

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**

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>MARAGANORE JOHN</u>  (Last) (First) (Middle) <u>C/O ALNYLAM PHARMACEUTICALS, INC.</u> <u>300 THIRD STREET</u>  (Street) <u>CAMBRIDGE MA 02142</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ALNYLAM PHARMACEUTICALS, INC.</u> [ <u>ALNY</u> ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Executive Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>11/22/2017</u>	
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	11/22/2017		M <sup>(1)</sup>		73,415	A	\$31.39	223,125	D	
Common Stock	11/22/2017		S <sup>(1)</sup>		25,263	D	\$129.97 <sup>(2)</sup>	197,862	D	
Common Stock	11/22/2017		S <sup>(1)</sup>		25,036	D	\$130.88 <sup>(3)</sup>	172,826	D	
Common Stock	11/22/2017		S <sup>(1)</sup>		20,433	D	\$131.82 <sup>(4)</sup>	152,393	D	
Common Stock	11/22/2017		S <sup>(1)</sup>		2,683	D	\$132.73 <sup>(5)</sup>	149,710	D	
Common Stock								2,960	I	By Managed Account <sup>(6)</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
Stock Option (Right to Buy)	\$31.39	11/22/2017		M <sup>(1)</sup>			73,415	(7)	12/12/2017 <sup>(1)</sup>	Common Stock	73,415	\$0	0	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 January 13, 2017. The 73,415 options exercised and sold by the reporting person were due to expire on December 12, 2017.
- Sale prices ranged from \$129.39 to \$130.35.
- Sale prices ranged from \$130.38 to \$131.37.
- Sale prices ranged from \$131.38 to \$132.36.
- Sale prices ranged from \$132.38 to \$133.34.
- The reporting person owns 2,960 shares of ALNY common stock under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.
- The stock option vested 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.

/s/ Michael P. Mason,  
Attorney-in-Fact for: John M. Maraganore 11/24/2017

\*\* 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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