beneficial owner of such securities.
 - (7) Consists of information supplied to us or filed with the SEC by Aberdare Ventures II, L.P. (“Aberdare II”), Aberdare Ventures II (Bermuda), L.P. (“Aberdare Bermuda”), Aberdare II Annex Fund, L.P. (“Aberdare II Annex”), Aberdare GP II, L.L.C. (“Aberdare GP II”) and Paul H. Klingenstein. Mr. Klingenstein serves as Manager of Aberdare GP II, which serves as the general partner of Aberdare II, which holds 245,448 shares, Aberdare II Bermuda, which holds 5,107 shares, and Aberdare II Annex, which holds 389,839 shares, and has voting and investment control of 640,394 shares owned, and may be deemed to own beneficially such shares. Mr. Klingenstein has sole voting and dispositive power of 15,291 shares. Mr. Klingenstein is a member of our Board of Directors.
 - (8) Includes 822,195 shares of common stock issuable upon exercise of options and warrants currently exercisable or exercisable within 60 days of August 31, 2010, inclusive of the options and warrants exercisable as described in footnotes (2) and (3), respectively.

**PROPOSAL 1—AMENDMENT TO THE 2003 STOCK INCENTIVE PLAN
TO INCREASE THE NUMBER OF SHARES AUTHORIZED UNDER THE PLAN**

On September 9, 2010, our Board of Directors approved, subject to stockholder approval, an amendment to the EnteroMedics Inc. 2003 Stock Incentive Plan (the “Plan”), to increase the number of shares authorized for issuance under the Plan by 1,149,817 shares, from 1,150,183 shares to 2,300,000 shares. As of September 15, 2010, there were 901,220 shares that had been issued or which were subject to outstanding awards under the Plan, and there remained 184,839 shares available for grant under the Plan. We are asking our stockholders to approve the amendment to the Plan, as our Board of Directors and management believe that stock-based awards under the Plan are instrumental in attracting, motivating and retaining talented employees, management personnel and non-employee directors. The availability of stock-based compensation not only increases employees’ focus on the creation of stockholder value, but also enhances employee retention and generally provides increased motivation for our employees to contribute to the future success of EnteroMedics. The Plan is the only plan pursuant to which we can grant stock options and other forms of stock-based compensation, and the limited number of shares remaining available under the Plan restricts the Board of Directors’ ability to make stock-based awards. The volatility of the stock market and decline in our stock price has greatly reduced the incentive value of existing shares available for awards as well as outstanding awards under the Plan. Our Board of Directors therefore determined that the number of available shares would not be adequate to provide competitive levels of incentive compensation. For these reasons, our Board of Directors believes that approval of the amendment to the Plan to increase the number of authorized shares is needed and is in the best interests of the Company and our stockholders.

The Board of Directors recommends a vote FOR the amendment of the Plan to increase the number of shares authorized for issuance under the Plan by 1,149,817 shares.

The affirmative vote of the holders of a majority of outstanding shares entitled to vote and present at the special meeting is necessary to approve this amendment to the Plan.

The following is a summary of the material terms of the Plan and is qualified in its entirety by reference to the Plan. A copy of the Plan, as amended to reflect Proposals 1 and 2, is attached as Appendix A to this proxy statement and has been filed with the SEC and is available at www.sec.gov.

This proposal to amend the Plan to increase the number of shares authorized for issuance under the Plan is separate from Proposal 2. In the event that the stockholders should fail to approve Proposal 2 but approve this proposal, we may amend the Plan to increase the number of shares authorized for issuance by 1,149,817.

Description of the Plan

Administration

The Board of Directors has appointed the Compensation Committee to administer the Plan. As a result, the Compensation Committee has the authority to determine when and to whom awards will be granted, and the type, amount, form of payment and other terms and conditions of each award, consistent with the provisions of the Plan. In addition, the Compensation Committee can specify whether, and under what circumstances, awards to be received under the Plan or amounts payable under such awards may be deferred automatically or at the election of either the holder of the award or the Compensation Committee. Subject to the provisions of the Plan, the Compensation Committee may amend or waive the terms and conditions, or accelerate the exercisability, of an outstanding award. The Compensation Committee has the authority to interpret the Plan and establish rules and regulations for the administration of the Plan.

The Compensation Committee may delegate its powers under the Plan to one or more officers of EnteroMedics or a committee of such officers, except that the Compensation Committee may not delegate its powers to grant awards to officers who are subject to Section 16 of the Securities Exchange Act of 1934, as amended, or in a way that would violate Section 162(m) of the U.S. Internal Revenue Code (the “Code”).

Eligible Participants

Any employee, officer, consultant, independent contractor or non-employee director providing services to us or any of our affiliates, who is selected by the Compensation Committee, is eligible to receive an award under the Plan. However, only employees of EnteroMedics or our subsidiary are eligible for grants of incentive stock options. As of September 15, 2010, approximately 29 employees and officers, 25 consultants and independent contractors and eight non-employee directors were eligible to participate in the Plan.

Shares Available for Awards

The Plan currently authorizes an aggregate of 1,150,183 shares of our common stock for issuance under all stock-based awards. If the proposed amendment to the Plan is approved by our stockholders, the maximum number of shares authorized under the Plan will be increased by 1,149,817 shares to 2,300,000 shares. The closing price of our stock on the NASDAQ Capital Market on September 17, 2010 was \$1.74 per share. Certain awards under the Plan are subject to limitations as follows:

- In any calendar year, no person may be granted awards, the value of which is based solely on an increase in the value of our common stock after the date of grant of the award, of more than 100,000 shares in the aggregate.
- In any calendar year, the maximum amount payable pursuant to all performance awards to any participant will be \$5,000,000 in aggregate value, whether payable in cash, shares or other property.

The Compensation Committee may adjust the Plan or outstanding awards in a manner it deems equitable or appropriate in order to prevent the dilution or enlargement of such benefits or potential benefits in the case of a stock dividend or other distribution, recapitalization, stock split, merger, repurchase or exchange of shares of our common stock or other securities, issuance of warrants or other rights or other similar corporate transaction or event. As a result of such changes, and provided that the number of shares covered by any award or to which any award relates will always be a whole number, the Compensation Committee may adjust the number and type of shares (or other securities or property) subject to outstanding awards or that may be made the subject of future awards and/or the purchase or exercise price of any award.

If an award is terminated, forfeited or cancelled without the issuance of any shares or if shares covered by an award are not issued for any other reason, then the shares previously set aside for such award will be available for future awards under the Plan. The shares available for award under the Plan may also include shares previously reacquired by EnteroMedics and designated as treasury shares.

Types of Awards and Terms and Conditions

The Plan permits the granting of: stock options (including both incentive and non-qualified stock options), stock appreciation rights ("SARs"), restricted stock and restricted stock units, performance awards, dividend equivalents, other stock grants and other stock-based awards. The Compensation Committee, in its discretion, may grant awards alone or in addition to, in tandem with or in substitution for any other award. Awards granted in addition to or in tandem with other awards may be granted either at the same time as or at a different time from the grant of another award. The specific terms of each award are provided in separate award agreements.

Stock Options. Stock options awarded under the Plan may be either "incentive" stock options or "non-qualified" stock options under the Code. Stock options allow the option holder to purchase shares of our stock for a set per-share exercise price determined by the Compensation Committee on the date of grant, and may not be less than the fair market value of our common stock on the date the option is granted, except for those who own more than 10% of the total voting power of our capital stock, who must be granted stock options with an exercise price of at least 110% of the fair market value of our stock. The Compensation Committee sets the terms and vesting provisions of stock options, provided that no incentive stock option may have a term of greater than ten

years and no incentive stock option granted to an employee owning more than 10% of the voting power of all classes of our stock may be exercisable by its terms after the expiration of five years from the date of grant. No incentive stock option is transferable by the holder, other than by the laws of descent and distribution. An incentive stock option may only be exercised by its holder during his or her lifetime. A nonqualified stock option will be transferable by the holder to a family member, by will, or pursuant to the laws of descent and distribution, or as otherwise permitted pursuant to rules and regulations adopted by the SEC. The exercise price of outstanding stock options may not be lowered through re-pricing, or by canceling any previously granted stock option and replacing that option with a re-grant of the same award without prior approval of our stockholders.

Stock Appreciation Rights. SARs granted under the Plan entitle the holder, upon exercise, to receive an amount equal to the excess of the fair market value of the shares of stock underlying the SAR at the time of exercise over the exercise price for such shares without tendering any consideration. The exercise or strike price for SARs is determined by the Compensation Committee on the date of grant, and may not be less than the fair market value on the date the SAR is granted. The Compensation Committee sets the terms and vesting provisions of SARs, provided that no SAR may have a term greater than 10 years. The Compensation Committee may, at its discretion, settle SARs in either cash or stock. A SAR may only be exercised by its holder during his or her lifetime. Except as otherwise provided by the Compensation Committee, a holder of an SAR may not sell, transfer, pledge or assign such any rights with respect to the SAR.

