

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G
(Rule 13d-102)

Information Statement Pursuant to Rules 13d-1 and 13d-2
Under the Securities Exchange Act of 1934
(Amendment No.)*

AVEO Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

053588109

(CUSIP Number)

December 31, 2010

Date of Event Which Requires Filing of the 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 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).

1.	Name of Reporting Person S.S. or I.R.S. Identification No. of Above Person Highland Capital Partners VI Limited Partnership	
<hr/>		
2.	Check the Appropriate Box if a Member of a Group	
(a)	<input type="checkbox"/>	
(b)	<input type="checkbox"/>	
<hr/>		
3.	SEC Use Only	
<hr/>		
4.	Citizenship or Place of Organization Delaware	
<hr/>		
5.	Sole Voting Power —	
<hr/>		
Number of Shares Beneficially Owned by Each Reporting Person With	6.	Shared Voting Power 1,245,527
	<hr/>	
	7.	Sole Dispositive Power —
	<hr/>	
8.	Shared Dispositive Power 1,245,527	
<hr/>		
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,245,527	
<hr/>		
10.	Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>	
<hr/>		
11.	Percent of Class Represented by Amount in Row (9) 3.5%(1)	
<hr/>		
12.	Type of Reporting Person PN	
<hr/>		

(1) The percentages reported in this Schedule 13G are based upon 35,509,967 shares of Common Stock outstanding as of November 3, 2010 (according to the Form 10-Q filed by the issuer on November 5, 2010).

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Highland Capital Partners VI-B Limited Partnership

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

682,540

7. Sole Dispositive Power

—

8. Shared Dispositive Power

682,540

9. Aggregate Amount Beneficially Owned by Each Reporting Person
682,540

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
1.9%

12. Type of Reporting Person
PN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Highland Entrepreneurs' Fund VI Limited Partnership

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

61,681

7. Sole Dispositive Power

—

8. Shared Dispositive Power

61,681

9. Aggregate Amount Beneficially Owned by Each Reporting Person
61,681

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
0.2%

12. Type of Reporting Person
PN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
HEF VI Limited Partnership

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

61,681

7. Sole Dispositive Power

—

8. Shared Dispositive Power

61,681

9. Aggregate Amount Beneficially Owned by Each Reporting Person
61,681

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
0.2%

12. Type of Reporting Person
PN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Highland Management Partners VI Limited Partnership

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,928,067

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,928,067

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,928,067

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.4%

12. Type of Reporting Person
PN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Highland Management Partners VI, Inc.

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
CO

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Robert F. Higgins

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power
4,166

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power
1,989,748

7. Sole Dispositive Power
4,166

8. Shared Dispositive Power
1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,993,914

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Paul A. Maeder

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Daniel J. Nova

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Sean M. Dalton

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

1.	Name of Reporting Person S.S. or I.R.S. Identification No. of Above Person Robert J. Davis	
<hr/>		
2.	Check the Appropriate Box if a Member of a Group	
(a)	<input type="checkbox"/>	
(b)	<input type="checkbox"/>	
<hr/>		
3.	SEC Use Only	
<hr/>		
4.	Citizenship or Place of Organization United States of America	
<hr/>		
	5. Sole Voting Power —	
<hr/>		
Number of Shares Beneficially Owned by Each Reporting Person With	6. Shared Voting Power 1,989,748	
	<hr/>	
	7. Sole Dispositive Power —	
	<hr/>	
	8. Shared Dispositive Power 1,989,748	
<hr/>		
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,989,748	
<hr/>		
10.	Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>	
<hr/>		
11.	Percent of Class Represented by Amount in Row (9) 5.6%	
<hr/>		
12.	Type of Reporting Person IN	
<hr/>		

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Fergal J. Mullen

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Republic of Ireland

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

1. Name of Reporting Person
S.S. or I.R.S. Identification No. of Above Person
Corey M. Mulloy

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power

—

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

1,989,748

7. Sole Dispositive Power

—

8. Shared Dispositive Power

1,989,748

9. Aggregate Amount Beneficially Owned by Each Reporting Person
1,989,748

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11. Percent of Class Represented by Amount in Row (9)
5.6%

