UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D

UNDER THE SECURITIES EXCHANGE ACT OF 1934 (Amendment No. ____)*

EnteroMedics Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

> **29365M 10 9** (CUSIP Number)

LUKE EVNIN MPM ASSET MANAGEMENT THE JOHN HANCOCK TOWER 200 CLARENDON STREET, 54TH FLOOR BOSTON, MASSACHUSETTS 02116 TELEPHONE: (617) 425-9200 (Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

February 24, 2009

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose 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).

Explanatory Note

The following constitutes the Schedule 13D filed by the undersigned (the "Schedule 13D"). This Schedule 13D is being filed by the MPM Entities and the Listed Persons (each as defined below) to report the acquisition of shares of Common Stock (as defined below) and warrants to purchase Common Stock, of the Issuer (as defined below) on February 24, 2009 as described in Item 3 below.

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of

	NAME							
1	NAME OF REPORTING PERSONS							
-	MPM B	ioVentu	ires III-QP, L.P					
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
2	(a) o							
	(b) ☑ ((1)						
	SEC US	E ONL	Y					
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4	SOURC	E OF F	UNDS (SEE INSTRUCTIONS)					
-	WC							
	CHECK	IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
5								
	0							
6	CITIZE	NSHIP	OR PLACE OF ORGANIZATION					
U	Delawar	e						
			SOLE VOTING POWER					
		7						
	BER OF		4,923,671(2)					
	ARES ICIALLY	8	SHARED VOTING POWER					
	ED BY	0	0					
	АСН		SOLE DISPOSITIVE POWER					
	RTING	9						
	RSON		4,923,671(2)					
W	ITH	10	SHARED DISPOSITIVE POWER					
		10	0					
	AGGRE	EGATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
11								
	4,923,67							
10	CHECK	IF TH	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
12	0							
		NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11					
13	I LICOL							
	16.4%(3	8)						
	TYPE C	OF REP	ORTING PERSON (SEE INSTRUCTIONS)					
14	DN							
	PN							

(1) This Schedule is filed by MPM BioVentures III-QP, L.P. ("BV III QP "), MPM BioVentures III, L.P. ("BV III"), MPM BioVentures III Parallel Fund, L.P. ("BV III PF"), MPM BioVentures III GmbH & Co. Beteiligungs KG ("BV III KG"), MPM Asset Management Investors 2002 BVIII LLC ("AM LLC"), MPM BioVentures III GP, L.P. ("BV III GP") and MPM BioVentures III LLC ("BV III LLC" and collectively with BV III QP, BV III, BV III PF, BV III KG, AM LLC and BV III GP, the "MPM Entities") and Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III and Dennis Henner (collectively, the "Listed Persons"). BVIII GP and BVIII LLC are the direct and indirect general partners of BV III QP, BV III, BV III PF and BV III KG. The Listed Persons are Series A members of BV III LLC and managers of AM LLC. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) Includes 104,816 shares of common stock, par value \$0.01 per share (the "Common Stock") issuable pursuant to warrants, which are exercisable within 60 days of the date of this filing.

(3) This percentage is calculated based upon 29,991,497 shares of EnteroMedics Inc.'s (the "Issuer's") Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1) promulgated under the Exchange Act of 1934, as amended (the "Exchange Act"), which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set forth in the Issuer's most recent Quarterly Report on Form 10-Q, filed with the

Securities and Exchange Commission on November 7, 2008 and (ii) 13,110,393 shares of the Issuer's Common Stock issued pursuant to the securities purchase agreement dated as of February 19, 2009 (the "SPA").

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1	NAME	NAME OF REPORTING PERSONS						
1	MPM B	ioVentu	ures III, L.P					
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
2	(a) o (b) ☑ ((a) o (b) ☑ (1) 						
2	SEC USE ONLY							
3								
	SOURC	SOURCE OF FUNDS (SEE INSTRUCTIONS)						
4	WC	WC						
-	CHECK	IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
5	0							
C	CITIZEI	NSHIP	OR PLACE OF ORGANIZATION					
6	Delawar	e						
		7	SOLE VOTING POWER					
NUM	IBER OF	1	331,045(2)					
	IARES	0	SHARED VOTING POWER					
	FICIALLY NED BY	8	0					
	ACH		SOLE DISPOSITIVE POWER					
	ORTING RSON	9	331,045(2)					
V	VITH	10	SHARED DISPOSITIVE POWER					
		10	0					
11	AGGRE	GATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
11	331,045	(2)						
10	CHECK	IF TH	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
12	0	ο						
10	PERCE	NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11					
13	1.1% (3)	1.1% (3)						
1 /	TYPE O	F REP	ORTING PERSON (SEE INSTRUCTIONS)					
14	PN							
	This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.							
-	-		res of Common Stock issuable pursuant to warrants, which are exercisable within 60 days of the date of this filing.					
(3)]			calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1)					
f	orth in the I	ssuer's	the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set s most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and					
(ii) 13,110,3	93 sha	res of the Issuer's Common Stock issued pursuant to the SPA.					

