

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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>Barrett Peter</u> _____ (Last) (First) (Middle) <u>C/O MOMENTA PHARMACEUTICALS, INC.</u> <u>675 WEST KENDALL STREET</u> _____ (Street) <u>CAMBRIDGE MA 02142</u> _____ (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MOMENTA PHARMACEUTICALS INC</u> [<u>MNTA</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>05/26/2005</u>	

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			

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)	
					(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (Right to Buy)	\$10.44	05/26/2005		A	19,200		05/26/2006 ⁽¹⁾	05/25/2015	Common Stock	19,200	\$0	19,200	I	See Note 2 ⁽²⁾
Stock Option (Right to Buy)	\$10.44	05/26/2005		A	19,200		05/26/2006 ⁽¹⁾	05/25/2015	Common Stock	19,200	\$0	38,400	I	See Note 2 ⁽²⁾

Explanation of Responses:

- Represents an option granted by the issuer pursuant to the issuer's 2004 Stock Incentive Plan. Subject to certain criteria, such option vests as to all of the shares on the first anniversary of the grant date.
- This option was granted to Peter Barrett, a director of the Issuer. The proceeds of any sale of shares of common stock issued to Mr. Barrett upon exercise of this option will be transferred to Atlas Venture Advisors, Inc. ("Atlas Advisors") and therefore Mr. Barrett disclaims beneficial ownership of such shares, which belong to Atlas Advisors.

/s/ Peter Barrett 05/26/2005

** Signature of Reporting Person Date

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

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

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

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.