Restricted Stock and Restricted Stock Units. The holders of restricted stock own shares of our common stock subject to restrictions imposed by the Compensation Committee (including, for example, restrictions on the right to vote the restricted shares or to receive any dividends with respect to the shares) for a specified time period determined by the Compensation Committee. The holder of restricted stock units will have the right, subject to any restrictions imposed by the Compensation Committee, to receive shares of our common stock, or a cash payment equal to the fair market value of those shares, at some future date determined by the Compensation Committee. The restriction period begins on the date of grant and the restrictions may lapse separately or in combination at a time or times in such installments or otherwise as determined by the Compensation Committee and set forth in the award agreement. After the restrictions have lapsed, the holder has all of the rights of a stockholder of our common stock. If the holder's employment or service to EnteroMedics terminates during the restriction period, the restricted stock and restricted stock units will be forfeited, unless the Compensation Committee determines that it would be in our best interest to waive the remaining restrictions. The holders of restricted stock awards may not sell, transfer, pledge or assign shares of restricted stock during the restriction period.

Performance Awards. Performance awards are exercisable upon the achievement of performance goals set forth in the agreements covering the performance awards. A performance award granted under the Plan may be payable in cash or in shares of common stock (including restricted stock), other securities, other awards or other property. Subject to the terms of the Plan and any award agreement, the length of the performance period, the performance goals to be achieved during the performance period, the amount of any performance award, the payment amount to be made pursuant to any performance award and any other terms and conditions of any performance award will be determined by the Compensation Committee.

Dividend Equivalents. Dividend equivalents entitle the holder to receive payments equivalent to the amount of any cash dividends paid on shares of our common stock. A dividend equivalent may be denominated or payable in cash, shares of stock or other securities, or other awards or property determined in the discretion of the Compensation Committee. The Compensation Committee will also determine any other terms and conditions applicable to the dividend equivalents.

Other Stock Grants and Stock-Based Awards. The Compensation Committee also has the authority to grant common stock under the Plan without restrictions as it deems consistent with the purpose of the Plan, as well as the authority to grant other stock-based awards, with methods of payment and other relevant terms as determined by the Compensation Committee.

Amendment and Termination

Our Board of Directors may amend, alter, or terminate the Plan at any time provided, however, that any Plan amendment will be submitted to our stockholders for approval if (i) required by law or by the securities exchange on which our stock is listed, (ii) the failure to obtain such consent causes Rule 16b-3 or Section 162(m) of the Code to be unavailable with respect to the Plan or (iii) the failure to obtain such consent causes us to be unable, under the Code, to grant incentive stock options under the Plan. No termination or amendment of the Plan will in any manner adversely affect an award previously granted under the Plan without the consent of the applicable award holder. While our Board of Directors retains the right to terminate the Plan as described above, the Plan will automatically terminate on October 1, 2013, the tenth anniversary of the effective date of the Plan.

Change in Control

The Compensation Committee has discretion to provide in any award agreement under the Plan that the restrictions on the award may lapse, mature or the award may become exercisable on an accelerated basis upon a change in control of EnteroMedics.

Federal Income Tax Matters

The following is a summary of the principal U.S. federal income tax consequences generally applicable to awards under the Plan.

Options and SARs. The grant of an option or SAR should not result in any taxable income for the recipient. The holder of an incentive stock option generally will have no taxable income upon exercising the incentive stock option (except that an alternative minimum tax liability may result), and the Company will not be entitled to a tax deduction when an incentive stock option is exercised. Upon exercising a non-qualified stock option, the optionholder must recognize ordinary income equal to the excess of the fair market value of the shares of Company common stock acquired on the date of exercise over the exercise price, and the Company will be entitled at that time to a tax deduction for the same amount. Upon the exercise of an SAR, the amount of any cash received and the fair market value on the exercise date of any shares of Company common stock received are taxable to the recipient as ordinary income, and are deductible by the Company.

The tax consequence to an optionholder upon a disposition of shares of Company common stock acquired through the exercise of an option will depend on how long the shares have been held and whether the shares were acquired by exercising an incentive stock option or by exercising a non-qualified stock option or SAR. Generally, there will be no tax consequences to the Company in connection with the disposition of shares acquired pursuant to an option. However, the Company may be entitled to a tax deduction in the case of a disposition of shares acquired pursuant to an incentive stock option before the applicable incentive stock option holding periods set forth in the Code have been satisfied.

Other Awards. For other awards granted under the Plan that are payable in cash or shares of Company common stock and that are either transferable or not subject to substantial risk of forfeiture, the holder of such an award must recognize ordinary income equal to the excess of (a) the cash or the fair market value of the shares of Company common stock received (determined as of the date of such receipt) over (b) the amount (if any) paid for the shares of Company common stock by the holder of the award. The Company will be entitled at that time to a deduction for the same amount if and to the extent that amount satisfies general rules concerning deductibility of compensation.

For an award that is payable in shares of Company common stock that are restricted as to transferability and subject to substantial risk of forfeiture, unless a special election is made pursuant to Section 83(b) of the Code, the holder of the award must recognize ordinary income equal to the excess of (x) the fair market value of the shares of Company common stock received (determined as of the first time the shares became transferable or not subject to substantial risk of forfeiture, whichever occurs earlier) over (y) the amount (if any) paid for the shares of Company common stock by the holder. The Company will be entitled at that time to a tax deduction for the same amount if and to the extent that amount satisfies general rules concerning deductibility.

Special Rules. Special rules may apply in the case of individuals subject to Section 16(b) of the Securities Exchange Act of 1934, as amended. In particular, unless a special election is made pursuant to Section 83(b) of the Code, shares of Company common stock received pursuant to the exercise of an option or SAR or otherwise in connection with an award may be treated as restricted as to transferability and subject to a substantial risk of forfeiture for a period of up to six months after the date of exercise. Accordingly, the amount of any ordinary income recognized, and the amount of the Company's tax deduction, may be determined as of the end of such period.

Deductibility of Executive Compensation Under Code Section 162(m). Section 162(m) of the Code generally limits to \$1,000,000 the amount that a publicly-held corporation is allowed each year to deduct for the compensation paid to each of the corporation's chief executive officer and the corporation's other four most highly compensated executive officers. However, "qualified performance-based compensation" is not subject to the \$1,000,000 deduction limit. In general, to qualify as performance-based compensation, the following requirements need to be satisfied: (1) payments must be computed on the basis of an objective, performance-based compensation standard determined by a committee consisting solely of two or more "outside directors," (2) the material terms under which the compensation is to be paid, including the business criteria upon which the performance goals are based, and a limit on the maximum bonus amount which may be paid to any participant pursuant to any performance period, must be approved by a majority of the corporation's shareholders and (3) the committee must certify that the applicable performance goals were satisfied before payment of any performance-based compensation.

Awards Under the Plan

Because future grants of awards under the Plan are subject to the discretion of the Compensation Committee and the Board of Directors, the future awards that may be granted to Plan participants cannot be determined at this time. During fiscal year 2009, option awards totaling: (i) 126,853 shares were granted to Mark B. Knudson, Ph.D., our President and Chief Executive Officer; (ii) 50,783 shares were granted to Greg S. Lea, our Senior Vice President and Chief Financial Officer; (iii) 29,842 shares were granted to Adrianus (Jos) Donders, our Senior Vice President of Operations; (iv) 62,498 shares were granted to Daniel L. Cohen, our Senior Vice President of Government Relations and Health Policy; (v) 43,365 shares were granted to Katherine S. Tweden, Ph.D., our Vice President of Research and Clinical; (vi) 313,341 shares were granted to all current executive officers as a group; (vii) 42,494 shares were granted to all current directors who are not executive officers as a group; and (viii) 331,394 shares were granted to all other employees as a group.

The following table sets forth information about our equity compensation plans as of December 31, 2009, the end of our last completed fiscal year (as adjusted to reflect the 1-for-6 reverse split of our common stock effected on July 9, 2010):

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 Second Column)
Equity compensation plans approved by security holders	2,328,067 ⁽¹⁾	\$ 13.50	98,923 ⁽²⁾
Equity compensation plans not approved by security holders	—	—	—
Total	2,328,067	\$ 13.50	98,923

- (1) Consists of options awarded under the 2003 Stock Incentive Plan and outstanding warrants to purchase common stock.
(2) Represents the maximum number of shares of common stock available to be awarded as of December 31, 2009.

**PROPOSAL 2—AMENDMENT TO THE 2003 STOCK INCENTIVE PLAN
TO ALLOW FOR A ONE-TIME STOCK OPTION EXCHANGE PROGRAM**

We are asking our stockholders to approve a one-time stock option exchange program (the “option exchange program”). Our Compensation Committee recommended and our Board of Directors authorized the stock option exchange program on September 9, 2010, subject to stockholder approval. If implemented, this option exchange program would permit some of our employees (including executive officers) to tender certain outstanding options that are significantly “underwater” (i.e., those options with an exercise price that is significantly greater than the current trading price of our common stock) for cancellation in exchange for a lesser number of stock options with an exercise price equal to the closing price of our common stock on the NASDAQ Capital Market on the last full trading day of the option exchange period. The new stock options would be issued under the Plan on the final day of the option exchange period.

