

ALNYLAM PHARMACEUTICALS, INC.

Reported by
VAISHNAW AKSHAY

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 01/04/17 for the Period Ending 12/30/16

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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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)		
Vaishnav Akshay			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) EVP, R&D		
(Last) (First) (Middle) C/O ALNYLAM PHARMACEUTICALS, INC., 300 THIRD STREET			3. Date of Earliest Transaction (MM/DD/YYYY) 12/30/2016					
(Street) CAMBRIDGE, MA 02142			4. If Amendment, Date Original Filed (MM/DD/YYYY)			6. Individual or Joint/Group Filing (Check Applicable Line)		
(City) (State) (Zip)						<input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		

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	12/30/2016		M		1172	A	\$16.43	6922	D	
Common Stock	12/30/2016		M		4019	A	\$18.66	10941	D	
Common Stock	12/30/2016		M		4356	A	\$21.35	15297	D	
Common Stock	12/30/2016		F		5000	D	\$37.44	10297	D	
Common Stock								223	I	By Managed Account (1)

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				
Stock Option (Right to Buy)	\$16.43	12/30/2016		M		1172		(2)	12/9/2019	Common Stock	1172	\$0	38913	D	
Stock Option (Right to Buy)	\$18.66	12/30/2016		M		4019		(2)	12/20/2022	Common Stock	4019	\$0	45981	D	
Stock Option (Right to Buy)	\$21.35	12/30/2016		M		4356		(2)	12/8/2018	Common Stock	4356	\$0	55994	D	

Explanation of Responses:

- The reporting person owns 223 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 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
Vaishnav Akshay C/O ALNYLAM PHARMACEUTICALS, INC. 300 THIRD STREET CAMBRIDGE, MA 02142			EVP, R&D	

Signatures

/s/ Michael P. Mason, Attorney-in-Fact for: Akshay K. Vaishnav

1/4/2017

—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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