1	NAME OF REPORTING PERSONS							
L	MPM A	MPM Asset Management Investors 2002 BVIII LLC						
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
2	(a) o							
	(b) 🗹 (1)							
3	SEC US	E ONI	X					
	COLIDO	SOLIDCE OF FLINIDS (SEE INSTRUCTIONS)						
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6	CITIZEI	NSHIP	OR PLACE OF ORGANIZATION					
	Delawar	e						
		7	SOLE VOTING POWER					
NUME	BER OF	•	97,273(2)					
	ARES ICIALLY	8	SHARED VOTING POWER					
	ED BY	U	0					
	ACH RTING	9	SOLE DISPOSITIVE POWER					
	SON	9	97,273(2)					
W	ITH	10	SHARED DISPOSITIVE POWER					
		10	0					
11	AGGRE	GATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
11	97,273(2	<u>2)</u>						
10	CHECK	IF TH	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
12	0	0						
10	PERCE	NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11					
13	0.3%(3)	0.3%(3)						
	TYPE O	F REP	ORTING PERSON (SEE INSTRUCTIONS)					
14	00							
	This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.							
-	-		res of Common Stock issuable pursuant to warrants, which are exercisable within 60 days of the date of this filing.					
(3) Th	nis percent	age is	calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1)					
			the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set s most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and					
			res of the Issuer's Common Stock issued pursuant to the SPA.					

1	NAME OF REPORTING PERSONS							
1	MPM B	MPM BioVentures III Parallel Fund, L.P						
	CHECK THE ADDODDIATE DOVIE A MEMBED OF A CROUD (CEP INCEDUCTIONO)							
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
2	(a) o							
		(b) \square (1) SEC USE ONLY						
3								
4	SOURC	E OF F	FUNDS (SEE INSTRUCTIONS)					
	WC	WC						
5	CHECK	IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
5	0							
6	CITIZEI	NSHIP	OR PLACE OF ORGANIZATION					
6	Delawar	e						
		_	SOLE VOTING POWER					
NUM	BER OF	7	148,747(2)					
	ARES		SHARED VOTING POWER					
	ICIALLY	8						
	ED BY ACH		0 SOLE DISPOSITIVE POWER					
	RTING	9	SOLE DISPOSITIVE FOWER					
	RSON		148,747(2)					
W	ITH	10	SHARED DISPOSITIVE POWER					
		10	0					
11	AGGRE	GATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
II	148,747(2)							
10	CHECK	IF TH	E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
12	0							
		NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11					
13	0 50/(2)							
		0.5%(3) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)						
14								
(1) Tł	PN 1is Schedu	le is fil	led by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for					
pu	rposes of	this Sc	hedule 13D.					
			res of Common Stock issuable pursuant to warrants, which are exercisable within 60 days of the date of this filing. calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1)					
pr	omulgated	under	the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set					
			s most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and res of the Issuer's Common Stock issued pursuant to the SPA.					

1	NAME	NAME OF REPORTING PERSONS						
L	MPM B	MPM BioVentures III GmbH & Co. Beteiligungs KG						
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)							
2	CHECK	CHECK THE AFFRORMALE DOA IF A MEMDER OF A GROUP (SEE INSTRUCTIONS)						
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5	CHECK	IF DI	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)					
	0							
6	CITIZE	NSHIP	OR PLACE OF ORGANIZATION					
U	German	у						
		7	SOLE VOTING POWER					
NUM	IBER OF	/	416,068(2)					
	IARES	•	SHARED VOTING POWER					
	FICIALLY NED BY	8	0					
	ACH		SOLE DISPOSITIVE POWER					
	ORTING RSON	9	416,068(2)					
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11	AGGRE	GALE	AMOUNT BENEFICIALLI OWNED BI EACH REPORTING PERSON					
		416,068(2)						
12	CHECK	IF TH	IE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)					
	0	0						
13		NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11					
13	1.4%(3)	1.4%(3)						
1 /	TYPE C	F REP	PORTING PERSON (SEE INSTRUCTIONS)					
14	PN							
	This Schedu		led by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for					
-	-		hedule 13D. res of Common Stock issuable pursuant to warrants, which are exercisable within 60 days of the date of this filing.					
			calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1)					
F	promulgated under the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as							
			s most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and res of the Issuer's Common Stock issued pursuant to the SPA.					