We believe that this option exchange program would be in the best interests of our stockholders and EnteroMedics, as the replacement stock options would help us to retain and motivate further our most talented employees so that we can continue to build value for our stockholders. In addition, the option exchange program would reduce the total number of outstanding stock options held by our employees and, because we will incur minimal incremental compensation expense in connection with the option exchange program, allow us to more effectively utilize the compensation expense that we have already recognized in our financial statements in connection with the grants of the existing underwater stock options.

In order to permit us to implement the stock option exchange program in compliance with our Plan and the applicable NASDAQ listing rules, our Compensation Committee recommended and our Board of Directors approved an amendment to the Plan, subject to approval of the amendment by our stockholders. We are seeking stockholder approval to amend the Plan to allow for the option exchange program. The amendment would add a new Section 12 to the Plan which will read essentially as follows:

Notwithstanding any other provision of the Plan to the contrary, upon approval of the Company’s stockholders, the Committee may provide for, and the Company may complete, a one-time option exchange offer, pursuant to which certain outstanding options could, at the election of the person holding such option, be tendered to the Company on a grant-by-grant basis for cancellation in exchange for the issuance of a lesser amount of options with a lower exercise price, provided that such one-time option exchange offer is commenced within twelve months of the date of such stockholder approval.

The Board of Directors unanimously recommends a vote FOR the amendment to the 2003 Stock Incentive Plan to allow for a one-time stock option exchange program.

Stockholder approval of this proposal is required both under the terms of the Plan and the NASDAQ Stock Market listing rules. If our stockholders do not approve this proposal, the option exchange program will not occur. The affirmative vote of the holders of a majority of outstanding shares entitled to vote and present at the special meeting is necessary to approve this amendment to the Plan.

A summary of the material terms of the Plan is included above as part of Proposal 1 in this proxy statement. A copy of the Plan, as amended to reflect Proposal 1 and Proposal 2, is attached as [Appendix A](#) to this proxy statement and has been filed with the SEC and is available at www.sec.gov.

This proposal to amend the Plan to allow a one-time option exchange program is separate from Proposal 1. In the event that the stockholders should fail to approve Proposal 1 but approve this proposal regarding the option exchange program, we may implement the option exchange program as an amendment to the Plan.

Summary of the Option Exchange Program

The following is a summary of the material terms of the option exchange program, which are described in more detail below under the section, captioned “*Terms of the Option Exchange Program*.” If you approve this Proposal 2 we intend to effect the program on substantially the terms described below, although we may make immaterial variations for reasons of convenience, legal compliance or otherwise.

- The option exchange program would generally be available to all of our employees (including executive officers) who hold eligible options, as long as they continue to be employed by us until the expiration of the option exchange program. The option exchange program would not be available to our non-employee directors, consultants or former employees;
- Only stock options, whether vested or unvested, that have an exercise price greater than \$6.00 (which is currently greater than the highest closing price of our common stock in the 52-week period immediately preceding the proposed expiration date of the exchange offer program), would be eligible to be exchanged for new options pursuant to the option exchange program. However, any options granted to individuals in connection with the performance of consulting services for EnteroMedics would not be eligible to be exchanged in the option exchange program;
- The option exchange program would not be a one-for-one exchange of options. Rather, employees who participate in the program would exchange their existing options for fewer options with a lower exercise price. The exchange ratios for the exchange program would be determined in a manner intended to result in the grant of new options that have a fair value approximately equal to the fair value of the options tendered for cancellation in the exchange. Therefore, the option exchange program should not cause any material incremental costs in the stock-based compensation expense that we will recognize in our financial statements;
- The exercise price of each new option would be equal to the closing price of our common stock on the NASDAQ Capital Market on the last full trading day of the option exchange period. Each new option would have a new term of seven years from the grant date of the new options, which will be the final day of the option exchange period;
- To enhance their retentive value, all new options issued pursuant to the option exchange program would be subject to a new vesting schedule whereby one-third of the shares underlying the new options would be vested immediately on the date of grant and the remaining shares would vest monthly for 24 months.
- Upon the occurrence of a “Change in Control” (as defined in the stock option agreement), 50% of the unvested portion of the New Options would become fully vested. In addition, in the event of a Change in Control in which the employment of the employee is terminated, 100% of the remaining unvested portion of the New Option would immediately vest and would be exercisable for five years following termination of employment.
- The new options will be non-qualified stock options for U.S. federal income tax purposes.

We intend to commence the option exchange program as soon as practicable, but will only accept options for cancellation and exchange if our stockholders approve this Proposal 2 at the special meeting.

Reasons for the Option Exchange Program

The price of our common stock, along with that of other medical device companies, has been significantly impacted by the worldwide economic downturn. Market capitalization declines have been particularly pronounced in certain industries, such as ours. These market factors have contributed to substantially all employee stock options granted by us being underwater. This situation was further compounded by the 1-for-6 reverse stock split that we effected on July 9, 2010 in order to regain compliance with the continued listing requirements of the NASDAQ Capital Market and prevent the delisting of our common stock from the NASDAQ

Capital Market. As of September 15, 2010, exercise prices for outstanding underwater options that would be eligible to be exchanged pursuant to the option exchange program ranged from \$6.60 to \$50.78, with a weighted average exercise price of \$27.38 per share, approximately 16 times above our current price of \$1.76 per share, the closing price of our common stock on the NASDAQ Capital Market on such date. Our Board of Directors believes that these underwater options provide little motivational or retention value for our existing employees.

Our Board of Directors believes that allowing our employees the opportunity to exchange their underwater stock options for a lesser number of new at-the-money options (i.e., options that have an exercise price equal to the current trading price of our common stock) would help us retain such employees as well as provide an additional incentive for our employees during these difficult economic times. The newly-issued options would include additional vesting requirements to enhance their retentive value and no options would be eligible to be exchanged that have exercise prices below \$6.00 (which is currently greater than the highest closing price of our common stock in the 52-week period immediately preceding the proposed expiration date of the exchange offer program). We plan to commence the exchange offer as soon as practicable, but will only accept options for cancellation and exchange after the special meeting if our stockholders approve this Proposal 2. The option exchange program is generally intended to be a “value neutral program” from an accounting perspective. Therefore, we do not expect that the program would result in any material incremental increase in our share-based compensation costs.

While we are executing an aggressive cost reduction strategy designed to enable us to emerge from the downturn in the strongest possible position, we are concerned that the strain from these activities could adversely impact the morale and retention of our employees. In addition, as described in more detail below, the underwater options that remain outstanding represent ongoing compensation expense for us even though the options provide minimal retentive value to our employees and may never be exercised. We believe that our proposed option exchange program would significantly mitigate our retention risk and create a positive solution for our employees and stockholders by enhancing our return from the compensation expense already recognized for the existing underwater options.

Value to our Employees: Create a “Return on Investment” from our Equity Incentive Program

We are facing significant challenges relating to how we compensate our most talented employees in the current macroeconomic environment. We are taking aggressive actions to conserve our cash balances and control our operating expenses. With limited resources to expend on other employee-based benefits, we believe that the use of non-cash incentives, such as a viable equity incentive program, is essential to effectively retain employees during these difficult times. In the context of the challenges that we face retaining employees, we believe that the option exchange program will allow us to provide a meaningful, tangible benefit to our employees at little additional cost to us.

Benefits to our Stockholders: Effective Use of Compensation Expense

We believe that the option exchange program will allow us to enhance our return on the compensation expense that we have already recognized or will recognize with respect to existing underwater stock options. Generally, we recognize an expense that reduces our net income whenever we grant stock options to our employees. This share-based compensation expense is calculated at the time the option is granted (not exercised) in accordance with the fair value method of accounting for share-based payments and is recognized over the vesting period of the option. Because the amount of expense is not re-measured as our stock price declines, we must continue to incur expense for underwater options without regard to the decreasing likelihood that they will ever be exercised. By implementing a value neutral exchange with additional vesting requirements for the new stock options, the granting of the new options should not result in any material incremental share-based compensation costs to us. At the same time, by allowing us to replace underwater options that have little or no retentive value with a lesser number of new at-the-money options, we believe that the exchange program would result in a meaningful, tangible benefit to our employees. Therefore, the exchange program would allow us to more efficiently utilize the share-based compensation expense that we have already recognized or will recognize in our financial statements.

Implementation of the Option Exchange Program

The option exchange program is subject to the approval of our stockholders of this Proposal 2. We plan to commence the option exchange program as soon as practicable, but will not accept any options for cancellation and exchange unless and until after this Proposal 2 is approved by the stockholders. When the option exchange program is commenced, eligible employees (including executive officers) will be offered the opportunity to participate in the option exchange program pursuant to a written tender offer that will be distributed to all eligible optionholders. Eligible optionholders would be given at least 20 business days in which to accept the offer to tender their eligible options for cancellation in exchange for fewer new stock options. The tendered options would be cancelled and the new options would be granted upon the cancellation of the tendered options. However, our Board of Directors reserves the right to postpone or cancel the program at any time before or after the option exchange program begins.

