

ALNYLAM PHARMACEUTICALS, INC.

Reported by
KEATING LAURIE

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 05/31/17 for the Period Ending 05/30/17

| | |
|-------------|---|
| Address | 300 THIRD STREET CAMBRIDGE, MA 02142 |
| Telephone | (617) 551-8200 |
| CIK | 0001178670 |
| Symbol | ALNY |
| SIC Code | 2834 - Pharmaceutical Preparations |
| Industry | Biotechnology & Medical Research |
| Sector | Healthcare |
| Fiscal Year | 12/31 |

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL
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[] 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 OF SECURITIES

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 * | | 2. Issuer Name and Ticker or Trading Symbol | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | |
| KEATING LAURIE | | ALNYLAM PHARMACEUTICALS, INC. [ALNY] | | <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) SVP, GC and Secretary | |
| (Last) (First) (Middle) | | 3. Date of Earliest Transaction (MM/DD/YYYY) | | | |
| C/O ALNYLAM PHARMACEUTICALS, INC., 300 THIRD STREET | | 5/30/2017 | | | |
| (Street) | | 4. If Amendment, Date Original Filed (MM/DD/YYYY) | | 6. Individual or Joint/Group Filing (Check Applicable Line) | |
| CAMBRIDGE, MA 02142 | | | | <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> 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. Trans. Date | 2A. Deemed Execution Date, if any | 3. Trans. 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 | | | |
| Common Stock | 5/30/2017 | | P | | 11500 | A | \$65.348 | 11500 | D | |
| Common Stock | | | | | | | | 207 | I | By Managed Account (U) |

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

| 1. Title of Derivate Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. 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 | | 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 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) The reporting person owns 207 shares of ALNY common stock under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|-----------------------|-------|
| | Director | 10% Owner | Officer | Other |
| KEATING LAURIE C/O ALNYLAM PHARMACEUTICALS, INC. 300 THIRD STREET CAMBRIDGE, MA 02142 | | | SVP, GC and Secretary | |

Signatures

/s/ Michael P. Mason, Attorney in Fact for: Laurie B. Keating

5/31/2017

**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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