12. Type of Reporting Person
IN

NOTE: This Statement on Schedule 13G is being filed on behalf of: (i) Highland Capital Partners VI Limited Partnership, a Delaware limited partnership (“Highland Capital VI”); (ii) Highland Capital Partners VI-B Limited Partnership, a Delaware limited partnership (“Highland Capital VI-B”); (iii) Highland Entrepreneurs’ Fund VI Limited Partnership, a Delaware limited partnership (“Highland Entrepreneurs’ Fund” and together with Highland Capital VI and Highland Capital VI-B, the “Highland Investing Entities”); (iv) HEF VI Limited Partnership, a Delaware limited partnership and general partner of Highland Entrepreneurs’ Fund (“HEF VI”); (v) Highland Management Partners VI Limited Partnership, a Delaware limited partnership and general partner of Highland Capital VI and Highland Capital VI-B (“HMP VI”); (vi) Highland Management Partners VI, Inc., a Delaware corporation (“Highland Management”) and general partner of both HEF VI and HMP VI; (vii) Robert F. Higgins (“Mr. Higgins”), a senior managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; (viii) Paul A. Maeder (“Mr. Maeder”), a senior managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; (ix) Daniel J. Nova (“Mr. Nova”), a senior managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; (x) Sean M. Dalton (“Mr. Dalton”), a managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; (xi) Robert J. Davis (Mr. Davis”), a managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; (xii) Fergal J. Mullen (“Mr. Mullen”), a managing director of Highland Management and a limited partner of each of HMP VI and HEF VI; and (xiii) Corey M. Mulloy (“Mr. Mulloy” and together with Mr. Higgins, Mr. Maeder, Mr. Nova, Mr. Dalton, Mr. Davis and Mr. Mullen, the “Managing Directors”), a managing director of Highland Management and a limited partner of each of HMP VI and HEF VI. Highland Management, as the general partner of the general partners of the Highland Investing Entities, may be deemed to have beneficial ownership of the shares held by the Highland Investing Entities. The Managing Directors of Highland Management have shared power over all investment decisions of Highland Management and therefore may be deemed to share beneficial ownership of the shares held by Highland Investing Entities by virtue of their status as controlling persons of Highland Management. Each Managing Director of Highland Management disclaims beneficial ownership of the shares held by the Highland Investing Entities, except to the extent of each such Managing Director’s pecuniary interest therein. Each of Highland Management, HMP VI and HEF VI disclaims beneficial ownership of the shares held by the Highland Investing Entities, except to the extent of each such entity’s pecuniary interest therein.

Item 1(a)	Name of Issuer AVEO Pharmaceuticals, Inc.																										
Item 1(b)	Address of Issuer's Principal Executive Offices 75 Sidney Street, 4th Floor Cambridge, MA 02139																										
Item 2(a)	Name of Person Filing The reporting persons are: Highland Capital Partners VI Limited Partnership ("Highland Capital VI"); Highland Capital Partners VI-B Limited Partnership ("Highland Capital VI-B"); Highland Entrepreneurs' Fund VI Limited Partnership ("Highland Entrepreneurs' Fund"); HEF VI Limited Partnership ("HEF VI"); Highland Management Partners VI Limited Partnership ("HMP VI"); Highland Management Partners VI, Inc. ("Highland Management"); Robert F. Higgins ("Mr. Higgins"); Paul A. Maeder ("Mr. Maeder"); Daniel J. Nova ("Mr. Nova"); Sean M. Dalton ("Mr. Dalton"); Robert J. Davis ("Mr. Davis"); Fergal J. Mullen ("Mr. Mullen"); and Corey M. Mulloy ("Mr. Mulloy").																										
Item 2(b)	Address of Principal Business Office The address of each of the reporting persons is: c/o Highland Capital Partners LLC 92 Hayden Avenue Lexington, Massachusetts 02421																										
Item 2(c)	Citizenship <table border="1"> <tr><td>Highland Capital VI</td><td>Delaware</td></tr> <tr><td>Highland Capital VI-B</td><td>Delaware</td></tr> <tr><td>Highland Entrepreneurs' Fund</td><td>Delaware</td></tr> <tr><td>HEF VI</td><td>Delaware</td></tr> <tr><td>HMP VI</td><td>Delaware</td></tr> <tr><td>Highland Management</td><td>Delaware</td></tr> <tr><td>Mr. Higgins</td><td>United States of America</td></tr> <tr><td>Mr. Maeder</td><td>United States of America</td></tr> <tr><td>Mr. Nova</td><td>United States of America</td></tr> <tr><td>Mr. Dalton</td><td>United States of America</td></tr> <tr><td>Mr. Davis</td><td>United States of America</td></tr> <tr><td>Mr. Mullen</td><td>Republic of Ireland</td></tr> <tr><td>Mr. Mulloy</td><td>United States of America</td></tr> </table>	Highland Capital VI	Delaware	Highland Capital VI-B	Delaware	Highland Entrepreneurs' Fund	Delaware	HEF VI	Delaware	HMP VI	Delaware	Highland Management	Delaware	Mr. Higgins	United States of America	Mr. Maeder	United States of America	Mr. Nova	United States of America	Mr. Dalton	United States of America	Mr. Davis	United States of America	Mr. Mullen	Republic of Ireland	Mr. Mulloy	United States of America
Highland Capital VI	Delaware																										
Highland Capital VI-B	Delaware																										
Highland Entrepreneurs' Fund	Delaware																										
HEF VI	Delaware																										
HMP VI	Delaware																										
Highland Management	Delaware																										
Mr. Higgins	United States of America																										
Mr. Maeder	United States of America																										
Mr. Nova	United States of America																										
Mr. Dalton	United States of America																										
Mr. Davis	United States of America																										
Mr. Mullen	Republic of Ireland																										
Mr. Mulloy	United States of America																										
Item 2(d)	Title of Class of Securities Common Stock, \$0.001 par value, of AVEO Pharmaceuticals, Inc.																										

