AVEO PHARMACEUTICALS INC Form SC 13G/A February 07, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

AVEO PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock (Title of Class of Securities)

53588109 (CUSIP Number)

December 31, 2012 (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)

x 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 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).

CUS	CUSIP No. 53588109	
1.	Name of Reporting Persons	
2.	MPM BioVentures II, L.P. Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) ··	
3.	(b) x SEC USE ONLY	
4.	Citizenship or Place of Organization	
	Delaware 5. Sole Voting Power	
Nur	ber of	
S	ares 6. Shared Voting Power	
Bene	ficially	
	ned by 0 7. Sole Dispositive Power	
Rej	orting	
P	rson 164,567 8. Shared Dispositive Power	
V	Tith:	
9.	0 Aggregate Amount Beneficially Owned by Each Reporting Person	
10.	164,567 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11. Percent of Class Represented by Amount in Row (9)

0.4%

12. Type of Reporting Person (See Instructions)

PN

Page 100 Pag	
1. Name of Reporting Persons	
MPM BioVentures II-QP, L.P. 2. Check the Appropriate Box if a Member of a Group (See Instructions)	
(a) "	
(b) x 3. SEC USE ONLY	
4. Citizenship or Place of Organization	
Delaware 5. Sole Voting Power	
Number of	
Shares 1,493,260 6. Shared Voting Power	
Beneficially	
Owned by 0 7. Sole Dispositive Power	
Reporting	
Person 1,493,260 8. Shared Dispositive Power	
With:	
9. Aggregate Amount Beneficially Owned by Each Reporting Person	
1,493,26010. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11. Percent of Class Represented by Amount in Row (9)

3.4%

12. Type of Reporting Person (See Instructions)

PN

CUSIP No. 53588109

1.	Name of Reporting Persons
2.	MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG Check the Appropriate Box if a Member of a Group (See Instructions)
	(a) "
3.	(b) x SEC USE ONLY
4.	Citizenship or Place of Organization
	Germany 5. Sole Voting Power
Nuı	mber of
	Shares 525,732 6. Shared Voting Power
	neficially
	vned by 0 7. Sole Dispositive Power Each
Rej	porting
	Person 525,732 8. Shared Dispositive Power
١	With:
9.	0 Aggregate Amount Beneficially Owned by Each Reporting Person
10.	525,732 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

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11. Percent of Class Represented by Amount in Row (9)

1.2%

12. Type of Reporting Person (See Instructions)

PN

CUSIP	CUSIP No. 53588109	
1. N	Name of Reporting Persons	
2. CI	MPM Asset Management Investors 2002 LLC Check the Appropriate Box if a Member of a Group (See Instructions)	
(a	a) "	
	b) x SEC USE ONLY	
4. Ci	Citizenship or Place of Organization	
De	Delaware 5. Sole Voting Power	
Numbe	per of	
Shar	res 25,402 6. Shared Voting Power	
Benefic	cially	
Owned	7. Sole Dispositive Power	
Repor	rting	
Perso	son 25,402 8. Shared Dispositive Power	
Witl	th:	
9. A	0 Aggregate Amount Beneficially Owned by Each Reporting Person	
	5,402 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11. Percent of Class Represented by Amount in Row (9)

0.1%

12. Type of Reporting Person (See Instructions)

OO

CUSIP No. 53588109	
1. Name of Reporting Persons	
MPM Asset Management II, L.P. 2. Check the Appropriate Box if a Member of a Group (See Instructions)	
(a) "	
(b) x 3. SEC USE ONLY	
4. Citizenship or Place of Organization	
Delaware 5. Sole Voting Power	
Number of	
Shares 0 6. Shared Voting Power	
Beneficially	
Owned by 2,183,559* Each 7. Sole Dispositive Power	
Reporting	
Person 0 8. Shared Dispositive Power	
With:	
2,183,559* 9. Aggregate Amount Beneficially Owned by Each Reporting Person	
2,183,559* 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
12.	5.0% Type of Reporting Person (See Instructions)
	PN

^{*} The shares are held as follows: 1,493,260 by MPM BioVentures II-QP, L.P. (BV II QP); 164,567 by MPM BioVentures II, L.P. (BV II); and 525,732 by MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG (BV KG). The Reporting Person is the direct general partner of BV II QP, BV II and BV KG.