CUSIP No. 29365M 10 9

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of

1	NAME OF REPORTING PERSONS								
I	MPM B	MPM BioVentures III GP, L.P							
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)								
2	(a) o								
	(b) ☑ ((b) 🗹 (1)							
3	SEC US	E ONL	Y						
4	SOURC	E OF F	UNDS (SEE INSTRUCTIONS)						
4	WC	WC							
5	CHECK	IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)						
5	0								
C	CITIZE	NSHIP	OR PLACE OF ORGANIZATION						
6	Delawar	e							
		-	SOLE VOTING POWER						
NUME	BER OF	7	0						
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EA	СН	•	SOLE DISPOSITIVE POWER						
	RTING SON	9	0						
	ITH		SHARED DISPOSITIVE POWER						
		10	5,819,531(2)						
	AGGRE	GATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
11	5,819,531(2)								
			E AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)						
12	0								
		NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11						
13	19.3%(3	5)							
			ORTING PERSON (SEE INSTRUCTIONS)						
14	PN								

- (1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.
- (2) Consists of 4,818,855 shares of Common Stock and 104,816 shares of Common Stock issuable upon exercise of warrants held by BV III QP; 323,996 shares of Common Stock and 7,049 shares of Common Stock issuable upon exercise of warrants held by BV III; 145,579 shares of Common Stock and 3,168 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III KG. The warrants listed above are exercisable within 60 days of the date of this filing. 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.
- (3) This percentage is calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1) promulgated under the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set forth in the Issuer's most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and (ii) 13,110,393 shares of the Issuer's Common Stock issued pursuant to the SPA.

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of

1 NAME OF REPORTING PERSONS MPM BioVentures III LLC 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 3 SEC USE ONLY 3 SEC USE ONLY 4 SOURCE OF FUNDS (SEE INSTRUCTIONS) wc 5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) o 6 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) o 6 CHECK IF DISCLOSURE OF ORGANIZATION Delaware 7 o 8 SOLE VOTING POWER SHARES BENEFICIALLY OWNED BY WTH SOLE VOTING POWER 5.019.531(2) 8 SOLE DISPOSITIVE POWER 5.019.531(2) 10 SHARED DISPOSITIVE POWER 5.019.531(2) 11 ACCRECATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5.019.531(2) 11 ACCRECATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5.019.531(2) 12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) o 12 OHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) o 13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 19.3%(3) 14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) o 14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) o <th></th> <th></th> <th></th> <th></th>								
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	(1) This		is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for				

purposes of this Schedule 13D.

(2) Consists of 4,818,855 shares of Common Stock and 104,816 shares of Common Stock issuable upon exercise of warrants held by BV III QP; 323,996 shares of Common Stock and 7,049 shares of Common Stock issuable upon exercise of warrants held by BV III; 145,579 shares of Common Stock and 3,168 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III QP, BV III PF; and 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III QP, BV III PF; and BV III CP a

CUSIP No. 29365M

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Page 9

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of

1	NAME OF REPORTING PERSONS								
1	Luke Evnin								
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)								
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3	SEC USE ONLY								
	SOURC	E OF F	UNDS (SEE INSTRUCTIONS)						
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	ED BY ACH		5,916,804(3) SOLE DISPOSITIVE POWER						
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12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)								
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10	PERCEN	NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11						
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	Schedule		by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for						
purpo	oses of this	Sched	uie 13D.						

(2) Consists of shares of Common Stock issuable pursuant to options which are exercisable within 60 days of the date of this filing.

(3) Consists of 4,818,855 shares of Common Stock and 104,816 shares of Common Stock issuable upon exercise of warrants held by BV III QP; 323,996 shares of Common Stock and 7,049 shares of Common Stock issuable upon exercise of warrants held by BV III; 145,579 shares of Common Stock and 3,168 shares of Common Stock issuable upon exercise of warrants held by BV III PF; 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III FF; 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III KG; and 95,201 shares of Common Stock and 2,072 shares of Common Stock issuable upon exercise of warrants held by AM LLC. The warrants listed above are exercisable within 60 days of the date of this filing. 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. The Reporting Person is a Series A member of BV III LLC and a manager of AM LLC.