Prior to the commencement of the option exchange program, we will file the written offer to exchange with the SEC, as part of a tender offer statement on Schedule TO. Eligible optionholders and our stockholders will be able to review, free of charge, the offer to exchange, and other related documents filed by us with the SEC on the SEC's website at www.sec.gov.

Terms of the Option Exchange Program

Eligible Options

To be eligible for exchange pursuant to the option exchange program, an option must have an exercise price greater than \$6.00 (which is currently greater than the highest closing price of our common stock in the 52-week period immediately preceding the proposed expiration date of the exchange offer program). However, any options granted to individuals in connection with the performance of consulting services for EnteroMedics would not be eligible to be exchanged in the option exchange program.

Eligible Participants

The option exchange program would be open to all of our employees (including executive officers) who hold eligible options, as long as they continue to be employed by us until the expiration of the option exchange program. The option exchange program would not be available to our non-employee directors, consultants or former employees.

Exchange Ratios

We refer to the number of options that an employee must tender for cancellation in exchange for one new option as the "exchange ratio." The exchange ratios for the option exchange program would be based on the exercise price of the existing options that are tendered for exchange and the estimated fair value of the options that would be received in the exchange. We will determine the exchange ratios shortly before the option exchange program commences.

We intend to establish the exchange ratios by dividing the eligible options into five groups based on their current exercise prices and assigning an exchange ratio to each group that is designed to result in an approximately value neutral exchange (calculated using the Black-Scholes option pricing model) for such group as a whole. The calculation of fair value using the Black-Scholes option pricing model takes into account many variables, such as the volatility of our common stock, the remaining term of the applicable options, the exercise prices of such options, the trading price of our common stock on the date of grant and the risk-free interest rate. As a result, the exchange ratios would not solely reflect the difference in the exercise prices of the existing options. Setting the exchange ratios in this manner will avoid EnteroMedics having to recognize any material incremental compensation expense upon the issuance of the new options. However, because the exchange ratios would be set prior to the actual exchange of options under the program, it is possible that we would recognize some additional material incremental compensation expense due to fluctuations in the trading price of our

common stock between the time the ratios are set and the date the new options are granted. For this reason, we also applied a 10% discount to the current value of the eligible options when calculating the exchange ratios.

The final exchange ratios have not been determined as of the date of this proxy statement. However, to illustrate the effect of the program on our outstanding options, we have set forth below an estimate of what the exchange ratios would be if they were set as of September 15, 2010, when the closing price of our common stock on the NASDAQ Capital Market was \$1.76 per share.

Per Share Exercise Price of Eligible Options	Number of Shares Underlying Eligible Options	Weighted Average Remaining Life of Eligible Options (Years)	Exchange Ratio	Maximum Number of Shares Underlying New Options that May Be Granted
\$6.00 to \$9.99	81,572	8.39	1.03	79,200
\$10.00 to \$19.99	9,383	6.33	1.10	8,535
\$20.00 to \$29.99	181,687	8.72	1.20	151,414
\$30.00 to \$39.99	101,756	7.51	1.26	80,768
\$40.00 and Up*	106,890	7.24	1.37	64,712
	Total: 481,288			Total: 384,629

* This group also contains five stock options awarded to our executive officers and management, which have milestone- and time-based vesting provisions. Some of the milestones established for these awards have been met and some are still pending, however, since some of the milestones were missed and these are the only outstanding options that have an element of performance-based vesting, if these options were to be tendered for cancellation and exchange in the option exchange program, the optionholders would forfeit the milestone-based portion of the options and would receive new options only in exchange for the time-based vesting portion of the options. The number of shares underlying these new options would be determined using this exchange ratio because the current exercise price of these options is between \$49.62 and \$49.82.

The total number of shares underlying new options that an eligible optionholder would receive in exchange for the tender of eligible options would be determined, on a grant-by-grant basis, by converting the number of shares underlying the eligible option according to the appropriate exchange ratio and rounding up to the nearest whole share. For example, using the example exchange ratios set forth above, if an eligible optionholder were to tender an eligible option for 100 shares with an exercise price of \$25.00 per share, the eligible optionholder would receive a new option for 84 shares (100 divided by 1.20, rounded up to the nearest whole share) in exchange for the tendered option. Likewise, if the eligible optionholder tendered an eligible option for 100 shares with an exercise price of \$45.00 per share, the eligible optionholder would receive a new option for 73 shares (100 divided by 1.37, rounded up to the nearest whole share). The exercise prices of the new options will equal the closing price of our common stock on the NASDAQ Capital Market on the last full trading date of the option exchange period.

Assuming the use of the illustrative exchange ratios and the estimated number of eligible options set forth above, if all eligible options are tendered for cancellation in the option exchange program, the total maximum number of common stock underlying new options would be 384,629 shares, resulting in a reduction of 96,659 shares of common stock subject to outstanding employee stock options.

Election to Participate

Participation in the option exchange program would be completely voluntary and eligible optionholders would be permitted to exchange all or none of their eligible options on a grant-by-grant basis. If an eligible optionholder declines to participate in the exchange program with respect to all or a portion of his or her eligible option grants, all existing stock options that are not tendered will remain outstanding subject to their existing terms, including vesting schedules, expiration dates and exercise prices.

If you are both a stockholder and an employee who would be eligible to participate in the option exchange program, your vote to approve this Proposal 2 does not constitute an election to participate in the option exchange program.

Material Terms of New Options

The exercise price of all new options received in exchange for the tender of existing eligible options would be equal to the closing price of our common stock on the NASDAQ Capital Market on the last full trading day of the option exchange period. All new options would have a new exercise term of seven years from the grant date of the new options, which will be the final day of the option exchange period. The new options would also be non-qualified stock options for U.S. federal income tax purposes. In addition, each new option would be subject to a new vesting schedule whereby one-third of the shares underlying the new options would be vested immediately on the date of grant and the remaining shares would vest monthly for 24 months. Upon the occurrence of a "Change in Control" (as defined in the stock option agreement), 50% of the unvested portion of the New Options would become fully vested. In addition, in the event of a Change in Control in which the employment of the employee is terminated, 100% of the remaining unvested portion of the New Option would immediately vest and would be exercisable for five years following termination of employment.

A participating eligible optionholder would not be able to exercise his or her new options prior to the time such options have vested in accordance with the new vesting schedule. If any employee ceases to provide services to us prior to the end of the new vesting period for any reason, all unvested options would be forfeited, subject to the provisions of the Plan. The other terms and conditions of the new options would be set forth in new stock option agreements to be entered into as soon as practicable after the grant date. Any additional terms of the new options would generally be comparable to the terms and conditions of the options tendered in the option exchange.

Cancellation of Tendered Options

All eligible options that are tendered pursuant to the option exchange program would be cancelled promptly at the end of the option exchange period, and new options would be granted on that date. All common stock subject to options cancelled in the option exchange program would be returned to the share reserve of the Plan and would be available for future grant under the Plan.

Accounting Impact

We have adopted the fair value method of accounting for share-based payments. Generally, when we grant new share-based awards, we recognize compensation expense for the fair value of such awards, which we recognize over the vesting schedule of the award. However, under these rules, the exchange of options pursuant to the option exchange program will be characterized as a modification of the existing option awards and no additional expense will be recognized if the modification is value neutral. To be value neutral, the fair value of the stock options tendered as calculated immediately prior to their tender must be at least equal to the fair value of the stock options received by employees in the option exchange program. As described above, we use the Black-Scholes option pricing model to determine the fair value of all stock options granted to employees. The ultimate accounting consequences will depend in part on participation levels as well as on the exchange ratios and vesting schedules established at the time of the option exchange.

Any previously unrecognized compensation expense from the tendered stock options and incremental compensation costs associated with the new stock options received in the option exchange program will be recognized over the appropriate vesting period.

U.S. Federal Income Tax Consequences

The following is a summary of the anticipated material U.S. federal income tax consequences of participating in the option exchange program. A more detailed summary of the applicable tax considerations to participants will be provided in the offer to exchange. We believe the exchange of eligible options for new options pursuant to the program should be treated as a non-taxable exchange and neither we nor any of our employees should recognize any income for U.S. federal income tax purposes upon the tender of eligible options

and the grant of new options in exchange therefor. Since all new options issued under the option exchange program will be non-qualified stock options, an optionholder who participates and receives the new options will recognize ordinary income upon exercise of the new options equal to the excess, if any, of the fair market value of the purchased common shares on the exercise date over the exercise price of the new options. At the time of exercise of the new options, the ordinary income will be subject to applicable tax withholding.

