

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

1. Name and Address of Reporting Person* <u>EVNIN ANTHONY B</u> _____ (Last) (First) (Middle) <u>C/O VENROCK</u> <u>530 FIFTH AVENUE, 22ND FLOOR</u> _____ (Street) <u>NEW YORK NY 10036</u> _____ (City) (State) (Zip)			2. Issuer Name and Ticker or Trading Symbol <u>AVEO PHARMACEUTICALS INC [AVEO]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner _____ Officer (give title below) Other (specify below)		
			3. Date of Earliest Transaction (Month/Day/Year) <u>03/17/2010</u>					
			4. If Amendment, Date of Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person _____ Form filed by More than One Reporting Person		

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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	03/17/2010		C		725,924 ⁽³⁾	A	(1)	725,924	I	By Funds ⁽⁶⁾
Common Stock	03/17/2010		C		720,521 ⁽⁴⁾	A	(1)	1,446,445	I	By Funds ⁽⁷⁾
Common Stock	03/17/2010		C		200,514 ⁽⁵⁾	A	(1)	1,646,959	I	By Funds ⁽⁸⁾

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Series A Convertible Preferred Stock	(1)	03/17/2010		C			2,903,704	(2)	(2)	Common Stock	725,924 ⁽³⁾	\$0	0	I	No securities owned
Series B Convertible Preferred Stock	(1)	03/17/2010		C			2,882,089	(2)	(2)	Common Stock	720,521 ⁽⁴⁾	\$0	0	I	No securities owned
Series D Convertible Preferred Stock	(1)	03/17/2010		C			802,062	(2)	(2)	Common Stock	200,514 ⁽⁵⁾	\$0	0	I	No securities owned

Explanation of Responses:

- Each share of Series A Convertible Preferred Stock, Series B Convertible Preferred Stock and Series D Convertible Preferred Stock automatically converted into shares of common stock on a 0.25 for 1 basis immediately upon the closing of the Issuer's initial public offering.
- These securities are preferred stock of the Issuer and do not have an expiration date. These securities automatically converted into shares of common stock upon the closing of the Issuer's initial public offering.
- The shares, on a post conversion basis, are held as follows: 130,666 shares held by Venrock Associates ("VA"), 580,740 shares held by Venrock Associates III, L.P. ("VA3") and 14,518 shares held by Venrock Entrepreneurs Fund III, L.P. ("VEF3"). Dr. Evnin is a general partner of VA. Venrock Management III, LLC ("VM3") is the sole general partner of VA3. VEF Management III, LLC ("VEFM3") is the sole general partner of VEF3. Dr. Evnin is a member of VM3 and VEFM3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.
- The shares, on a post conversion basis, are held as follows: 129,694 shares held by VA, 576,417 shares held by VA3 and 14,410 shares held by VEF3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.
- The shares, on a post conversion basis, are held as follows: 36,092 shares held by VA, 160,412 shares held by VA3 and 4,010 shares held by VEF3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.
- The shares are held as follows: 130,666 shares held by VA, 580,740 shares held by VA3 and 14,518 shares held by VEF3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.
- The shares are held as follows: 260,360 shares held by VA, 1,157,157 shares held by VA3 and 28,928 shares held by VEF3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.
- The shares are held as follows: 296,452 shares held by VA, 1,317,569 shares held by VA3 and 32,938 shares held by VEF3. Dr. Evnin expressly disclaims beneficial ownership over all shares held by VA, VA3, VEF3, VM3 and VEFM3, except to the extent of his indirect pecuniary interest therein. VM3 and VEFM3 expressly disclaim beneficial ownership over all shares held by VA3 and VEF3, except to the extent of their indirect pecuniary interest therein.

Remarks:

/s/ Anthony B. Evnin

03/18/2010

** Signature of Reporting Person

Date

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

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

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