

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Enteromedics Inc.
(Name of Issuer)

Common Stock, \$0.01 par value per share
(Title of Class of Securities)

29365M109
(CUSIP Number)

October 2, 2009
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

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

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

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CUSIP No. 29365M109

13G

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(1) NAMES OF REPORTING PERSONS

Hudson Bay Fund LP

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER

454,271 shares of Common Stock

OWNED BY

EACH (7) SOLE DISPOSITIVE POWER
0

REPORTING

PERSON WITH: (8) SHARED DISPOSITIVE POWER
454,271 shares of Common Stock

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
454,271 shares of Common Stock

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

[]

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
1.22%

(12) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
PN

(1) NAMES OF REPORTING PERSONS

Hudson Bay Overseas Fund, Ltd.

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 807,594 shares of Common Stock

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH: (8) SHARED DISPOSITIVE POWER
807,594 shares of Common Stock

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
807,594 shares of Common Stock

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

[]

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
2.16%

(12) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
CO

(1) NAMES OF REPORTING PERSONS

Hudson Bay Capital Management, L.P.

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 1,261,865 shares of Common Stock

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH: (8) SHARED DISPOSITIVE POWER
1,261,865 shares of Common Stock

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
1,261,865 shares of Common Stock

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
3.38%

(12) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
PN

(1) NAMES OF REPORTING PERSONS

Sander Gerber

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

United States

NUMBER OF (5) SOLE VOTING POWER
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER
OWNED BY 1,261,865 shares of Common Stock

EACH (7) SOLE DISPOSITIVE POWER
REPORTING 0

PERSON WITH: (8) SHARED DISPOSITIVE POWER
1,261,865 shares of Common Stock

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED
BY EACH REPORTING PERSON
1,261,865 shares of Common Stock

(10) CHECK BOX IF THE AGGREGATE AMOUNT
IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

(11) PERCENT OF CLASS REPRESENTED
BY AMOUNT IN ROW (9)
3.38%

(12) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
IN

Item 1.

(a) Name of Issuer

EnteroMedics Inc., a Delaware corporation (the "Company")

(b) Address of Issuer's Principal Executive Offices

2800 Patton Road
St. Paul, Minnesota 55113

Item 2(a). Name of Person Filing

This statement is filed by the entities and persons listed below, who are collectively referred to herein as "Reporting Persons".

FUNDS

- (i) Hudson Bay Fund LP, with respect to the shares of Common Stock beneficially owned by it.
- (ii) Hudson Bay Overseas Fund, Ltd. with respect to the shares of Common Stock beneficially owned by it.

INVESTMENT MANAGER

- (iii) Hudson Bay Capital Management, L.P., (the "Investment Manager"), with respect to the shares of Common Stock beneficially owned by Hudson Bay Fund LP and Hudson Bay Overseas Fund, Ltd. (together, the "Hudson Bay Funds") and to which the Investment Manager serves as investment manager.

REPORTING INDIVIDUAL

- (iv) Mr. Sander Gerber ("Mr. Gerber"), with respect to the shares of Common Stock beneficially owned by each of the Hudson Bay Funds.

Mr. Gerber is referred to as the "Reporting Individual."

The Investment Manager serves as the investment manager to each of the Hudson Bay Funds. The Reporting Individual is an executive officer of the Investment Manager.

Item 2(b). Address of Principal Business Office or, if none, Residence

The address of the principal business office of each of the Reporting Persons is:

120 Broadway, 40th Floor
New York, NY 10271

Item 2(c). Citizenship

Citizenship is set forth in Row 4 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

Item 2(d) Title of Class of Securities

Common Stock, \$0.01 par value per share ("Common Stock")

Item 2(e) CUSIP Number

29365M109

Item 3. If this statement is filed pursuant to ss.ss.240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o).
- (b) Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) An investment adviser in accordance with ss.240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with ss.240.13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

The information required by Items 4(a) - (c) is set forth in Rows 5 - 11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person. The Company indicated to the Reporting Persons in writing that on October 2, 2009 the Company had 31,213,336 shares of Common Stock issued and outstanding prior to the issuance of shares of Common Stock in the transaction described in the Company's current report on Form 8-K filed on October 5, 2009 (the "8-K Filing"). As disclosed in the 8-K Filing, the Company issued to the Hudson Bay Funds, in the aggregate, 6,161,068 shares of Common Stock. The percentage set forth on Row (11) of the cover pages is based on the total number of outstanding shares of Common Stock.

The Investment Manager, which serves as the investment manager to the Hudson Bay Funds, may be deemed to be the beneficial owner of all shares of Common Stock owned by the Hudson Bay Funds. The Reporting Individual, as an executive officer of the Investment Manager with the power to exercise investment discretion, may be deemed to be the beneficial owner of all shares of Common Stock owned by the Hudson Bay Funds. Each of the Investment Manager and the Reporting Individual hereby disclaims any beneficial ownership of any such shares of Common Stock, except for their pecuniary interest therein.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company

Not applicable.

Item 8. Identification and Classification of Members of the Group

See Exhibit I.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Exhibits:

Exhibit I: Joint Filing Agreement, dated as of October 6, 2009, by and among Hudson Bay Fund LP, Hudson Bay Overseas Fund, Ltd., Hudson Bay Capital Management, L.P. and Sander Gerber.

SIGNATURES

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information with respect to it set forth in this statement is true, complete, and correct.

Dated: October 6, 2009

HUDSON BAY FUND LP

By: Hudson Bay Capital Management LP,
Investment Manager

By: /s/ Yoav Roth

Name: Yoav Roth
Title Authorized Signatory

HUDSON BAY CAPITAL MANAGEMENT, L.P.

By: /s/ Yoav Roth

Name: Yoav Roth
Title Authorized Signatory

HUDSON BAY OVERSEAS FUND, LTD.

By: Hudson Bay Capital Management LP,
Investment Manager

By: /s/ Yoav Roth

Name: Yoav Roth
Title Authorized Signatory

/s/ Sander Gerber

SANDER GERBER

EXHIBIT I

JOINT FILING AGREEMENT

This will confirm the agreement by and among the undersigned that the Schedule 13G filed with the Securities and Exchange Commission on or about the date hereof with respect to the beneficial ownership by the undersigned of the shares of common stock, \$0.01 par value, of EnteroMedics Inc. is being filed, and all amendments thereto will be filed, on behalf of each of the persons and entities named below in accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Dated as of October 6, 2009

HUDSON BAY FUND LP

HUDSON BAY OVERSEAS FUND, LTD.

By: Hudson Bay Capital Management LP,
Investment Manager

By: Hudson Bay Capital Management LP,
Investment Manager

By: /s/ Yoav Roth

By: /s/ Yoav Roth

Name: Yoav Roth
Title Authorized Signatory

Name: Yoav Roth
Title Authorized Signatory

HUDSON BAY CAPITAL MANAGEMENT, L.P.

By: /s/ Yoav Roth

/s/ Sander Gerber

Name: Yoav Roth
Title Authorized Signatory

SANDER GERBER