CUSIP No. 53588109	
1. Name of Reporting Persons	
MPM Asset Management II LLC 2. Check the Appropriate Box if a Member of a Group (See Instructions)	
(a) "	
(b) x 3. SEC USE ONLY	
4. Citizenship or Place of Organization	
Delaware 5. Sole Voting Power	
Number of	
Shares 0 6. Shared Voting Power Beneficially	
Owned by 2,183,559* 7. Sole Dispositive Power	
Reporting	
Person 0 8. Shared Dispositive Power	
With:	
2,183,559* 9. Aggregate Amount Beneficially Owned by Each Reporting Person	
2,183,559* 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
	5.0%
12.	Type of Reporting Person (See Instructions)
	00
*	The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; and 525,732 by BV KG. The Reporting Person is the
	indirect general partner of BV II QP, BV II and BV KG.

CUSIP	CUSIP No. 53588109	
1. N	Name of Reporting Persons	
	Ansbert Gadicke Check the Appropriate Box if a Member of a Group (See Instructions)	
((a) "	
	(b) x SEC USE ONLY	
4. (Citizenship or Place of Organization	
Ţ	United States 5. Sole Voting Power	
Numb	mber of	
Sha	hares 0 6. Shared Voting Power	
Benefi	eficially	
	zoned by 2,208,961* 7. Sole Dispositive Power	
Repo	porting	
Pers	Person 0 8. Shared Dispositive Power	
Wi	With:	
9. A	2,208,961* Aggregate Amount Beneficially Owned by Each Reporting Person	
	2,208,961* Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11.	Percent of Class Represented by Amount in Row (9)
12.	5.1% Type of Reporting Person (See Instructions)
	IN

* The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 25,402 by MPM Asset Management Investors 2002 BVII LLC (AM 2002); and 525,732 by BV KG. MPM Asset Management II, L.P. (AM LP) and MPM Asset Management II LLC (AM II LLC) are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

CUSI	CUSIP No. 53588109	
1.	Name of Reporting Persons	
	Luke Evnin Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) "	
	(b) x SEC USE ONLY	
4.	Citizenship or Place of Organization	
	United States 5. Sole Voting Power	
Nun	nber of	
	nares 0 6. Shared Voting Power	
Owr	ned by 2,208,961* 7. Sole Dispositive Power	
Pe	orting erson 0 8. Shared Dispositive Power 7ith:	
9.	2,208,961* Aggregate Amount Beneficially Owned by Each Reporting Person	
	2,208,961* Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
12.	5.1% Type of Reporting Person (See Instructions)
	IN
*	The charge are held as follows: 1.403.260 by RV II OP: 164.567 by RV II: 25.402 by AM 2002: and 525.732 by RV KG. AM I P and A

* The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 25,402 by AM 2002; and 525,732 by BV KG. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

CUS	SIP No. 53588109	Page 10 of 20
1.	Name of Reporting Persons	
2.	Nicholas Galakatos Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) "	
3.	(b) x SEC USE ONLY	
4.	Citizenship or Place of Organization	
	United States 5. Sole Voting Power	
Nu	mber of	
	Shares 0 6. Shared Voting Power	
Ben	neficially	
	vned by 2,208,961* 7. Sole Dispositive Power Each	
Re	porting	
P	Person 0 8. Shared Dispositive Power	
1	With:	
9.	2,208,961* Aggregate Amount Beneficially Owned by Each Reporting Person	
10.	2,208,961* Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
12.	5.1% Type of Reporting Person (See Instructions)
	IN
*	The charge are hald as follows: 1.403.260 by RV II OD: 164.567 by RV II: 525.732 by RV KG: and 25.402 by AM 2002. AM I P and A

* The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 525,732 by BV KG; and 25,402 by AM 2002. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

