FORM 4

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL |
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# Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

#### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

|  |   |                             |            |  | o  | r Sect                                  | tion 30   | (h) of the I | nvestmen                                | t Con | npany Act  | of 1940   |   |   |   |  |                     |  |   |
|--|---|-----------------------------|------------|--|--|---|---|--------------|---|-------|--|---|---|---|---|--|---------------------|--|---|
|  |   |                             |            |  | 2. Issuer Name <b>and</b> Ticker or Trading Symbol EnteroMedics Inc [ ETRM ] |   |   |              |   |       |  |   |   | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director  Officer (give title  X  below) |   |  |                     |  |   |
| (Last) (First) (Middle) ONE EMBARCADERO CENTER SUITE 4000        |   |                             |            |  | 3. Date of Earliest Transaction (Month/Day/Year) 12/14/2010                  |   |   |              |   |       |  |   |   | below) For  | rmer 10%  |  | below)<br>kholder   |  |   |
| Street) SAN FRANCISCO CA 94111                                   |   |                             |            | 4. If Amendment, Date of Original Filed (Month/Day/Year) |  |   |   |              |   |       | Line)  | 6. Individual or Joint/Group Filing (Check Applicable Line)  Form filed by One Reporting Person  X Form filed by More than One Reporting Person |   |   |   |  |                     |  |   |
| (City)   | (St   | ate)                        | (Zip)      |  |  |   |   |              |   |       |  |   |   |   |   |  |                     |  |   |
|  |   | Tal                         | ole I - No | n-Deri   | vativ  | re Se                                   | ecuri   | ities Acc    | quired,                                 | Dis   | posed o  | f, or B   | enef  | icially   | Owned   |  |                     |  |   |
| 1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day) |   |                             |            |  | ay/Year) if  |   | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) |              | 3.<br>Transaction<br>Code (Instr.<br>8) |       | 4. Securities Acquired (A)<br>Disposed Of (D) (Instr. 3, 4 |   | A) or<br>, 4 and 5)   | 1 and 5) Securities<br>Beneficia<br>Owned Fo  |   | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)      |                     | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership                      |   |
|  |   |                             |            |  |  |   |   |              |   | v     | Amount (   |   | or  | Price   | Reported<br>Transaction(s)<br>(Instr. 3 and 4)      |  |                     |  | (Instr. 4)  |
| Common Stock   |   |                             |            | 12/1   | 12/14/2010   |   |   |              | С                                       |       | 406,50   | 04 .  | A   | \$0(1)  | 693,  | 693,249  |                     | I  | By<br>Aberdare<br>II Annex<br>Fund,<br>L.P. <sup>(2)(3)</sup> |
| Common Stock   |   |                             |            |  |  |   |   |              |   |       |  |   |   |   | 238,  | 565  |                     | I :  | By<br>Aberdare<br>Ventures<br>II, L.P. <sup>(4)</sup>         |
| Common Stock   |   |                             |            |  |  |   |   |              |   |       |  |   |   | 4,9   | 50  |  | I                   | By<br>Aberdare<br>Ventures<br>II<br>Bermuda,<br>L.P. <sup>(5)</sup>      |   |
|  |   |                             | Table II - |  |  |   |   |              |   |       |  |   |   |   | wned  |  |                     |  |   |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)              | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | e of<br>vative              |            | 3A. Deemed Execution Date, if any                        |  | 4.<br>Transaction<br>Code (Instr.<br>8) |   | Derivative E |   |       |  | 7. Title of Secu<br>Underly<br>Derivati   | Title and Amount<br>f Securities<br>nderlying<br>erivative Security<br>nstr. 3 and 4) |   | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | derivative<br>Securitie<br>Beneficia<br>Owned<br>Following<br>Reported | e<br>s<br>ally<br>g | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>(Instr. 4)                         |
|  |   |                             |            |  | Code   | v                                       | (A)   | (D)          | Date<br>Exercisal                       | ole [ | Expiration<br>Date   | Title   | or<br>Nu  | nount<br>ımber<br>Shares  |   | Transacti<br>(Instr. 4)  | ion(s)              |  |   |
| Series A<br>Non-Voting<br>Convertible<br>Preferred<br>Stock      | (1)   | 12/14/2010                  |            |  | С  |   |   | 406,504      | (1)                                     |       | (1)  | Commo<br>Stock  | <sup>n</sup> 40   | 06,504  | \$0   | 0  |                     | I  | See<br>Footnote <sup>(6)</sup>                                |
|  |   | Reporting Person* ANNEX FUN | ID L P     |  |  |   |   |              |   |       |  |   |   |   |   |  |                     |  |   |
| (Last)   |   | (First)                     | (Middl     | e)   |  |   |   |              |   |       |  |   |   |   |   |  |                     |  |   |

