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

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

OMB APPROVAL

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Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person<sup>\*</sup> 5. Relationship of Reporting Person(s) to AGIOS PHARMACEUTICALS INC [AGIO] Issuer Cole Douglas G. (Check all applicable) 3. Date of Earliest Transaction (Month/Day/Year) X Director 10% Owner 06/23/2014 (Last) (First) (Middle) Officer (give Other (specify C/O AGIOS PHARMACEUTICALS, INC., 38 title below) below) SIDNEY STREET, 2ND FLOOR 4. If Amendment, Date of Original Filed 6. Individual or Joint/Group Filing (Check (Month/Day/Year) Applicable Line) (Street) X Form filed by One Reporting Person CAMBRIDGE MA 02139 Form filed by More than One Reporting Person (City) (State) (Zip)

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. Transac Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned	6. Ownership Form: Direct (D)	Beneficial Ownership		
			Code	v	Amount	(A) or (D)	Price	Reported	or Indirect (I) (Instr. 4)	(Instr. 4)		
Common stock	06/23/2014		J <sup>(1)</sup>		1,861	Α	\$ 0	1,861	D			

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. Transac Code (Instr. 8		5.		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (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 of Derivative Security: 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				

## Explanation of Responses:

1. On June 23, 2014, Flagship Ventures Fund 2007, L.P. ("Flagship 2007") distributed to its limited partners and sole general partner, Flagship Ventures 2007 General Partner LLC ("Flagship GP"), pro rata and without consideration, certain shares of the Issuer's common stock. Flagship GP, in turn, distributed to its members the shares it received from Flagship 2007. Mr. Cole, a member of Flagship GP, received 1,861 shares through such distribution. Mr. Cole does not have voting or investment control over the shares of the Issuer currently held by Flagship 2007 and hereby disclaims beneficial ownership of such shares and the shares reported in this Form 4, except to the extent of his pecuniary interest therein.

<u>/s/ Glenn Goddard, as</u> <u>Attorney-in-fact for Douglas</u> 06/25/2014 <u>G. Cole</u> \*\* 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.