CUSIP No. 53588109		Page 11 of 20
Name of Reporting	Persons	
Michael Steinmetz 2. Check the Appropri	riate Box if a Member of a Group (See Instructions)	
(a) "		
(b) x 3. SEC USE ONLY		
4. Citizenship or Place	e of Organization	
United States 5. Sole V	Joting Power	
Number of		
Shares 0 Shared Beneficially	d Voting Power	
Owned by 2,208, Each 7. Sole D	961* Dispositive Power	
Reporting		
Person 0 8. Shared	d Dispositive Power	
With:		
2,208,9. Aggregate Amount	961* Beneficially Owned by Each Reporting Person	
2,208,961* 10. Check if the Aggre	gate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
12.	5.1% Type of Reporting Person (See Instructions)
	IN
*	The charge are held as follows: 1.403.260 by RV II OD: 164.567 by RV II: 525.732 by RV VC: and 25.402 by AM 2002. AM I P and A

* The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 525,732 by BV KG; and 25,402 by AM 2002. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

CUS	SIP No. 53588109	Page 12 of 20
1.	Name of Reporting Persons	
2.	Kurt Wheeler Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) "	
3.	(b) x SEC USE ONLY	
4.	Citizenship or Place of Organization	
	United States 5. Sole Voting Power	
Nu	umber of	
	Shares 0 6. Shared Voting Power neficially	
Ow	wned by 2,208,961* 7. Sole Dispositive Power Each	
P	Person 0 8. Shared Dispositive Power With:	
9.	2,208,961* Aggregate Amount Beneficially Owned by Each Reporting Person	
10.	2,208,961* Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)	

11.	Percent of Class Represented by Amount in Row (9)
12.	5.1% Type of Reporting Person (See Instructions)
	IN
*	The shares are held as follows: 1 493 260 by RV II OP: 164 567 by RV II: 525 732 by RV KG: and 25 402 by AM 2002. AM I P and A

* The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 525,732 by BV KG; and 25,402 by AM 2002. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

(a) Name of Issuer AVEO Pharmaceuticals, Inc.

(b) Address of Issuer s Principal Executive Offices 75 Sidney Street, 4^{th} Floor

Cambridge, MA 02139

Item 2.

Item 1.

(a) Name of Person Filing MPM BioVentures II, LP

MPM BioVentures II-QP, L.P.

MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG

MPM Asset Management Investors 2002 BVII LLC

MPM Asset Management II, L.P.

MPM Asset Management II LLC

Ansbert Gadicke

Luke Evnin

Nicholas Galakatos

Michael Steinmetz

Kurt Wheeler

(b) Address of Principal Business Office or, if none, Residence c/o MPM Capital L.P.

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

(c) Citizenship

All entities were organized in Delaware except MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG, which was organized in Germ	nany.
The individuals are all United States citizens.	

(d) Title of Class of Securities
Common Stock

(e) CUSIP Number 53588109

Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a: Not applicable

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Item 4. Ownership

(a) Amount Beneficially Owned:

MPM BioVentures II, L.P.	164,567
MPM BioVentures II-QP, L.P.	1,493,260
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	525,732
MPM Asset Management Investors 2002 BVII LLC	25,402
MPM Asset Management II, L.P.	2,183,559(1)
MPM Asset Management II LLC	2,183,559(1)
Ansbert Gadicke	2,208,961(2)
Luke B. Evnin	2,208,961(2)
Nicholas Galakatos	2,208,961(2)
Michael Steinmetz	2,208,961(2)
Kurt Wheeler	2,208,961(2)

Percent of Class:

MPM BioVentures II, L.P.	0.4%
MPM BioVentures II-QP, L.P.	3.4%
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	1.2%
MPM Asset Management Investors 2002 BVII LLC	0.1%
MPM Asset Management II, L.P.	5.0%
MPM Asset Management II LLC	5.0%
Ansbert Gadicke	5.1%
Luke B. Evnin	5.1%
Nicholas Galakatos	5.1%
Michael Steinmetz	5.1%
Kurt Wheeler	5.1%

