

<b>OMB APPROVAL</b>	
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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**

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* <u>Greene Barry E</u>  (Last) (First) (Middle) 300 THIRD STREET  (Street) CAMBRIDGE MA 02142  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ALNYLAM PHARMACEUTICALS, INC.</u> [ ALNY ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <p style="text-align: center;"><b>President</b></p>
	3. Date of Earliest Transaction (Month/Day/Year) 03/14/2018	

**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)	3. Transaction 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	03/14/2018		s <sup>(1)</sup>		2,884	D	\$140.43 <sup>(2)</sup>	97,544	D	
Common Stock	03/14/2018		s <sup>(1)</sup>		7,250	D	\$141.74 <sup>(3)</sup>	90,294	D	
Common Stock	03/14/2018		s <sup>(1)</sup>		9,217	D	\$142.68 <sup>(4)</sup>	81,077	D	
Common Stock	03/14/2018		s <sup>(1)</sup>		8,644	D	\$143.58 <sup>(5)</sup>	72,433	D	
Common Stock	03/14/2018		s <sup>(1)</sup>		9,165	D	\$144.67 <sup>(6)</sup>	63,268	D	
Common Stock	03/14/2018		s <sup>(1)</sup>		1,300	D	\$145.41 <sup>(7)</sup>	61,968	D	
Common Stock								2,810	I	by Managed Account <sup>(8)</sup>

**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		Date Exercisable	Expiration Date					

**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 11, 2018.
- Sale prices ranged from \$140.00 to \$140.95
- Sale prices ranged from \$141.12 to \$142.10
- Sale prices ranged from \$142.12 to \$143.11
- Sale prices ranged from \$143.12 to \$144.11
- Sale prices ranged from \$144.14 to \$145.13
- Sale prices ranged from \$145.16 to \$145.79
- The reporting person owns 2,827 shares of ALNY common stock under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.

By: /s/ Michael P. Mason,  
 Attorney-in-Fact For: Barry E. 03/16/2018  
Greene

\*\* Signature of Reporting Person Date

\* 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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