Upon disposition of the common shares issued upon the exercise of the new options, the participating optionholder will recognize a capital gain or loss (which will be long- or short-term depending upon whether the shares were held for more than one year) equal to the difference between the selling price and the sum of the amount paid for the shares plus any amount recognized as ordinary income upon exercise of the option. Additionally, because all new options will be non-qualified stock options, an individual's tax treatment upon exercise of the new options may differ from the treatment otherwise applicable to the tendered eligible options. The tax consequences for participating optionholders subject to tax outside the United States may differ from the U.S. federal income tax consequences described in the preceding sentences. All holders of eligible options are urged to consult their own tax advisors regarding the tax implications of participating in the option exchange program under all applicable laws prior to participating in the option exchange program.

Potential Modification to Terms to Comply with Governmental Requirements

The terms of the option exchange program will be described in an offer to exchange that will be filed with the SEC. Although we do not anticipate that the SEC will require us to materially modify the option exchange program's terms, it is possible that we will need to alter the terms of the option exchange program to comply with comments from the SEC. Changes in the terms of the option exchange program may also be required for tax purposes for participants in the U.S. as the tax treatment of the option exchange program is not entirely certain. Our Compensation Committee and Board of Directors will retain the discretion to make any such necessary or desirable changes to the terms of the option exchange program for purposes of complying with comments from the SEC or optimizing the U.S. federal or foreign tax consequences.

Effect of Option Exchange Program on Stockholders

Although we are not able to predict the precise impact of the option exchange program on our stockholders because of the voluntary nature of the program, we have designed the program in a manner intended to ensure, from an accounting perspective, that the value of the options granted in the program is not materially greater than the value of the options tendered. In addition, the option exchange program is intended to advance the objectives of our equity program to attract, retain and motivate our employees. Lastly, because the program is designed to be approximately value neutral, it is also intended to more effectively recapture value from the share-based compensation expense that we have already recognized or will recognize in our financial statements.

INTERESTS OF CERTAIN PERSONS IN THE PROPOSALS

No director, executive officer, associate of any director or executive officer or any other person has any substantial interest, direct or indirect, by security holdings or otherwise, in Proposal 1 that is not shared by all other holders of our capital stock.

Our executive officers are eligible to participate in the proposed stock option exchange program and therefore may have an interest in Proposal 2, which may differ from the interests of the stockholders. The following table sets forth certain information as of September 15, 2010 about the outstanding options granted under our 2003 Plan held by each of our executive officers. As of September 15, 2010, our executive officers as a group held options unexercised and outstanding under the 2003 Plan to purchase a total of 523,048 shares of our common stock, which represented approximately 58.0% of the shares subject to all options outstanding under the 2003 Plan as of that date. The percentages in the table below are based on the total number of outstanding options

(i.e., whether or not eligible for exchange) to purchase our common stock under our 2003 Plan, which was 901,220 as of September 15, 2010.

<u>Name</u>	<u>Position</u>	<u>Aggregate Number of Options Awarded Under the 2003 Plan</u>	<u>Percentage of Total Outstanding Options Under the 2003 Plan</u>
Mark B. Knudson, Ph.D.	President, Chief Executive Officer, Chairman and Director	243,148	27.0%
Greg S. Lea	Senior Vice President and Chief Financial Officer	80,912	9.0%
Adrianus (Jos) Donders	Senior Vice President of Operations	75,871	8.4%
Daniel L. Cohen	Senior Vice President of Government Relations and Health Policy	62,498	6.9%
Katherine S. Tweden, Ph.D.	Vice President of Research and Clinical	60,619	6.7%

PRINCIPAL ACCOUNTANT

Deloitte & Touche LLP, the Company's principal accountant, will not be in attendance at the 2010 Special Meeting of Stockholders.

AVAILABLE INFORMATION

We are subject to the periodic reporting requirements of the Securities Exchange Act of 1934, as amended, and, in accordance therewith, file reports and other information with the SEC. Such reports and other information may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the SEC at (202) 942-8090 for further information. Copies of such materials may also be accessed electronically by means of the SEC's website at www.sec.gov.

STOCKHOLDER PROPOSALS FOR 2011 ANNUAL MEETING

In order for a stockholder proposal to be considered for inclusion in our proxy statement for the 2011 annual meeting, the written proposal must be received at our principal executive offices at 2800 Patton Road, St. Paul, Minnesota 55113, Attention: Secretary, on or before December 7, 2010. The proposal must comply with SEC regulations regarding the inclusion of stockholder proposals in company-sponsored proxy materials.

Our bylaws provide that a stockholder may present from the floor a proposal that is not included in the proxy statement if proper written notice is received by the Secretary of EnteroMedics at our principal executive offices in St. Paul, Minnesota, no less than 90 days and no more than 120 days prior to the anniversary date of the last annual meeting. For the 2011 annual meeting, director nominations and stockholder proposals must be received on or after January 6, 2011 and on or before February 5, 2011. The proposal must contain the specific information required by our bylaws. In the event that the 2011 annual meeting is called for a date that is not within 30 days of the anniversary date of the 2010 annual meeting, stockholder proposals must be received in accordance with the timeline set forth in our bylaws. You may request a copy of our bylaws by contacting our Secretary, EnteroMedics Inc., 2800 Patton Road, St. Paul, Minnesota 55113, telephone (651) 634-3003. Stockholder proposals that are received by us after February 5, 2011, may not be presented in any manner at the 2011 annual meeting.

ANNUAL REPORT TO STOCKHOLDERS AND FORM 10-K

Our 2009 Annual Report to Stockholders and Form 10-K, including consolidated financial statements for the year ended December 31, 2009, is available to you, without charge, upon written request to Secretary, EnteroMedics Inc., 2800 Patton Road, St. Paul, Minnesota 55113, and is also available on our website at www.enteromedics.com. If requested, we will provide you copies of any exhibits to the Form 10-K upon the payment of a fee covering our reasonable expenses in furnishing the exhibits. You can request exhibits to the Form 10-K by writing to Secretary, EnteroMedics Inc., 2800 Patton Road, St. Paul, Minnesota 55113.

“HOUSEHOLDING” OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement or annual report, as applicable, addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially provides extra convenience for stockholders and cost savings for companies. Although we do not household for our registered stockholders, some brokers household EnteroMedics proxy materials and annual reports, delivering a single proxy statement and annual report to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement or annual report, or if you are receiving multiple copies of either document and wish to receive only one, please notify your broker. We will deliver promptly upon written or oral request a separate copy of our annual report and/or proxy statement to a stockholder at a shared address to which a single copy of either document was delivered. For copies of either or both documents, stockholders should write to Secretary, EnteroMedics Inc., 2800 Patton Road, St. Paul, Minnesota 55113, or call (651) 634-3003.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SPECIAL STOCKHOLDER MEETING TO BE HELD ON OCTOBER 22, 2010

This proxy statement and the Annual Report on Form 10-K for the fiscal year ended December 31, 2009 are available at <http://ir.enteromedics.com/annual-proxy.cfm>.

OTHER MATTERS

We do not know of any other matters that may be presented for consideration at the special meeting. If any other business does properly come before the special meeting, the persons named as proxies on the enclosed proxy card will vote as they deem in the best interests of EnteroMedics.



Greg S. Lea
Secretary

Dated: October 1, 2010

ENTEROMEDICS INC.
2003 STOCK INCENTIVE PLAN AS AMENDED

Section 1. Purpose.

The purpose of the EnteroMedics Inc. 2003 Stock Incentive Plan (the "Plan") is to aid in attracting and retaining employees, management personnel and other personnel and members of the Board of Directors who are not also employees ("Non-Employee Directors") of EnteroMedics (the "Company") capable of assuring the future success of the Company, to offer such personnel and Non-Employee Directors incentives to put forth maximum efforts for the success of the Company's business and to afford such personnel and Non-Employee Directors an opportunity to acquire a proprietary interest in the Company.

Section 2. Definitions.

As used in the Plan, the following terms shall have the meanings set forth below:

(a) "Affiliate" shall mean (i) any entity that, directly or indirectly through one or more intermediaries, is controlled by the Company and (ii) any entity in which the Company has a significant equity interest, in each case as determined by the Committee.

(b) "Award" shall mean any Option, Stock Appreciation Right, Restricted Stock, Restricted Stock Unit, Performance Award, Dividend Equivalent, Other Stock Grant or Other Stock-Based Award granted under the Plan.

(c) "Award Agreement" shall mean any written agreement, contract or other instrument or document evidencing any Award granted under the Plan.

(d) "Code" shall mean the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder.

(e) "Committee" shall mean either the Board of Directors of the Company or a committee of the Board of Directors appointed by the Board of Directors to administer the Plan.

(f) "Company" shall mean EnteroMedics Inc., a Delaware corporation, and any successor corporation.

(g) "Dividend Equivalent" shall mean any right granted under Section 6(e) of the Plan.

(h) "Eligible Person" shall mean any employee, officer, consultant, independent contractor or Non-Employee Director providing services to the Company or any Affiliate whom the Committee determines to be an Eligible Person.

