

ALNYLAM PHARMACEUTICALS, INC.

Reported by
GREENE BARRY E

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 09/22/17 for the Period Ending 09/20/17

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

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Form 5 obligations may
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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)			
Greene Barry E			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) President			
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (MM/DD/YYYY)						
C/O ALNYLAM PHARMACEUTICALS, INC., 300 THIRD STREET				9/20/2017					
(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	9/20/2017		M	(1)	76815	A	\$31.39	165399	D	
Common Stock	9/20/2017		S	(1)	76815	D	\$100	88584	D	
Common Stock	9/21/2017		M		6485	A	\$7.1	95069	D	
Common Stock	9/21/2017		M		5359	A	\$18.66	100428	D	
Common Stock								2810	I	By Managed Account (2)

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				
Performance Stock Option 2013 (Right to Buy)	\$63	9/20/2017		A	(3)	15000		9/20/2017	12/17/2023	Common Stock	15000	\$0	15000	D	
Stock Option (Right to Buy)	\$7.1	9/21/2017		M		6485		(4)	11/30/2021	Common Stock	6485	\$0	85915	D	
Stock Option (Right to Buy)	\$18.66	9/21/2017		M		5359		(4)	12/20/2022	Common Stock	5359	\$0	94641	D	
Stock Option (Right to Buy)	\$31.39	9/20/2017		M	(1)	76815		(4)	12/12/2017 (1)	Common Stock	76815	\$0	0	D	

Explanation of Responses:

- The sales reported on this Form 4 were made pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on January 23, 2017. The 76,815 options exercised and sold by the reporting person were due to expire on December 12, 2017.
- The reporting person owns 2,810 shares of ALNY common stock under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.
- 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 the compensation committee of the Company. Effective September 20, 2017, the compensation committee of the Company determined the second performance criteria had been met and the option was vested as to one-third of the shares.
- The stock option vests as to 25% of the shares on the first anniversary of the date of the stock option grant and as to an additional 6.25% of the shares each successive three month period thereafter.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Greene Barry E C/O ALNYLAM PHARMACEUTICALS, INC. 300 THIRD STREET CAMBRIDGE, MA 02142			President	

Signatures/s/ **Michael P. Mason, Attorney-in-Fact for Barry E. Greene****9/22/2017**

**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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