Item 2(e) CUSIP Number
053588109

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:

- (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 §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §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 §240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution: _____.

Not applicable.

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.

- (a) Amount beneficially owned:

As of December 31, 2010, each of the following is the owner of record of the shares of Common Stock set forth next to his or its name:

Highland Capital VI	1,245,527
Highland Capital VI-B	682,540
Highland Entrepreneurs' Fund	61,681
HEF VI	0
HMP VI	0
Highland Management	0
Mr. Higgins	4,166
Mr. Maeder	0
Mr. Nova	0
Mr. Dalton	0
Mr. Davis	0
Mr. Mullen	0
Mr. Mulloy	0

As of December 31, 2010, Highland Capital VI was the record owner of and beneficially owned 1,245,527 shares (the "HCVI Shares") of Common Stock. Highland Capital VI has the power to vote or direct the disposition of all of the HCVI Shares. Such power is exercised through Highland Management as the sole general partner of HMP VI as the sole general partner of Highland Capital VI.

As of December 31, 2010, Highland Capital VI-B was the record owner of and beneficially owned 682,540 shares (the "HCVI-B Shares" and together with the HCVI Shares, the "HC Shares") of Common Stock. Highland Capital VI-B has the power to vote or direct the disposition of all of the HCVI-B Shares. Such power is exercised through Highland Management as the sole general partner of HMP VI as the sole general partner of Highland Capital VI-B.

As of December 31, 2010, Highland Entrepreneurs' Fund was the record owner of and beneficially owned 61,681 shares (the "HEF Shares" and together with the HC Shares, the "Shares") of Common Stock. Highland Entrepreneurs' Fund has the power to vote or direct the disposition of all of the HEF Shares. Such power is exercised through Highland Management as the sole general partner of HEF VI as the sole general partner of Highland Entrepreneurs' Fund.

HMP VI, as the general partner of Highland Capital VI and Highland Capital VI-B, may be deemed to own the HC Shares beneficially and HEF VI, as the general partner of Highland Entrepreneurs' Fund, may be deemed to own the HEF Shares beneficially. Each of HMP VI and HEF VI disclaims beneficial ownership of the shares held by the Highland Investing Entities, except to the extent of each such entity's pecuniary interest therein.

Highland Management, as the general partner of HMP VI and HEF VI, may be deemed to own the Shares beneficially. The Managing Directors have the power over all investment decisions of Highland Management and therefore may be deemed to share beneficial ownership of the Shares by virtue of their status as controlling persons of Highland Management. Highland Management and each of the Managing Directors disclaims beneficial ownership of the Shares, except to the extent of each such entity's pecuniary interest therein.

