

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* MPM BIOVENTURES III-QP L.P. (Last) (First) (Middle) C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR (Street) BOSTON MA 02116 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol EnteroMedics Inc [ETRM]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) <input checked="" type="checkbox"/> Other (specify below) Former 10% Owner
	3. Date of Earliest Transaction (Month/Day/Year) 12/14/2010	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	
6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	12/14/2010		C		704,607 ⁽¹⁾	A	(2)	1,669,753	I	See footnote ⁽³⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					
Series A Non-Voting Convertible Preferred Stock	(2)	12/14/2010		C		704,607 ⁽¹⁾		(2)	(2)	Common Stock 704,607	\$0	0	I	See footnote ⁽⁴⁾

1. Name and Address of Reporting Person*
MPM BIOVENTURES III-QP L.P.
 (Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR
 (Street)
BOSTON MA 02116
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
MPM BIOVENTURES III PARALLEL FUND, L.P.
 (Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR
 (Street)
BOSTON MA 02116
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
MPM BIOVENTURES III GMBH & CO. Beteiligungs KG

(Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

(Street)
BOSTON MA 02116

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[MPM BIOVENTURES III L.P.](#)

(Last) (First) (Middle)

C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

(Street)
BOSTON MA 02116

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[MPM BIOVENTURES III GP L.P.](#)

(Last) (First) (Middle)

C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

(Street)
BOSTON MA 02116

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[MPM BIOVENTURES III LLC](#)

(Last) (First) (Middle)

C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

(Street)
BOSTON MA 02116

(City) (State) (Zip)

1. Name and Address of Reporting Person*

[MPM ASSET MANAGEMENT INVESTORS](#)
[2002 BVIII LLC](#)

(Last) (First) (Middle)

C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

(Street)
BOSTON MA 02116

(City) (State) (Zip)

Explanation of Responses:

1. The shares were converted as follows: 586,338 by MPM BioVentures III QP, L.P. ("BV III QP"), 39,423 by MPM BioVentures III, L.P. ("BV III"), 11,584 by MPM Asset Management Investors 2002 BVIII LLC ("AM 2002"), 17,714 by MPM BioVentures III Parallel Fund, L.P. ("BV Parallel") and 49,548 by MPM BioVentures III GmbH & Co. Beteiligungs KG ("BV KG"). MPM BioVentures III GP, L.P. ("MPM III GP") and MPM BioVentures III LLC ("MPM III LLC") are the direct and indirect general partners of BV III QP, BV III, BV Parallel and BV KG. Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Dennis Henner, Nicholas Simon III, Michael Steinmetz and Kurt Wheeler are the Series A members of MPM III LLC and the managers of AM 2002. Each Reporting Person disclaims beneficial ownership of the securities except to the extent of his or its respective pecuniary interest therein. Mr. Evnin is a director of the Issuer and files Section 16 reports separately.

2. 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.

3. The shares are held as follows: 1,389,482 by BV III QP, 93,424 by BV III, 27,452 by AM 2002, 41,978 by BV Parallel and 117,417 by BV KG. Each Reporting Person disclaims beneficial ownership of the securities except to the extent of his or its respective pecuniary interest therein.

4. No securities owned.

Remarks:

See Form 4 for Ansbert Gadicke for additional members of this joint filing.

/s/ Luke Evnin, Series A 12/15/2010
Member of MPM BioVentures
III LLC, the general partner of
MPM BioVentures III GP, LP,

<u>the general partner of MPM BioVentures III QP, LP</u>	
<u>/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, the general partner of MPM BioVentures III Parallel Fund, LP</u>	<u>12/15/2010</u>
<u>/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, in its capacity as the Managing Limited Partner of MPM BioVentures III GmbH & Co. Beteiligungs KG</u>	<u>12/15/2010</u>
<u>/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, the general partner of MPM BioVentures III, LP</u>	<u>12/15/2010</u>
<u>/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP</u>	<u>12/15/2010</u>
<u>/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC</u>	<u>12/15/2010</u>
<u>/s/ Luke Evnin, manager of MPM Asset Management Investors 2002 BVIII LLC</u>	<u>12/15/2010</u>
** Signature of Reporting Person	Date

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

* 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.