ALNYLAM PHARMACEUTICALS, INC.

Form 4

Common

September 12, 2013

September	12, 2013									
FORM	4 UNITED	STATES SEC	URITIES	AND EX	KCH	ANGE C	OMMISSION	OMB A	PPROVAL	
Check t	his hoy	Washington, D.C. 20549							3235-0287	
if no los subject	nger STATEN								Expires: January 31 2009 2009	
Section Form 4	16.		SECURITIES					burden hou response	ırs per	
Form 5 obligati may con See Inst	ons ntinue. Section 17(rsuant to Sectio (a) of the Public 30(h) of the	Utility Ho	lding Co	mpai	ny Act of	1935 or Section	·		
(Print or Type	Responses)									
Name and Address of Reporting Person * Vaishnaw Akshay			2. Issuer ranne una riener or riading				5. Relationship of Reporting Person(s) to Issuer			
							(Check all applicable) Director 10% Owner			
(Last)	(First)		5. Date of cartiest fransaction			Officer (give titleOther (specify lelow) below) EVP, Chief Medical Officer				
C/O ALNY PHARMA THIRD ST	CEUTICALS, IN	09/1	0/2013				EVP, CIII	ei Medicai Oi	ncer	
	(Street)		mendment, I Month/Day/Ye	_	nal		6. Individual or Jos Applicable Line) _X_ Form filed by O			
CAMBRII	OGE, MA 02142						Form filed by M Person			
(City)	(State)	(Zip)	able I - Non-	-Derivativ	e Secu	ırities Acqu	iired, Disposed of,	, or Beneficia	lly Owned	
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	Execution Date, i	3. 4. Securities Acquired (A Transaction Disposed of (D) Code (Instr. 3, 4 and 5) Year) (Instr. 8)			f (D) 15)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	Ownership Indirect	Beneficial Ownership	
			Code V	Amount	or (D)	Price	(Instr. 3 and 4)	(2115127-1)		
Common Stock	09/10/2013		M(1)	6,250	A	\$ 9.3	18,838	D		
Common Stock	09/10/2013		<u>S(1)</u>	5,550	D	\$ 57.39 (2)	13,288	D		
Common Stock	09/10/2013		S <u>(1)</u>	700	D	\$ 58.1771	12,588	D		

(3)

2,647

I

By

Stock Managed Account

(4)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

Relationships

SEC 1474 (9-02)

> De Se (In

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. Transactic Code (Instr. 8)	Transaction Derivative Code Securities		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)	
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	
Stock Option (Right to	\$ 9.3	09/10/2013		M <u>(1)</u>	6,250	(5)	06/09/2021	Common Stock	6,250	

Reporting Owners

Buy)

Reporting Owner N	lame / Address		_	
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Director 10% Owner Officer Other

Vaishnaw Akshay

C/O ALNYLAM PHARMACEUTICALS, INC.

300 THIRD STREET

Medical
Officer

CAMBRIDGE, MA 02142

Signatures

/s/ Michael P. Mason, Attorney-in-Fact For: Akshay K.
Vaishnaw

09/12/2013

**Signature of Reporting Person Date

Reporting Owners 2

Explanation of Responses:

- * 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).
- (1) The sales reported on this Form 4 were made pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on March 20, 2012.
- (2) Sale prices ranged from \$57.02 to \$58.00.
- (3) Sale prices ranged from \$58.07 to \$58.28.
- (4) The reporting person owns 2,647 shares of ALNY common stock under the ALNY 401(k) plan as a result of the ALNY 401(k) matching contribution program.
- (5) The stock option vests as to 25% of the shares on the first anniversary of the stock option grant date and as to an additional 6.25% of the shares each successive three month period thereafter.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.