FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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)

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

or Section 30(h) of the Investment Company Act of 1940 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person AGIOS PHARMACEUTICALS INC Cantley Lewis Clayton Jr. Director 10% Owner AGIO] Officer (give title Other (specify below) below) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) C/O AGIOS PHARMACEUTICALS, INC. 07/19/2017 88 SIDNEY STREET 6. Individual or Joint/Group Filing (Check Applicable 4. If Amendment, Date of Original Filed (Month/Day/Year) Line) (Street) X Form filed by One Reporting Person 02139 CAMBRIDGE MA Form filed by More than One Reporting Person (City) (State) (Zip)

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

2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Code (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following	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	Transaction(s) (Instr. 3 and 4)		(instr. 4)
07/19/2017		S ⁽¹⁾		3,000	D	\$56.15 ⁽²⁾	86,697	D	
07/19/2017		S ⁽¹⁾		3,000	D	\$56.15 ⁽²⁾	86,737	I	See footnote ⁽³⁾
07/19/2017		S ⁽¹⁾		500	D	\$56.11 ⁽⁴⁾	86,197	D	
07/19/2017		S ⁽¹⁾		500	D	\$56.11 ⁽⁴⁾	86,237	I	See footnote ⁽³⁾
07/20/2017		S ⁽¹⁾		500	D	\$57.12 ⁽⁵⁾	85,697	D	
07/20/2017		S ⁽¹⁾		500	D	\$ 57.12 ⁽⁵⁾	85,737	I	See footnote ⁽³⁾
07/20/2017		S ⁽¹⁾		500	D	\$57.13 ⁽⁶⁾	85,197	D	
07/20/2017		S ⁽¹⁾		500	D	\$57.13 ⁽⁶⁾	85,237	I	See footnote ⁽³⁾
							25,000	I	See footnote ⁽⁷⁾
							25,000	I	See footnote ⁽⁸⁾
	Date (Month/Day/Year) 07/19/2017 07/19/2017 07/19/2017 07/20/2017 07/20/2017	Date (Month/Day/Year) Execution Date, if any (Month/Day/Year) 07/19/2017 07/19/2017 07/19/2017 07/19/2017 07/20/2017 07/20/2017 07/20/2017 07/20/2017	Date (Month/Day/Year) (Month/Day/Year) Execution Date, if any (Month/Day/Year) Transa Code (Month/Day/Year) Transa Code (Month/Day/Year) 07/19/2017 \$(1) \$(1) 07/19/2017 \$(1) \$(1) 07/19/2017 \$(1) \$(1) 07/20/2017 \$(1) \$(1) 07/20/2017 \$(1) \$(1) 07/20/2017 \$(1) \$(1) 07/20/2017 \$(1) \$(1)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Date (Month/Day/Year) (Month/Day/Year) Execution Date; if any (Month/Day/Year) Transaction Code (Instr. 8) Disposed Of (D) (Instr. 3, 4 and 5) 07/19/2017 Code V Amount (A) or (D) (Instr. 3, 4 and 5) 07/19/2017 S(1) 3,000 D \$56.15(2) 07/19/2017 S(1) 500 D \$56.11(4) 07/19/2017 S(1) 500 D \$56.11(4) 07/20/2017 S(1) 500 D \$57.12(5) 07/20/2017 S(1) 500 D \$57.12(5) 07/20/2017 S(1) 500 D \$57.12(5)	Date (Month/Day/Year) (Month/Day/Year) Execution Date if any (Month/Day/Year) Transaction Code (Instr. 8) Disposed Of (D) (Instr. 3, 4 and 5) Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) 07/19/2017 5(1) 3,000 D \$56.15(2) 86,697 07/19/2017 5(1) 3,000 D \$56.15(2) 86,737 07/19/2017 5(1) 500 D \$56.11(4) 86,197 07/19/2017 5(1) 500 D \$56.11(4) 86,237 07/20/2017 5(1) 500 D \$57.12(5) 85,697 07/20/2017 5(1) 500 D \$57.12(5) 85,737 07/20/2017 5(1) 500 D \$57.13(6) 85,197 07/20/2017 5(1) 500 D \$57.13(6) 85,237 07/20/2017 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1) 5(1)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

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				

Explanation of Responses:

- 1. This sale was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person.
- 2. The price reported is the weighted average of the shares sold. The shares were sold at varying prices in the range of \$55.79 to \$56.72. The reporting person undertakes, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, to provide full information regarding the number of shares sold at each separate price.
- 3. Shares held by Vicki Lee Sato, who is the reporting person's spouse.
- 4. The price reported is the weighted average of the shares sold. The shares were sold at varying prices in the range of \$55.85 to \$56.49. The reporting person undertakes, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, to provide full information regarding the number of shares sold at each separate price.
- 5. The price reported is the weighted average of the shares sold. The shares were sold at varying prices in the range of \$56.18 to \$57.58. The reporting person undertakes, upon request by the staff of the
- Securities and Exchange Commission, the issuer, or a security holder of the issuer, to provide full information regarding the number of shares sold at each separate price. 6. The price reported is the weighted average of the shares sold. The shares were sold at varying prices in the range of \$56.18 to \$57.59. The reporting person undertakes, upon request by the staff of the
- Securities and Exchange Commission, the issuer, or a security holder of the issuer, to provide full information regarding the number of shares sold at each separate price. 7. Shares held by grantor retained annuity trusts for the benefit of the reporting person and his two children, of which the reporting person is trustee and sole annuitant.
- 8. Shares held by grantor retained annuity trusts for the benefit of the reporting person's spouse and their two children, of which the reporting person's spouse is trustee and sole annuitant.

Remarks:

/s/ Andrew Hirsch, as
Attorney-in-fact for Lewis C. 07/21/2017
Cantley Jr.

** 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.

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