

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

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>Celgene European Investment Co LLC</u> <hr/> (Last) (First) (Middle) 86 MORRIS AVENUE <hr/> (Street) SUMMIT NJ 07901 <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>AGIOS PHARMACEUTICALS INC [AGIO]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 04/24/2017	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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 Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	04/24/2017		P		624,575	A	\$49.5	1,856,353	I	See footnote ⁽¹⁾
Common Stock								4,010,926	D ⁽²⁾	

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					

1. Name and Address of Reporting Person* <u>Celgene European Investment Co LLC</u> <hr/> (Last) (First) (Middle) 86 MORRIS AVENUE <hr/> (Street) SUMMIT NJ 07901 <hr/> (City) (State) (Zip)		
---	--	--

1. Name and Address of Reporting Person*		
Celgene Switzerland LLC		
(Last)	(First)	(Middle)
AON HOUSE		
30 WOODBOURNE AVENUE		
(Street)		
PEMBROKE	DO	HM 08
(City)		
(State)	(Zip)	

1. Name and Address of Reporting Person*		
Celgene Alpine Investment Co., LLC		
(Last)	(First)	(Middle)
86 MORRIS AVENUE		
(Street)		
SUMMIT	NJ	07901
(City)		
(State)	(Zip)	

1. Name and Address of Reporting Person*		
CELGENE CORP /DE/		
(Last)	(First)	(Middle)
86 MORRIS AVENUE		
(Street)		
SUMMIT	NJ	07901
(City)		
(State)	(Zip)	

Explanation of Responses:

- Of these shares, 624,575 shares are owned directly by Celgene Switzerland LLC ("Celgene Switzerland"), 708,333 shares are owned directly by Celgene Alpine Investment Co. LLC ("Celgene Alpine"), each a wholly-owned subsidiary of Celgene Corporation ("Celgene"), and Celgene has the power to vote, acquire, hold and dispose of all such shares. Celgene and Celgene European Investment Company LLC, a wholly owned subsidiary of Celgene ("CEICO"), disclaim beneficial ownership of such securities except to the extent of their pecuniary interest therein. The remaining 523,445 shares are owned directly by Celgene. CEICO, Celgene Switzerland and Celgene Alpine disclaim beneficial ownership of such securities except to the extent of their pecuniary interest therein.
- These shares are owned directly by CEICO, and Celgene has the power to vote, acquire, hold and dispose of all shares. Celgene, Celgene Switzerland and Celgene Alpine disclaim beneficial ownership of such securities except to the extent of their pecuniary interest therein.

Remarks:

/s/ Kevin Mello, Manager,
Celgene European Investment 04/24/2017
Company LLC

/s/ Kevin Mello, Manager, 04/24/2017
Celgene Switzerland LLC

/s/ Kevin Mello, Manager, 04/24/2017
Celgene Alpine Investment
Co., LLC

/s/ Peter N. Kellogg, Executive
Vice President & Chief 04/24/2017
Financial Officer, Celgene
Corporation

** 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.