(b) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

MPM BioVentures II, L.P.	164,567
MPM BioVentures II-QP, L.P.	1,493,260
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	525,732
MPM Asset Management Investors 2002 BVII LLC	25,402
MPM Asset Management II, L.P.	0
MPM Asset Management II LLC	0
Ansbert Gadicke	0
Luke B. Evnin	0
Nicholas Galakatos	0
Michael Steinmetz	0
Kurt Wheeler	0

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(ii) Shared power to vote or to direct the vote

MPM BioVentures II, L.P.	0
MPM BioVentures II-QP, L.P.	0
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	0
MPM Asset Management Investors 2002 BVII LLC	0
MPM Asset Management II, L.P.	2,183,559(1)
MPM Asset Management II LLC	2,183,559(1)
Ansbert Gadicke	2,208,961(2)
Luke B. Evnin	2,208,961(2)
Nicholas Galakatos	2,208,961(2)
Michael Steinmetz	2,208,961(2)
Kurt Wheeler	2,208,961(2)

(iii) Sole power to dispose or to direct the disposition of

MPM BioVentures II, LP	164,567
MPM BioVentures II-QP, L.P.	1,493,260
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	525,732
MPM Asset Management Investors 2002 LLC	25,402
MPM Asset Management II, L.P.	0
MPM Asset Management II LLC	0
Ansbert Gadicke	0
Luke Evnin	0
Nicholas Galakatos	0
Michael Steinmetz	0
Kurt Wheeler	0

(iv) Shared power to dispose or to direct the disposition of

MPM BioVentures II, LP	0
MPM BioVentures II-QP, L.P.	0
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG	0
MPM Asset Management Investors 2002 BVII LLC	0
MPM Asset Management II, L.P.	2,183,559(1)
MPM Asset Management II LLC	2,183,559(1)
Ansbert Gadicke	2,208,961(2)
Luke B. Evnin	2,208,961(2)
Nicholas Galakatos	2,208,961(2)
Michael Steinmetz	2,208,961(2)
Kurt Wheeler	2,208,961(2)

⁽¹⁾ The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; and 525,732 by BV KG. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG.

⁽²⁾ The shares are held as follows: 1,493,260 by BV II QP; 164,567 by BV II; 525,732 by BV KG; and 25,402 by AM 2002. AM LP and AM II LLC are the direct and indirect general partners of BV II QP, BV II and BV KG. The Reporting Person is an investment manager of AM II LLC and AM 2002.

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 ".

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 or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of a Group

Not Applicable

Item 10. Certification

Not Applicable

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SIGNATURE

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.

Dated: February 6, 2013

MPM BIOVENTURES II, L.P. MPM BIOVENTURES II-QP, L.P.

By: MPM Asset Management II, L.P., By: MPM Asset Management II, L.P.,

its General Partner its General Partner

By: MPM Asset Management II LLC, By: MPM Asset Management II LLC,

its General Partner its General Partner

By: /s/ Luke B. Evnin
Name: Luke B. Evnin
Name: Luke B. Evnin

Title: Investment Manager Title: Investment Manager

MPM BIOVENTURES GMBH & CO.

PARALLEL-BETEILIGUNGS KG MPM ASSET MANAGEMENT INVESTORS 2002 BVII LLC

By: MPM Asset Management II LP, in its capacity as the Special

Limited Partner

By: /s/ Luke B. Evnin Name: Luke B. Evnin

By: MPM Asset Management II LLC, its General Partner Title: Investment Manager

By: /s/ Luke B. Evnin Name: Luke B. Evnin

Title: Investment Manager

MPM ASSET MANAGEMENT II L.P. MPM ASSET MANAGEMENT II LLC

By: MPM Asset Management II LLC, its General Partner

By: /s/ Luke B. Evnin
Name: Luke B. Evnin
Name: Luke B. Evnin

Title: Investment Manager Title: Investment Manager

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/s/ Ansbert Gadicke /s/ Luke B. Evnin
Ansbert Gadicke Luke B. Evnin

/s/ Nicholas Galakatos /s/ Michael Steinmetz

Nicholas Galakatos Michael Steinmetz

/s/ Kurt Wheeler

Kurt Wheeler **EXHIBITS**

A: Joint Filing Agreement

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