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 ar Schenl (Last) C/O AGIO 38 SIDNI | 3. D 05/0 | Issuer Name and Ticker or Trading Symbol AGIOS PHARMACEUTICALS INC [AGIO] Date of Earliest Transaction (Month/Day/Year) 05/01/2015 If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 5. Relationship of Reporting Person(s) to Issue (Check all applicable) X Director 10% Owne X Officer (give title Other (spe below) Chief Executive Officer 6. Individual or Joint/Group Filing (Check AppliLine) | | | | | Owner (specify r) | | | | |
|---|--|--|---|--|----------------|---|--|---------------------------------------|----------------------------------|--|--|--|--------|-----------------------|---|-------------------------|---------------|---|--|
| (Street) CAMBR (City) | CAMBRIDGE MA 02139 | | | | | | | | | | | | | X | X 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/Y | | | | | n 2 (ear) i | 2A. Deemed Execution Date | | | 3. Transaction Code (Instr | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5) | | | or 5. Amo | | unt of ies cially | Forr (D) o | n: Direct | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | | | | Code | v | Amount | (A) or (D) | Price | Repo Tran | | | | u. 4) | (IIISU: 4) |
| Common stock 05/01/ | | | | | 15 | | | | S ⁽¹⁾ | | 3,900 | D | \$93.6 | 53(2) | 231,372 | | | I | See footnote ⁽³⁾ |
| Common stock | | | | | | | | | | | | | | 10 | | 01,201 | | I | See footnote ⁽⁴⁾ |
| | 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) | Execution Date, T if any C (Month/Day/Year) 8 | | Code | ransaction of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, and 5) | | rative rities ired r osed | Expir (Mont | ation I | | 7. Title and Amount of Securities Underlying Derivative Security (Instr 3 and 4) Amoun or Numbb of Title Shares | | of De Se (In | 8. Price of derivative Security (Instr. 5) Owned Following Report Transa (Instr. 4) | | ly | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |

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 \$93.01 to \$94.37. 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 David P. Schenkein 2004 Revocable Trust, of which the reporting person is trustee and beneficiary.
- 4. Shares held by Amy P. Schenkein 2004 Revocable Trust, of which the reporting person's spouse is trustee and beneficiary.

Remarks:

/s/ Glenn Goddard, as
Attorney-in-Fact for David 05/05/2015
Schenkein 05/05/2015

** 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.