(4) This percentage is calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1) promulgated under the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set

forth in the Issuer's most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and (ii) 13,110,393 shares of the Issuer's Common Stock issued pursuant to the SPA.

29365M 10 9

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of

1	NAME OF REPORTING PERSONS						
1	Ansbert Gadicke						
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)						
2	(-)						
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10	PERCE	NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11				
13	19.7%(3	0					
			ORTING PERSON (SEE INSTRUCTIONS)				
14	11110						
	IN						
(1) This	Schedule	is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for				

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Page 11

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of

1	NAME OF REPORTING PERSONS								
–	Nicholas Galakatos								
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)								
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10	PERCE	NT OF	CLASS REPRESENTED BY AMOUNT IN ROW 11						
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			ORTING PERSON (SEE INSTRUCTIONS)						
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(1) This		is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for						

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of

1 NAME OF REPORTING PERSONS								
	Michael	lichael Steinmetz						
	CHECK	THE A	APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)					
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(1) I his	Schedule	is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for					

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Page 13

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of

1	NAME OF REPORTING PERSONS							
	Kurt Wl	Kurt Wheeler						
	CHECK	THE A	APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)					
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	(b) ☑(
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(1) I his	Schedule	is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for					

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of

	NAME OF REPORTING PERSONS						
1	Nicholas Simon III						
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)						
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14	LIPEC	IT KEP	ORTING PERSON (SEE INSTRUCTIONS)				
	IN IN						
(1) This	Schedule	is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for				

(1) This Schedule is filed by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) Consists of 4,818,855 shares of Common Stock and 104,816 shares of Common Stock issuable upon exercise of warrants held by BV III QP; 323,996 shares of Common Stock and 7,049 shares of Common Stock issuable upon exercise of warrants held by BV III; 145,579 shares of Common Stock and 3,168 shares of Common Stock issuable upon exercise of warrants held by BV III PF; 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III FF; 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III FF; 407,210 shares of Common Stock and 8,858 shares of Common Stock issuable upon exercise of warrants held by BV III KG; and 95,201 shares of Common Stock and 2,072 shares of Common Stock issuable upon exercise of warrants held by AM LLC. The warrants listed above are exercisable within 60 days of the date of this filing. 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. The Reporting Person is a Series A member of BV III LLC and a manager of AM LLC.

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of

1	NAME OF REPORTING PERSONS						
	Dennis Henner						
	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)						
2							
	(a) o (b) ☑(1)						
2	SEC USE ONLY						
3							
	SOURC	E OF F	UNDS (SEE INSTRUCTIONS)				
4	00						
_	CHECK	IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)				
5	0						
	CITIZENSHIP OR PLACE OF ORGANIZATION						
6	6 United States						
			SOLE VOTING POWER				
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	ICIALLY ED BY	8	5,916,804(2)				
	ACH		SOLE DISPOSITIVE POWER				
REPORTING PERSON		9	0				
	ITH		SHARED DISPOSITIVE POWER				
	10						
	5,916,804(2) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
11							
	5,916,804(2)						
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)						
	o PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11						
13	PERCE	NI OF	CLASS REPRESENTED DT AMOUNT IN ROW IT				
	19.7%(3		ODTING DEDGON (SEE INSTRUCTIONS)				
14	IYPEC	F KEP	ORTING PERSON (SEE INSTRUCTIONS)				
	IN						
(1) This	Schedule	is filed	by the MPM Entities and the Listed Persons. The MPM Entities and the Listed Persons expressly disclaim status as a "group" for				

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Item 1. Security and Issuer

(a) This statement on Schedule 13D relates to the common stock, par value \$0.01 per share (the "Common Stock") of EnteroMedics Inc., a Delaware corporation (the "Issuer").

(b) The principal executive offices of the Issuer are located at 2800 Patton Road, St. Paul, Minnesota 55113.