(b) Percent of class:

Highland Capital VI	3.5%
Highland Capital VI-B	1.9%
Highland Entrepreneurs' Fund	0.2%
HEF VI	0.2%
HMP VI	5.4%
Highland Management	5.6%
Mr. Higgins	5.6%
Mr. Maeder	5.6%
Mr. Nova	5.6%
Mr. Dalton	5.6%
Mr. Davis	5.6%
Mr. Mullen	5.6%
Mr. Mulloy	5.6%

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

Reporting Person	Number of Shares			
	(i)	(ii)	(iii)	(iv)
Highland Capital VI	0	1,245,527	0	1,245,527
Highland Capital VI-B	0	682,540	0	682,540
Highland Entrepreneurs' Fund	0	61,681	0	61,681
HEF VI	0	61,681	0	61,681
HMP VI	0	1,928,067	0	1,928,067
Highland Management	0	1,989,748	0	1,989,748
Mr. Higgins	4,166	1,989,748	4,166	1,989,748
Mr. Maeder	0	1,989,748	0	1,989,748
Mr. Nova	0	1,989,748	0	1,989,748
Mr. Dalton	0	1,989,748	0	1,989,748
Mr. Davis	0	1,989,748	0	1,989,748
Mr. Mullen	0	1,989,748	0	1,989,748
Mr. Mulloy	0	1,989,748	0	1,989,748

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

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

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

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

Each of Highland Capital VI, Highland Capital VI-B, Highland Entrepreneurs' Fund, HEF VI, HMP VI, Highland Management and the Managing Directors expressly disclaims beneficial ownership of any shares of the Common Stock of lululemon athletica inc., except any shares except to the extent of his or its pecuniary interest therein and any shares held directly of record.

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 5 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

Not applicable.

Item 8 Identification and Classification of Members of the Group

Each of the Reporting Persons expressly disclaims membership in a "Group" as defined in Rule 13d-1(b)(ii)(J).

Item 9 Notice of Dissolution of Group

Not applicable.

Item 10 Certification

Not applicable. This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

SIGNATURE

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

DATED: February 14, 2011.

HIGHLAND CAPITAL PARTNERS VI LIMITED PARTNERSHIP

By: Highland Management Partners VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND CAPITAL PARTNERS VI-B LIMITED PARTNERSHIP

By: Highland Management Partners VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND ENTREPRENEURS' FUND VI LIMITED PARTNERSHIP

By: HEF VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HEF VI LIMITED PARTNERSHIP

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND MANAGEMENT PARTNERS VI LIMITED PARTNERSHIP

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND MANAGEMENT PARTNERSHIP VI, INC.

By: /s/ Robert F. Higgins
Managing Director

/s/ Robert F. Higgins
Robert F. Higgins

/s/ Paul A. Maeder
Paul A. Maeder

/s/ Daniel J. Nova
Daniel J. Nova

/s/ Sean M. Dalton
Sean M. Dalton

/s/ Robert J. Davis
Robert J. Davis

/s/ Fergal J. Mullen
Fergal J. Mullen

/s/ Corey M. Mulloy
Corey M. Mulloy

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of the shares of Common Stock of AVEO Pharmaceuticals, Inc.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 14th day of February, 2011.

HIGHLAND CAPITAL PARTNERS VI LIMITED PARTNERSHIP

By: Highland Management Partners VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND CAPITAL PARTNERS VI-B LIMITED PARTNERSHIP

By: Highland Management Partners VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND ENTREPRENEURS' FUND VI LIMITED PARTNERSHIP

By: HEF VI Limited Partnership, its general partner

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HEF VI LIMITED PARTNERSHIP

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND MANAGEMENT PARTNERS VI LIMITED PARTNERSHIP

By: Highland Management Partners VI, Inc., its general partner

By: /s/ Robert F. Higgins
Managing Director

HIGHLAND MANAGEMENT PARTNERSHIP VI, INC.

By: /s/ Robert F. Higgins
Managing Director

/s/ Robert F. Higgins
Robert F. Higgins

/s/ Paul A. Maeder
Paul A. Maeder

/s/ Daniel J. Nova
Daniel J. Nova

/s/ Sean M. Dalton
Sean M. Dalton

/s/ Robert J. Davis
Robert J. Davis

/s/ Fergal J. Mullen
Fergal J. Mullen

/s/ Corey M. Mulloy
Corey M. Mulloy