Greene Barry E Form 4 August 14, 2018

FORM 4

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

OMB 3235-0287 Number:

OMB APPROVAL

Check this box if no longer STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF subject to **SECURITIES**

January 31, Expires: 2005 Estimated average

Other (specify

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Section 16. Form 4 or Form 5 obligations may continue. See Instruction

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

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person *

Greene Barry E

2. Issuer Name and Ticker or Trading

Symbol

ALNYLAM

PHARMACEUTICALS, INC.

[ALNY]

(Last) (First) (Middle)

(04-4-)

3. Date of Earliest Transaction

(Month/Day/Year) 08/10/2018

5. Relationship of Reporting Person(s) to

Issuer

below)

(Check all applicable) Director 10% Owner

300 THIRD STREET

(Street) 4. If Amendment, Date Original

Filed(Month/Day/Year)

President 6. Individual or Joint/Group Filing(Check

Applicable Line)

X_ Officer (give title

X Form filed by One Reporting Person Form filed by More than One Reporting

Person

CAMBRIDGE, MA 02142

| (City) | (State) (Z | (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) | Code | TransactionAcquired (A) or Code Disposed of (D) (Instr. 8) (Instr. 3, 4 and 5) (A) | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | Code | V | Amount | or (D) | Price | (Instr. 3 and 4) | | |
| Common Stock | 07/31/2018 | | G | V | 9,030 | D | \$0 | 52,938 | D | |
| Common Stock | 01/17/2018 | | J <u>(1)</u> | V | 17 | A | \$ 0 (1) | 2,827 | I | by Managed Account (1) |
| Common Stock | 04/16/2018 | | J <u>(1)</u> | V | 28 | A | \$ 0 (1) | 2,855 | I | by Managed Account (1) |
| Common Stock | 07/10/2018 | | <u>J(1)</u> | V | 29 | A | \$ 0 (1) | 2,884 | I | by Managed |

Account (1)

Common Stock 07/31/2018 G V 9,030 A \$ 0 9,030 I by Trust (2)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474

(9-02)

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. Transactio Code (Instr. 8) | 5. Number of onDerivative 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 Underlying Securiti (Instr. 3 and 4) | |
|---|---|--------------------------------------|---|--|---|--|--------------------|--|------------------------------|
| | | | | Code V | (A) (D) | Date Exercisable | Expiration Date | Title | Amou or Numb of Sha |
| Performance Based Stock Option 2013 (right to buy) | \$ 63 | 08/10/2018 | | A(3) | 15,000 | 08/10/2018 | 12/18/2023 | Common Stock | 15,0 |
| Performance Based Stock Option 2014 (right to buy) | \$ 96.45 | 08/10/2018 | | A(4) | 15,875 | 08/10/2018 | 12/17/2024 | Common Stock | 15,8 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | | | | |
|--------------------------------|---------------|-----------|-----------|-------|--|--|--|
| • | Director | 10% Owner | Officer | Other | | | |
| Greene Barry E | | | | | | | |
| 300 THIRD STREET | | | President | | | | |
| CAMBRIDGE, MA 02142 | | | | | | | |
| 0: | | | | | | | |

Signatures

/s/ Michael P. Mason, Attorney-in-Fact for Barry E.

Greene

08/14/2018

**Signature of Reporting Person Date

Reporting Owners 2

Explanation of Responses:

- * 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).
- (1) Reflects shares of ALNY common stock acquired by the reporting person under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.
- (2) The 9,030 shares were previously reported as directly beneficially owned. On 7/31/2018, the shares were contributed to the "Barry E. Greene Qualified Annuity Interest Trust" (GRAT). Barry E. Greene is the sole trustee.
- On December 18, 2013, the reporting person was granted a performance based stock option to purchase shares of ALNY Common Stock.

 One-third of the shares subject to the option will vest upon the achievement of each of three specific clinical development and regulatory events, as approved by our compensation committee. Effective August 10, 2018, the compensation committee of the Company determined the final performance criteria had been met and the option will vest as to the final third of the award.
- On December 17, 2014, the reporting person was granted a performance based stock option to purchase shares of ALNY Common Stock.

 One-third of the shares subject to the option will vest upon the achievement of each of three specific clinical development and regulatory events, as approved by our compensation committee. Effective August 10, 2018, the compensation committee of the Company determined the final performance criteria had been met and the option vested as to the final third of the award

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.