Item 2. Identity and Background

(a) The persons and entities filing this Schedule 13D are MPM BioVentures III-QP, L.P. ("BV III QP"), MPM BioVentures III, L.P. ("BV III"), MPM BioVentures III Parallel Fund, L.P. ("BV III PF"), MPM BioVentures III GmbH & Co. Beteiligungs KG ("BV III KG"), MPM Asset Management Investors 2002 BVIII LLC ("AM LLC"), MPM BioVentures III GP, L.P. ("BV III GP") and MPM BioVentures III LLC ("BV III LLC" and collectively with BV III QP, BV III, BV III PF, BV III KG, AM LLC and BV III GP, the "MPM Entities") and Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Michael Steinmetz, Kurt Wheeler, Nicholas Simon III and Dennis Henner (collectively, the "Listed Persons" and together with the MPM Entities, the "Filing Persons").

(b) The address of the principal place of business of each of the Filing Persons is The John Hancock Tower, 200 Clarendon Street, 54^{4h} Floor, Boston, Massachusetts 02116.

(c) The principal business of each of the Filing Persons is the venture capital investment business.

(d) During the last five years, none of the Filing Persons has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Filing Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Each of the Listed Persons is a United States citizen and each of the MPM Entities is a Delaware limited partnership or limited liability company, except BV III KG, which was organized in Germany.

In accordance with the provisions of General Instruction C to Schedule 13D, information concerning the managers and each other person controlling the general partners of the MPM Entities required by Item 2 of Schedule 13D is listed on Schedule 1 hereto and is incorporated by reference herein.

Item 3. Source and Amount of Funds or Other Consideration

Pursuant to the terms of that certain Securities Purchase Agreement by and among the Issuer, certain of the MPM Entities, and various other investors (collectively, the "PIPE Investors"), dated February 19, 2009 (the "Securities Purchase Agreement"), the MPM Entities purchased an aggregate of 1,765,499 shares of Common Stock (the "Shares"), at a price of \$1.15 per share, together with associated warrants (the "Warrants") to acquire an aggregate of 882,749 shares of Common Stock at a price per share of \$0.125 (the "Financing"). The Warrants are exercisable at any time and from time to time beginning on August 25, 2009 and ending on February 24, 2013 at an exercise price of \$1.38 per share. The rights relating to the Warrants were set forth in a warrant, dated as of February 19, 2009. The applicable per share purchase price and the number of shares issuable upon exercise of the Warrants are subject to adjustment for the occurrence of certain events, including stock dividends, splits, subdivisions, combinations, reorganizations and reclassifications. The aggregate purchase price of the Shares and the Warrants was \$2,140,667.48.

The sale of the Shares and Warrants to the MPM Entities described above was part of a private placement by the Issuer to a number of affiliated and unaffiliated investors (including the MPM Entities). The closing of the Financing occurred on February 24, 2009 (the "Closing Date").

Prior to entering into the Securities Purchase Agreement, and prior to the initial public offering of the Issuer (the "IPO"), the MPM Entities acquired convertible stock and notes of the Issuer which, at the IPO, converted into an aggregate of 3,400,342 shares of common stock of the Issuer and immediately exercisable warrants to purchase an aggregate of 125,963 shares of common stock of the Issuer (collectively, the "Registrable Shares") for an aggregate purchase price of \$19,140,312.33.

The MPM Entities purchased an aggregate of 625,000 shares of common stock of the Issuer in the IPO for an aggregate purchase price of \$5 million.

The funds used by the MPM Entities to acquire the securities described herein were obtained from capital contributions by their partners and from direct capital commitments by the MPM Entities.

References to and descriptions of the Financing as set forth in this Item 3 are qualified in their entirety by reference to the Securities Purchase Agreement and the form of Warrant, which are filed as exhibits to this Schedule and are incorporated by reference herein.

Item 4. Purpose of Transaction

The MPM Entities agreed to purchase the Shares and the Warrants for investment purposes with the aim of increasing the value of their investments and the Issuer.

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Luke Evnin is a member of the Board of Directors of the Issuer and is also a Series A member of BV III LLC and a manager of AM LLC. BV III LLC is the indirect general partner of BV III QP, BV III, BV III PF and BV III KG.

Subject to applicable legal requirements, one or more of the Filing Persons may purchase additional securities of the Issuer from time to time in open market or private transactions, depending on their evaluation of the Issuer's business, prospects and financial condition, the market for the Issuer's securities, other developments concerning the Issuer, the reaction of the Issuer to the Filing Persons' ownership of the Issuer's securities, other opportunities available to the Filing Persons and general economic, money market and stock market conditions. In addition, depending upon the factors referred to above, the Filing Persons may dispose of all or a portion of their securities of the Issuer at any time. Each of the Filing Persons reserves the right to increase or decrease its holdings on such terms and at such times as each may decide.