## ONE EMBARCADERO CENTER **SUITE 4000** (Street) SAN FRANCISCO CA 94111 (City) (State) (Zip) 1. Name and Address of Reporting Person\* Aberdare GP II, L.L.C.

| (Last)   | (First) | (Middle) |  |  |  |  |  |  |  |
|--|---------|----------|--|--|--|--|--|--|--|
| ONE EMBARCADERO CENTER   |         |          |  |  |  |  |  |  |  |
| SUITE 4000   |         |          |  |  |  |  |  |  |  |
| (Street)   |         |          |  |  |  |  |  |  |  |
| SAN FRANCISCO  | CA      | 94111    |  |  |  |  |  |  |  |
| (City)   | (State) | (Zip)    |  |  |  |  |  |  |  |
| 1. Name and Address of Reporting Person* <u>Aberdare Ventures II, L.P.</u> |         |          |  |  |  |  |  |  |  |
| (Last)   | (First) | (Middle) |  |  |  |  |  |  |  |
| ONE EMBARCADERO CENTER   |         |          |  |  |  |  |  |  |  |
| SUITE 4000   |         |          |  |  |  |  |  |  |  |
| (Street)   |         |          |  |  |  |  |  |  |  |
| SAN FRANCISCO  | CA      | 94111    |  |  |  |  |  |  |  |
| (City)   | (State) | (Zip)    |  |  |  |  |  |  |  |
| 1. Name and Address of   |         | . D      |  |  |  |  |  |  |  |
| Aberdare Ventures II (Bermuda), L.P.                                       |         |          |  |  |  |  |  |  |  |
| (Last)   | (First) | (Middle) |  |  |  |  |  |  |  |
| ONE EMBARCADERO CENTER   |         |          |  |  |  |  |  |  |  |
| SUITE 4000   |         |          |  |  |  |  |  |  |  |
| (Street)   |         |          |  |  |  |  |  |  |  |
| SAN FRANCISCO  | CA      | 94111    |  |  |  |  |  |  |  |
| (City)   | (State) | (Zip)    |  |  |  |  |  |  |  |

#### **Explanation of Responses:**

- 1. The Series A Non-Voting Convertible Preferred Stock converted into the Issuer's Corporation common stock on a 1-for-1 basis and had no expiration date.
- 2. The securities are owned by Aberdare II Annex Fund, L.P. ("Aberdare Annex II"). Aberdare GP II, L.L.C. ("Aberdare GP II") serves as the sole General Partner of Aberdare Annex II, Aberdare Ventures II, L.P. ("Aberdare II") and Aberdare Ventures II Bermuda, L.P. ("Aberdare II Bermuda"), and has sole voting and investment control over the securities owned by Aberdare Annex II, Aberdare II Bermuda, and may be deemed to own beneficially the securities held by Aberdare Annex II, Aberdare II Bermuda.
- 3. Aberdare GP II however owns no securities of the Issuer directly. Aberdare GP II disclaims beneficial ownership of the securities reported herein, except to the extent of its proportionate pecuniary interest therein. Paul H. Klingenstein ("Klingenstein") is a manager of Aberdare GP II and has voting and dispositive power over the securities held by Aberdare Annex II, Aberdare II and Aberdare II Bermuda. Klingenstein is a director of the Issuer and, accordingly, files separate Section 16 reports.
- 4. The securities are owned by Aberdare II.
- 5. The securities are owned by Aberdare II Bermuda.
- 6. No securities owned

| /s/ Paul H. Klingenstein, Manager of Aberdare GP II, L.L.C., which serves as the General Partner of Aberdare II Annex Fund, L.P.         | 12/16/2010       |
|--|------------------|
| /s/ Paul H. Klingenstein, Manager of Aberdare GP II, L.L.C., which serves as the General Partner of Aberdare Ventures II, L.P.           | 12/16/2010       |
| /s/ Paul H. Klingenstein, Manager of Aberdare GP II, L.L.C., which serves as the General Partner of Aberdare Ventures II (Bermuda), L.P. | 12/16/2010       |
| /s/ Paul H. Klingenstein, Manager of Aberdare GP II, L.L.C. ** Signature of Reporting Person   | 12/16/2010  Date |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.