(i) "Fair Market Value" shall mean, with respect to any property (including, without limitation, any Shares or other securities), the fair market value of such property determined by such methods or procedures as shall be established from time to time by the Committee. Notwithstanding the foregoing, unless otherwise determined by the Committee, the Fair Market Value of Shares on a given date for purposes of the Plan shall not be less than (i) the closing price as reported for composite transactions, if the Shares are then listed on a national securities exchange, (ii) the last sale price, if the Shares are then quoted on the Nasdaq National Market or (iii) the average of the closing representative bid and asked prices of the Shares in all other cases, on the date as of which fair market value is being determined. If on a given date the Shares are not traded in an established securities market, the Committee shall make a good faith attempt to satisfy the requirements of this clause and in connection therewith shall take such action as it deems necessary or advisable.

(j) "Incentive Stock Option" shall mean an option granted under Section 6(a) of the Plan that is intended to meet the requirements of Section 422 of the Code or any successor provision.

(k) "Non-Qualified Stock Option" shall mean an option granted under Section 6(a) of the Plan that is not intended to be an Incentive Stock Option.

(l) "Option" shall mean an Incentive Stock Option or a Non-Qualified Stock Option.

(m) "Other Stock Grant" shall mean any right granted under Section 6(f) of the Plan.

(n) "Other Stock-Based Award" shall mean any right granted under Section 6(g) of the Plan.

(o) "Participant" shall mean an Eligible Person designated to be granted an Award under the Plan.

(p) "Performance Award" shall mean any right granted under Section 6(d) of the Plan.

(q) "Person" shall mean any individual, corporation, partnership, association or trust.

(r) "Plan" shall mean the EnteroMedics Inc. 2003 Stock Incentive Plan, as amended from time to time.

(s) "Restricted Stock" shall mean any Shares granted under Section 6(c) of the Plan.

(t) "Restricted Stock Unit" shall mean any unit granted under Section 6(c) of the Plan evidencing the right to receive a Share (or a cash payment equal to the Fair Market Value of a Share) at some future date.

(u) "Shares" shall mean shares of Common Stock, \$0.01 par value, of the Company or such other securities or property as may become subject to Awards pursuant to an adjustment made under Section 4(c) of the Plan.

(v) "Stock Appreciation Right" shall mean any right granted under Section 6(b) of the Plan.

Section 3. Administration.

(a) Power and Authority of the Committee. The Plan shall be administered by the Committee. Subject to the express provisions of the Plan and to applicable law, the Committee shall have full power and authority to: (i) designate Participants; (ii) determine the type or types of Awards to be granted to each Participant under the Plan; (iii) determine the number of Shares to be covered by (or with respect to which payments, rights or other matters are to be calculated in connection with) each Award; (iv) determine the terms and conditions of any Award or Award Agreement; (v) amend the terms and conditions of any Award or Award Agreement and accelerate the exercisability of Options or the lapse of restrictions relating to Restricted Stock, Restricted Stock Units or other Awards; (vi) determine whether, to what extent and under what circumstances Awards may be exercised in cash, Shares, other securities, other Awards or other property, or canceled, forfeited or suspended; (vii) determine whether, to what extent and under what circumstances cash, Shares, other securities, other Awards, other property and other amounts payable with respect to an Award under the Plan shall be deferred either automatically or at the election of the holder thereof or the Committee; (viii) interpret and administer the Plan and any instrument or agreement relating to, or Award made under, the Plan; (ix) establish, amend, suspend or waive such rules and regulations and appoint such agents as it shall deem appropriate for the proper administration of the Plan; and (x) make any other determination and take any other action that the Committee deems necessary or desirable for the administration of the Plan. Unless otherwise expressly provided in the Plan, all designations, determinations, interpretations and other decisions under or with respect to the Plan or any Award shall be within the sole discretion of the Committee, may be made at any time and shall be final, conclusive and binding upon any Participant, any holder or beneficiary of any Award.

(b) Delegation. The Committee may delegate its powers and duties under the Plan to one or more officers of the Company or any Affiliate or a committee of such officers, subject to such terms, conditions and limitations as the Committee may establish in its sole discretion.

Section 4. Shares Available for Awards.

(a) Shares Available. Subject to adjustment as provided in Section 4(c), the aggregate number of Shares that may be issued under all Awards under the Plan shall be 2,300,000. If any Shares covered by an Award or to which an Award relates are not purchased or are forfeited, or if an Award otherwise terminates without delivery of any Shares, then the number of Shares counted against the aggregate number of Shares available under the Plan with respect to such Award, to the extent of any such forfeiture or termination, shall again be available for granting Awards under the Plan. Notwithstanding the foregoing, the number of Shares available for granting Incentive Stock Options under the Plan shall not exceed 2,300,000, subject to adjustment as provided in the Plan and Section 422 or 424 of the Code or any successor provision.

(b) Accounting for Awards. For purposes of this Section 4, if an Award entitles the holder thereof to receive or purchase Shares, the number of Shares covered by such Award or to which such Award relates shall be counted on the date of grant of such Award against the aggregate number of Shares available for granting Awards under the Plan.

(c) Adjustments. In the event that the Committee shall determine that any dividend or other distribution (whether in the form of cash, Shares, other securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of Shares or other securities of the Company, issuance of warrants or other rights to purchase Shares or other securities of the Company or other similar corporate transaction or event affects the Shares such that an adjustment is determined by the Committee to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, then the Committee shall, in such manner as it may deem equitable, adjust any or all of (i) the number and type of Shares (or other securities or other property) that thereafter may be made the subject of Awards, (ii) the number and type of Shares (or other securities or other property) subject to outstanding Awards and (iii) the purchase or exercise price with respect to any Award; provided, however, that the number of Shares covered by any Award or to which such Award relates shall always be a whole number.

Section 5. Eligibility.

Any Eligible Person of the Company or any Affiliate, shall be eligible to be designated a Participant. In determining which Eligible Persons shall receive an Award and the terms of any Award, the Committee may take into account the nature of the services rendered by the respective Eligible Persons, their present and potential contributions to the success of the Company or such other factors as the Committee, in its discretion, shall deem relevant. Notwithstanding the foregoing, an Incentive Stock Option may only be granted to full or part-time employees (which term as used herein includes, without limitation, officers and directors who are also employees), and an Incentive Stock Option shall not be granted to an employee of an Affiliate unless such Affiliate is also a "subsidiary corporation" of the Company within the meaning of Section 424(f) of the Code or any successor provision.

Section 6. Awards.

(a) Options. The Committee is hereby authorized to grant Options to Participants with the following terms and conditions and with such additional terms and conditions not inconsistent with the provisions of the Plan as the Committee shall determine:

(i) Exercise Price. The purchase price per Share purchasable under an Option shall be determined by the Committee; provided, however, that the purchase price of an Incentive Stock Option shall not be less than 100% of the Fair Market Value of a Share on the date of grant of such Option.

(ii) Option Term. The term of each Option shall be fixed by the Committee; provided, however, that the term of an Incentive Stock Option may not extend more than ten years from the date of grant of such Incentive Stock Option.

(iii) Time and Method of Exercise. The Committee shall determine the time or times at which an Option may be exercised in whole or in part and the method or methods by which, and the form or forms (including, without limitation, cash, Shares, other securities, other Awards or other property, or any combination thereof, having a Fair Market Value on the exercise date equal to the relevant exercise price, which terms shall be set forth in the Award Agreement) in which payment of the exercise price with respect thereto may be made or deemed to have been made.

(iv) Ten Percent Shareholder Rule. Notwithstanding any other provision in the Plan, if at the time an Option is otherwise to be granted pursuant to the Plan to a Participant who owns, directly or indirectly (within the meaning of Section 424(d) of the Code), Common Stock of the Company possessing more than 10% of the total combined voting power of all classes of stock of the Company or its parent or any subsidiary, then any Incentive Stock Option to be granted to such Participant pursuant to the Plan shall satisfy the requirements of Section 422(c)(5) of the Code, and the exercise price of such Option shall be not less than 110% of the Fair Market Value of the Shares covered, and such Option by its terms shall not be exercisable after the expiration of five years from the date such Option is granted.

(b) Stock Appreciation Rights. The Committee is hereby authorized to grant Stock Appreciation Rights to Participants subject to the terms of the Plan and any applicable Award Agreement. A Stock Appreciation Right granted under the Plan shall confer on the holder thereof a right to receive upon exercise thereof the excess of (i) the Fair Market Value of one Share on the date of exercise (or, if the Committee shall so determine, at any time during a specified period before or after the date of exercise) over (ii) the grant price of the Stock Appreciation Right as specified by the Committee, which price shall not be less than 100% of the Fair Market Value of one Share on the date of grant of the Stock Appreciation Right. Subject to the terms of the Plan and any applicable Award Agreement, the grant price, term, methods of exercise, dates of exercise, methods of settlement and any other terms and conditions of any Stock Appreciation Right shall be as determined by the Committee. The Committee may impose such conditions or restrictions on the exercise of any Stock Appreciation Right as it may deem appropriate.