Other than as described above in this Item 4, none of the Filing Persons have any plan or proposal relating to or that would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries; (c) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries; (d) any change in the present Board of Directors or management of the Issuer, including any plans or proposals to change the number or terms of directors or to fill any existing vacancies on the Board of Directors of the Issuer; (e) any material change in the present capitalization or dividend policy of the Issuer; (f) any other material change in the Issuer's business or corporate structure; (g) any changes in the Issuer's charter, by-laws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person; (h) a class of securities of the Issuer being delisted from a national securities exchange or ceasing to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Exchange Act; or (j) any action similar to those enumerated above.

Item 5. Interest in Securities of the Issuer

The following information with respect to the beneficial ownership of the Common Stock of the Issuer by the persons filing this Schedule 13D is provided as of the date of this filing:

MPM Entity	Shares Held Directly	Shares Issuable Upon Exercise of Warrants Held Directly(1)	Shares Issuable Upon Exercise of Options Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (2)
BV III QP	4,818,855	104,816	0	4,923,671	0	4,923,671	0	4,923,671	16.4%
BV III	323,996	7,049	0	331,045	0	331,045	0	331,045	1.1%
AM LLC	95,201	2,072	0	97,273	0	97,273	0	97,273	0.3%
BV III PF	145,579	3,168	0	148,747	0	148,747	0	148,747	0.5%
BV III KG	407,210	8,858	0	416,068	0	416,068	0	416,068	1.4%
BV III GP(3)	0	0	0	0	5,819,531	0	5,819,531	5,819,531	19.3%
BV III LLC(3)	0	0	0	0	5,819,531	0	5,819,531	5,819,531	19.3%
Luke Evnin(4) (5)	0	0	12,500	12,500	5,916,804	12,500	5,916,804	5,929,304	19.7%
Ansbert Gadicke(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%
Nicholas Galakatos(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%
Michael Steinmetz(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%
Kurt Wheeler(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%
Nicholas Simon III(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%
Dennis Henner(4)	0	0	0	0	5,916,804	0	5,916,804	5,916,804	19.7%

(1) Comprised of securities exercisable within 60 days of the filing date.

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- (2) This percentage is calculated based upon 29,991,497 shares of the Issuer's Common Stock outstanding as adjusted pursuant to Rule 13d-3(d)(1) promulgated under the Exchange Act, which is the sum of: (i) 16,881,104 shares of the Issuer's Common Stock outstanding on October 31, 2008, as set forth in the Issuer's most recent Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on November 7, 2008 and (ii) 13,110,393 shares of the Issuer's Common Stock issued pursuant to the SPA.
- (3) 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. The securities are held as follows: BV III QP: 4,818,855 shares of Common Stock and warrants to purchase 104,816 shares of Common Stock; BV III: 323,996 shares of Common Stock and warrants to purchase 7,049 shares of Common Stock; BV III PF: 145,579 shares of Common Stock and warrants to purchase 3,168 shares of Common Stock; and BV III KG: 407,210 shares of Common Stock and warrants to purchase 8,858 shares of Common Stock.
- (4) The Reporting Person is a Series A member of BV III LLC and a manager of AM LLC. The securities are held as follows: BV III QP: 4,818,855 shares of Common Stock and warrants to purchase 104,816 shares of Common Stock; BV III: 323,996 shares of Common Stock and warrants to purchase 7,049 shares of Common Stock; BV III PF: 145,579 shares of Common Stock and warrants to purchase 3,168 shares of Common Stock; BV III KG: 407,210 shares of Common Stock and warrants to purchase 8,858 shares of Common Stock; and AM LLC: 95,201 shares of Common Stock and warrants to purchase 2,072 shares of Common Stock.
- (5) Includes shares issuable upon the exercise of options within 60 days of the filing date.

The information provided and incorporated by reference in Item 3 is hereby incorporated by reference.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

The Securities Purchase Agreement includes standard representations and warranties of the Issuer and the PIPE Investors, as well as additional terms and conditions, including those set forth below. The Issuer has agreed to indemnify the PIPE Investors and specified related parties against damages with respect to breaches of the representations and warranties or failure to comply with the covenants and agreements of the Issuer in the Securities Purchase Agreement. The Securities Purchase Agreement may be modified, waived or amended pursuant to an instrument in writing signed by the Issuer and PIPE Investors. Each of the Warrants is exercisable as described in Item 3 above.

