

<b>OMB APPROVAL</b>	
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**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>Greenstreet Yvonne</u>  (Last) (First) (Middle) 675 WEST KENDALL STREET HENRI A. TERMEER SQUARE  (Street) CAMBRIDGE MA 02142  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol ALNYLAM PHARMACEUTICALS, INC. [ 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) Chief Operating Officer
	3. Date of Earliest Transaction (Month/Day/Year) 11/20/2019	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**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	11/20/2019		M <sup>(1)</sup>		2,154	A	\$42.22	4,070	D	
Common Stock	11/20/2019		M <sup>(1)</sup>		6,250	A	\$42.22	10,320	D	
Common Stock	11/20/2019		S <sup>(1)</sup>		8,404	D	\$105	1,916	D	
Common Stock								407	I	by Managed Account <sup>(2)</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	(A)	(D)	Date Exercisable	Expiration Date						Title
Performance Stock Option 2016 (right to buy)	\$42.22	11/20/2019		M <sup>(1)</sup>			6,250	08/06/2019	12/20/2026	Common Stock	6,250	\$0.0	18,750	D	
Stock Option (right to buy)	\$42.22	11/20/2019		M <sup>(1)</sup>			2,154	(3)	12/20/2026	Common Stock	2,154	\$0.0	15,625	D	

**Explanation of Responses:**

- All sales reported on this Form 4 were made pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on March 20, 2018.
- 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.
- The stock option vests as to 25% of the shares on the 1st 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.

By: Mary Beth DeLena  
 Attorney-in-Fact For: Yvonne Greenstreet 11/22/2019

\*\* 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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