(c) Restricted Stock and Restricted Stock Units. The Committee is hereby authorized to grant Restricted Stock and Restricted Stock Units to Participants with the following terms and conditions and with such additional terms and conditions not inconsistent with the provisions of the Plan as the Committee shall determine:

(i) Restrictions. Shares of Restricted Stock and Restricted Stock Units shall be subject to such restrictions as the Committee may impose (including, without limitation, a waiver by the Participant of the right to vote or to receive any dividend or other right or property with respect thereto), which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise as the Committee may deem appropriate.

(ii) Stock Certificates. Any Restricted Stock shall be registered in the name of the Participant and shall bear an appropriate legend referring to the terms, conditions and restrictions applicable to such Restricted Stock. In the case of Restricted Stock Units, no Shares shall be issued at the time such Awards are granted.

(iii) Forfeiture. Except as otherwise determined by the Committee, upon termination of employment (as determined under criteria established by the Committee) during the applicable restriction period, all Shares of Restricted Stock and all Restricted Stock Units at such time subject to restriction shall be forfeited and reacquired by the Company at the original purchase price; provided, however, that the Committee may, when it finds that a waiver would be in the best interest of the Company, waive in whole or in part any or all remaining restrictions with respect to Shares of Restricted Stock or Restricted Stock Units. Upon the lapse or waiver of restrictions and the restricted period relating to Restricted Stock Units evidencing the right to receive Shares, such Shares shall be issued and delivered to the holders of the Restricted Stock Units.

(d) Performance Awards. The Committee is hereby authorized to grant Performance Awards to Participants subject to the terms of the Plan and any applicable Award Agreement. A Performance Award granted under the Plan (i) may be denominated or payable in cash, Shares (including, without limitation, Restricted Stock and

Restricted Stock Units), other securities, other Awards or other property and (ii) shall confer on the holder thereof the right to receive payments, in whole or in part, upon the achievement of such performance goals during such performance periods as the Committee shall establish. Subject to the terms of the Plan and any applicable Award Agreement, the performance goals to be achieved during any performance period, the length of any performance period, the amount of any Performance Award granted, the amount of any payment or transfer to be made pursuant to any Performance Award and any other terms and conditions of any Performance Award shall be determined by the Committee.

(e) Dividend Equivalents. The Committee is hereby authorized to grant Dividend Equivalents to Participants, subject to the terms of the Plan and any applicable Award Agreement, under which such Participants shall be entitled to receive payments (in cash, Shares, other securities, other Awards or other property as determined in the discretion of the Committee) equivalent to the amount of cash dividends paid by the Company to holders of Shares with respect to a number of Shares determined by the Committee.

(f) Other Stock Grants. The Committee is hereby authorized, subject to the terms of the Plan and any applicable Award Agreement, to grant to Participants Shares without restrictions thereon as are deemed by the Committee to be consistent with the purpose of the Plan.

(g) Other Stock-Based Awards. The Committee is hereby authorized to grant to Participants subject to the terms of the Plan and any applicable Award Agreement, such other Awards that are denominated or payable in, valued in whole or in part by reference to, or otherwise based on or related to, Shares (including, without limitation, securities convertible into Shares), as are deemed by the Committee to be consistent with the purpose of the Plan. Shares or other securities delivered pursuant to a purchase right granted under this Section 6(g) shall be purchased for such consideration, which may be paid by such method or methods and in such form or forms (including, without limitation, cash, Shares, other securities, other Awards or other property or any combination thereof), as the Committee shall determine.

(h) General.

(i) No Cash Consideration for Awards. Awards shall be granted for no cash consideration or for such minimal cash consideration as may be required by applicable law.

(ii) Awards May Be Granted Separately or Together. Awards may, in the discretion of the Committee, be granted either alone or in addition to, in tandem with or in substitution for any other Award or any award granted under any plan of the Company or any Affiliate other than the Plan. Awards granted in addition to or in tandem with other Awards or in addition to or in tandem with awards granted under any such other plan of the Company or any Affiliate may be granted either at the same time as or at a different time from the grant of such other Awards or awards.

(iii) Forms of Payment under Awards. Subject to the terms of the Plan and of any applicable Award Agreement, payments or transfers to be made by the Company or an Affiliate upon the grant, exercise or payment of an Award may be made in such form or forms as the Committee shall determine (including, without limitation, cash, Shares, other securities, other Awards or other property or any combination thereof), and may be made in a single payment or transfer, in installments or on a deferred basis, in each case in accordance with rules and procedures established by the Committee. Such rules and procedures may include, without limitation, provisions for the payment or crediting of reasonable interest on installment or deferred payments or the grant or crediting of Dividend Equivalents with respect to installment or deferred payments.

(iv) Limits on Transfer of Awards. No Award (other than Other Stock Grants) and no right under any such Award shall be transferable by a Participant otherwise than by will or by the laws of descent and distribution; provided, however, that, with the approval of the Committee, a Participant may, in the manner established by the Committee, transfer Options (other than Incentive Stock Options) or designate a beneficiary or beneficiaries to exercise the rights of the Participant and receive any property distributable

with respect to any Award upon the death of the Participant. Each Award or right under any Award shall be exercisable during the Participant's lifetime only by the Participant or, if permissible under applicable law, by the Participant's guardian or legal representative. No Award or right under any such Award may be pledged, alienated, attached or otherwise encumbered, and any purported pledge, alienation, attachment or encumbrance thereof shall be void and unenforceable against the Company or any Affiliate.

(v) Term of Awards. The term of each Award shall be for such period as may be determined by the Committee.

(vi) Restrictions; Securities Exchange Listing. All Shares or other securities delivered under the Plan pursuant to any Award or the exercise thereof shall be subject to such restrictions as the Committee may deem advisable under the Plan, and to any applicable federal or state securities laws and regulatory requirements. The Committee may cause appropriate entries to be made or legends to be affixed to reflect such restrictions. If the Shares or other securities are listed on a securities exchange, the Company shall not be required to deliver any Shares or other securities covered by an Award until such Shares or other securities have been listed on such securities exchange.

Section 7. Amendment and Termination; Adjustments.

Except to the extent prohibited by applicable law and unless otherwise expressly provided in an Award Agreement or in the Plan:

(a) Amendments to the Plan. The Board of Directors of the Company may amend, alter, suspend, discontinue or terminate the Plan; provided, however, that, notwithstanding any other provision of the Plan or any Award Agreement, without the approval of the shareholders of the Company, no such amendment, alteration, suspension, discontinuation or termination shall be made that, absent such approval:

(i) if a class of the Company's securities is then listed on a securities exchange, would cause Rule 16b-3 or the provisions of Section 162(m)(4)(c) of the Code to become unavailable with respect to the Plan;

(ii) would violate the rules or regulations of the Nasdaq National Market, any other securities exchange or the National Association of Securities Dealers, Inc. that are applicable to the Company; or

(iii) would cause the Company to be unable, under the Code, to grant Incentive Stock Options under the Plan.

(b) Amendments to Awards. The Committee may waive any conditions of or rights of the Company under any outstanding Award, prospectively or retroactively. The Committee may not amend, alter, suspend, discontinue or terminate any outstanding Award, prospectively or retroactively, without the consent of the Participant or holder or beneficiary thereof, except as otherwise herein provided or in the Award Agreement.

(c) Correction of Defects, Omissions and Inconsistencies. The Committee may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem desirable to carry the Plan into effect.

Section 8. Income Tax Withholding; Tax Bonuses.

(a) Withholding. In order to comply with all applicable federal or state income tax laws or regulations, the Company may take such action as it deems appropriate to ensure that all applicable federal or state payroll, withholding, income or other taxes, which are the sole and absolute responsibility of a Participant are withheld or collected from such Participant. In order to assist a Participant in paying all or a portion of the federal and state taxes to be withheld or collected upon exercise or receipt of (or the lapse of restrictions relating to) an Award, the Committee, in its discretion and subject to such additional terms and conditions as it may adopt, may permit the Participant to satisfy such tax obligation by (i) electing to have the Company withhold a portion of the Shares

otherwise to be delivered upon exercise or receipt of (or the lapse of restrictions relating to) such Award with a Fair Market Value equal to the amount of such taxes or (ii) electing to deliver to the Company Shares other than Shares issuable upon exercise or receipt of (or the lapse of restrictions relating to) such Award with a Fair Market Value equal to the amount of such taxes. The election, if any, must be made on or before the date that the amount of tax to be withheld is determined.

(b) Tax Bonuses. The Committee, in its discretion, shall have the authority, at the time of grant of any Award under this Plan or at any time thereafter, to approve cash bonuses to designated Participants to be paid upon their exercise or receipt of (or the lapse of restrictions relating to) Awards in order to provide funds to pay all or a portion of federal and state taxes due as a result of such exercise or receipt (or the lapse of such restrictions). The Committee shall have full authority in its discretion to determine the amount of any such tax bonus.

Section 9. General Provisions.