Registration Rights

Pursuant to the terms of the Amended and Restated Investors' Rights Agreement (the "Rights Agreement"), the Issuer has granted certain stockholders, including the MPM Entities, the following registration rights with regard to the Registrable Shares.

Demand Registration Rights. On no more than one occasion during any twelve-month period, the holders of at least 50% of the Issuer's Registrable Securities (as defined in the Rights Agreement) have the right to request that the Issuer register all or a portion of the Registrable Securities then held by the requesting stockholders, provided that the shares requested to be registered have an aggregate value of at least \$5.0 million. The Issuer is required to use its commercially reasonable best efforts to cause any such demand registration to become effective under the Securities Act of 1933, as amended (the "Securities Act") as soon as practicable. The demand registration rights will cease after the Issuer has effected two such demand registrations. In addition to the demand registration rights, the holders of the Registrable Securities have the right to request that the Issuer register on Form S-3 all or a portion of the Registrable Securities held by them, provided that the holders propose to sell Registrable Securities at an aggregate price of at least \$1,000,000 (less any underwriter discounts or fees) pursuant to such registration statement on Form S-3 (a "Form S-3 Registration"). The Issuer is not obligated to effect a demand registration or a Form S-3 Registration within 180 calendar days of the effective date of an immediately preceding Form S-3 registration of its securities.

Incidental Registration Rights. If the Issuer proposes to register shares of its common stock under the Securities Act (other than a registration relating solely to the sale of securities of participants in its stock option plans, a registration relating to a corporate reorganization or transaction under Rule 145 of the Securities Act, a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of Registrable Securities, or a registration in which the only common stock being registered is common stock issuable upon conversion of debt securities that are also being registered), the holders of Registrable Securities have the right to require the Issuer to register all or a portion of the Registrable Securities then held by them. In the event that any registration in which the holders of Registrable Securities participate pursuant to the Rights Agreement is an underwritten public offering, the number of Registrable Securities to be included may, in specified circumstances, be limited due to market conditions.

The registration rights described in the Rights Agreement are subject to customary restrictions such as minimums, blackout periods and, if a registration is underwritten, any limitations on the number of shares to be included in the underwritten offering imposed by the managing underwriter. The Rights Agreement also contains customary indemnification and contribution provisions. All expenses of registration under the Rights Agreement, including the legal fees of one counsel for the holders, but excluding underwriting discounts and commissions will be paid by the Issuer. The foregoing description of the terms of the Rights Agreement is intended as a summary only and is qualified in its entirety by reference to the Rights Agreement, which is filed as Exhibit C to this Schedule 13D.

Luke Evnin is a member of the Board of Directors of the Issuer and is also a Series A member of BV III LLC and a manager of AM LLC. BV III LLC is the indirect general partner of BV III QP, BV III, BV III PF and BV III KG.

The information provided and incorporated by reference in Items 3, 4 and 5 is hereby incorporated by reference.

Other than as described in this Schedule 13D, to the best of the MPM Entities' and Listed Persons' knowledge, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

Item 7. Material to Be Filed as Exhibits

Page	19	of	23
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- A. Form of Securities Purchase Agreement by and among the Issuer and certain purchasers, dated February 19, 2009 (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed on February 25, 2009 (SEC File No. 001-33818)).
- B. Form of Warrant to purchase shares of common stock (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8- K filed on February 25, 2009 (SEC File No. 001-33818)).
- C. Amended and Restated Investors' Rights Agreement by and among the Issuer and certain investors, dated as of July 6, 2006 (incorporated by reference to Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 filed on May 25, 2007 (File No. 333-143265)).
- D. Agreement regarding filing of joint Schedule 13D.

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SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: March 4, 2009

MPM BIOVENTURES III, L.P.

- By: MPM BioVentures III GP, L.P., its General Partner
- By: MPM BioVentures III LLC, its General Partner
- By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member

MPM BIOVENTURES III PARALLEL FUND, L.P.

- By: MPM BioVentures III GP, L.P., its General Partner
- By: MPM BioVentures III LLC, its General Partner
- By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member

MPM ASSET MANAGEMENT INVESTORS 2002 BVIII LLC

By: /s/ Luke Evnin Name: Luke Evnin Title: Manager

MPM BIOVENTURES III LLC

By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member

By: /s/ Ansbert Gadicke Name: Ansbert Gadicke

- By: /s/ Michael Steinmetz Name: Michael Steinmetz
- By: /s/ Nicholas Simon III Name: Nicholas Simon III

MPM BIOVENTURES III-QP, L.P.

- By: MPM BioVentures III GP, L.P., its General Partner
- By: MPM BioVentures III LLC, its General Partner
- By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member

MPM BIOVENTURES III GMBH & CO. BETEILIGUNGS KG

- By: MPM BioVentures III GP, L.P., in its capacity as the Managing Limited Partner
- By: MPM BioVentures III LLC, its General Partner
- By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member

MPM BIOVENTURES III GP, L.P.

- By: MPM BioVentures III LLC, its General Partner
- By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member
- By: /s/ Luke Evnin
- By: /s/ Nicholas Galakatos Name: Nicholas Galakatos
- By: /s/ Kurt Wheeler Name: Kurt Wheeler
- By: /s/ Dennis Henner Name: Dennis Henner

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of the filing person), evidence of the representative's authority to sign on behalf of such person shall be filed with the statement: provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001) 23

of

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of

SCHEDULE I

General Partners/Members:

Luke Evnin c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Ansbert Gadicke c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Nicholas Galakatos c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Michael Steinmetz c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Kurt Wheeler c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Nicholas Simon III c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC Citizenship: USA Dennis Henner c/o MPM Asset Management The John Hancock Tower 200 Clarendon Street, 544h Floor Boston, Massachusetts 02116 Principal Occupation: Series A member of the general partner of the general partner of MPM BioVentures III-QP, L.P., MPM BioVentures III, L.P., MPM BioVentures III Parallel Fund, L.P. and MPM BioVentures III GmbH & Co. Beteiligungs KG and manager of MPM Asset Management Investors 2002 BVIII LLC

Citizenship: USA

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EXHIBIT INDEX

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- B. Form of Warrant to purchase shares of common stock (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8- K filed on February 25, 2009 (SEC File No. 001-33818)).
- C. Amended and Restated Investors' Rights Agreement by and among the Issuer and certain investors, dated as of July 6, 2006 (incorporated by reference to Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 filed on May 25, 2007 (File No. 333-143265)).
- D. Agreement regarding filing of joint Schedule 13D.

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Exhibit D

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JOINT FILING STATEMENT

I, the undersigned, hereby express my agreement that the attached Schedule 13D (and any amendments thereto) relating to the Common Stock of EnteroMedics Inc. is filed on behalf of each of the undersigned.

Dated: March 4, 2009						
MPM BIOVENTURES III, L.P.	MPM BIOVENTURES III-QP, L.P.					
By: MPM BioVentures III GP, L.P.,	By: MPM BioVentures III GP, L.P.,					
its General Partner	its General Partner					
By: MPM BioVentures III LLC,	By: MPM BioVentures III LLC,					
its General Partner	its General Partner					
By: /s/ Luke Evnin	By: /s/ Luke Evnin					
Name: Luke Evnin	Name: Luke Evnin					
Title: Series A Member	Title: Series A Member					
MPM BIOVENTURES III PARALLEL FUND, L.P.	MPM BIOVENTURES III GMBH & CO. BETEILIGUNGS KG					
By: MPM BioVentures III GP, L.P.,	By: MPM BioVentures III GP, L.P.,					
its General Partner	in its capacity as the Managing Limited Partner					
By: MPM BioVentures III LLC,	By: MPM BioVentures III LLC,					
its General Partner	its General Partner					
By: /s/ Luke Evnin	By: /s/ Luke Evnin					
Name: Luke Evnin	Name: Luke Evnin					
Title: Series A Member	Title: Series A Member					
MPM ASSET MANAGEMENT INVESTORS 2002 BVIII LLC	MPM BIOVENTURES III GP, L.P.					
By: /s/ Luke Evnin Name: Luke Evnin Title: Manager	By: MPM BioVentures III LLC, its General Partner					
	By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member					
MPM BIOVENTURES III LLC						
By: /s/ Luke Evnin Name: Luke Evnin Title: Series A Member	By: /s/ Luke Evnin Name: Luke Evnin					
By: /s/ Ansbert Gadicke	By: /s/ Nicholas Galakatos					
Name: Ansbert Gadicke	Name: Nicholas Galakatos					
By: /s/ Michael Steinmetz	By: /s/ Kurt Wheeler					
Name: Michael Steinmetz	Name: Kurt Wheeler					
By: /s/ Nicholas Simon III	By: /s/ Dennis Henner					
Name: Nicholas Simon III	Name: Dennis Henner					