(a) No Rights to Awards. No Eligible Person, Participant or other Person shall have any claim to be granted any Award under the Plan, and there is no obligation for uniformity of treatment of Eligible Persons, Participants or holders or beneficiaries of Awards under the Plan. The terms and conditions of Awards need not be the same with respect to any Participant or with respect to different Participants.

(b) Award Agreements. No Participant will have rights under an Award granted to such Participant unless and until an Award Agreement shall have been duly executed on behalf of the Company and, if requested by the Company, signed by the Participant.

(c) No Limit on Other Compensation Arrangements. Nothing contained in the Plan shall prevent the Company or any Affiliate from adopting or continuing in effect other or additional compensation arrangements, and such arrangements may be either generally applicable or applicable only in specific cases.

(d) No Right to Employment. The grant of an Award shall not be construed as giving a Participant the right to be retained in the employ of the Company or any Affiliate, nor will it affect in any way the right of the Company or an Affiliate to terminate such employment at any time, with or without cause. In addition, the Company or an Affiliate may at any time dismiss a Participant from employment free from any liability or any claim under the Plan, unless otherwise expressly provided in the Plan or in any Award Agreement.

(e) Governing Law. The validity, construction and effect of the Plan or any Award, and any rules and regulations relating to the Plan or any Award, shall be determined in accordance with the laws of the State of Minnesota.

(f) Severability. If any provision of the Plan or any Award is or becomes or is deemed to be invalid, illegal or unenforceable in any jurisdiction or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or if it cannot be so construed or deemed amended without, in the determination of the Committee, materially altering the purpose or intent of the Plan or the Award, such provision shall be stricken as to such jurisdiction or Award, and the remainder of the Plan or any such Award shall remain in full force and effect.

(g) No Trust or Fund Created. Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company or any Affiliate and a Participant or any other Person. To the extent that any Person acquires a right to receive payments from the Company or any Affiliate pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Company or any Affiliate.

(h) No Fractional Shares. No fractional Shares shall be issued or delivered pursuant to the Plan or any Award, and the Committee shall determine whether cash shall be paid in lieu of any fractional Shares or whether such fractional Shares or any rights thereto shall be canceled, terminated or otherwise eliminated.

(i) Headings. Headings are given to the Sections and subsections of the Plan solely as a convenience to facilitate reference. Such headings shall not be deemed in any way material or relevant to the construction or interpretation of the Plan or any provision thereof.

(j) Other Benefits. No compensation or benefit awarded to or realized by any Participant under the Plan shall be included for the purpose of computing such Participant's compensation under any compensation-based retirement, disability, or similar plan of the Company unless required by law or otherwise provided by such other plan.

Section 10. Effective Date of the Plan.

The Plan shall be effective as of the date of its approval and adoption by the Company's shareholders. If the Company's shareholders do not approve the Plan, the Plan shall be null and void.

Section 11. Term of the Plan.

Awards shall only be granted under the Plan during a 10-year period beginning on the effective date of the Plan. However, unless otherwise expressly provided in the Plan or in an applicable Award Agreement, any Award theretofore granted may extend beyond the end of such 10-year period, and the authority of the Committee provided for hereunder with respect to the Plan and any Awards, and the authority of the Board of Directors of the Company to amend the Plan and to waive any conditions or rights of the Company under any Award pursuant to 7(b) hereof, shall extend beyond the termination of the Plan.

Section 12. One-Time Option Exchange Offer.

Notwithstanding any other provision of the Plan to the contrary, upon approval of the Company's stockholders, the Committee may provide for, and the Company may complete, a one-time option exchange offer, pursuant to which certain outstanding options could, at the election of the person holding such option, be tendered to the Company on a grant-by-grant basis for cancellation in exchange for the issuance of a lesser amount of options with a lower exercise price, provided that such one-time option exchange offer is commenced within twelve months of the date of such stockholder approval.

LOCATION OF ENTEROMEDICS SPECIAL MEETING OF STOCKHOLDERS

Friday, October 22 at 8:00 a.m. Central Time

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



Directions By Car:

From Minneapolis-St. Paul Airport/South

Merge onto MN-5 toward MN-55/St. Paul/Minneapolis. Merge onto MN-55W toward MN-62/Minneapolis. Follow MN-62 West. Merge onto I-35W N. Stay on I-35W N for approximately 7 miles. Take the Cleveland Avenue/ County C Exit, Exit 24. Take the Westbound ramp. Continue West on County Road C through two stoplights (Long Lake Road and Walnut Street). We are the first right turn (Patton Road) after Walnut Street and are located in the building at end of the cul-de-sac.

From the North

Follow I-35W South to the County Road C Exit, Exit 24. Continue west on County Road C through two stoplights (Long Lake Road and Walnut Street). We are the first right turn (Patton Road) after Walnut Street and are located in the building at end of the cul-de-sac.

From the East

Follow I-94E to I-35E North. Merge onto MN-36W via Exit 111B toward Minneapolis. Merge onto I-35W N toward Cleveland Avenue. Take the Cleveland Avenue/County C Exit, Exit 24. Take the Westbound ramp. Continue West on County Road C through two stoplights (Long Lake Road and Walnut Street). We are the first right turn (Patton Road) after Walnut Street and are located in the building at end of the cul-de-sac.

From the West

Follow I-394 East/US-12 toward Minneapolis. Merge onto I-94 East/US 12 E/US-52 S via Exit 8B. Merge onto I-35W N via exit 233C on the left. Take the Cleveland Avenue/ county C Exit, Exit 24. Take the Westbound ramp. Continue West on County Road C through two stoplights (Long Lake Road and Walnut Street). We are the first right turn (Patton Road) after Walnut Street and are located in the building at end of the cul-de-sac.

EnteroMedics Inc.

SPECIAL MEETING OF STOCKHOLDERS

Friday, October 22, 2010

8:00 a.m., Central Time

EnteroMedics Inc.

2800 Patton Road

St. Paul, Minnesota 55113



**EnteroMedics Inc.
2800 Patton Road
St. Paul, Minnesota 55113**

proxy

This proxy is solicited by the Board of Directors for use at the Special Meeting on October 22, 2010.

The shares of stock you hold in your account will be voted as you specify on the reverse side.

If no choice is specified, the proxy will be voted "FOR" Items 1 and 2.

By signing the proxy, you revoke all prior proxies and appoint Mark B. Knudson, Ph.D. and Greg S. Lea, and each of them, with full power of substitution, to vote your shares on the matters shown on the reverse side and any other matters which may come before the Special Meeting and all adjournments.

See reverse for voting instructions.



Wells Fargo Shareowner Services
P.O. Box 64873
St. Paul, MN 55164-0873

COMPANY #

There are three ways to vote your Proxy

Your telephone or internet vote authorizes the Named Proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

VOTE BY PHONE — TOLL FREE — 1-800-560-1965 — QUICK EASY IMMEDIATE

- Use any touch-tone telephone to vote your proxy 24 hours a day, 7 days a week, until 12:00 p.m. (CT) on October 21, 2010.
- Please have your proxy card and the last four digits of your Social Security Number or taxpayer identification number available. Follow the simple instructions the voice provides you.

VOTE BY INTERNET — <http://www.eproxy.com/etrm/> — QUICK EASY IMMEDIATE

- Use the Internet to vote your proxy 24 hours a day, 7 days a week until 12:00 p.m. (CT) on October 21, 2010.
- Please have your proxy card and the last four digits of your Social Security Number or taxpayer identification number available. Follow the simple instructions to obtain your records and create an electronic ballot.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we've provided or return it to **EnteroMedics Inc.**, c/o Shareowner ServicesSM, P.O. Box 64873, St. Paul, MN 55164-0873.

If you vote by Phone or Internet, please do not mail your Proxy Card.

⤵ Please detach here ⤵

The Board of Directors Recommends a Vote FOR Items 1 and 2.

- | | | | |
|--|-----------------------------------|---------------------------------------|----------------------------------|
| 1. Amendment to the 2003 Stock Incentive Plan to increase the number of shares authorized under the plan by 1,149,817 from 1,150,183 to 2,300,000. | <input type="checkbox"/> Vote FOR | <input type="checkbox"/> Vote AGAINST | <input type="checkbox"/> ABSTAIN |
| 2. Amendment to the 2003 Stock Incentive Plan to allow for a one-time stock option exchange program. | <input type="checkbox"/> Vote FOR | <input type="checkbox"/> Vote AGAINST | <input type="checkbox"/> ABSTAIN |
| 3. To transact such other business as may properly be considered at the meeting or any adjournment of the meeting. | | | |

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED OR, IF NO DIRECTION IS GIVEN, WILL BE VOTED FOR EACH PROPOSAL.

Address Change? Mark Box Indicate changes below: Date _____

Signature box

Signature(s) in Box
Please sign exactly as your name(s) appear on the Proxy. If held in joint tenancy, all persons must sign. Trustees, administrators, etc., should include title and authority. Corporations should provide full name of corporation and title of authorized officer signing the proxy.