ALNYLAM PHARMACEUTICALS, INC.

Form 4

October 26, 2007

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB Number: 3235-0287

burden hours per

Form filed by More than One Reporting

Check this box if no longer subject to Section 16.

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Expires: January 31, 2005
Estimated average

OMB APPROVAL

Form 4 or Form 5 obligations may continue. See Instruction

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

response... 0.5

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person * Greene Barry E		orting Person *	2. Issuer Name and Ticker or Trading Symbol ALNYLAM PHARMACEUTICALS, INC.	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)			
(Last) 300 THIRD	(First)	(Middle)	[ALNY] 3. Date of Earliest Transaction (Month/Day/Year) 10/24/2007	Director 10% Owner _X Officer (give title Other (specify below) COO			
	(Street)		4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person			

CAMBRIDGE, MA 02142

(State)

(Zip)

(City)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

Person

		14.01	CI 11011 D	CIIII	Decar	rico ricq.	an ea, Disposea o	i, or beneficial	ij O IIIIcu
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transactic Code (Instr. 8)	4. Securion(A) or Di (Instr. 3,	ispose	d of (D)	5. Amount of Securities Beneficially Owned Following Reported	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	Transaction(s) (Instr. 3 and 4)		
Common Stock	10/24/2007		S <u>(1)</u>	100	D	\$ 31.36	9,671	D	
Common Stock	10/24/2007		S	200	D	\$ 31.37	9,471	D	
Common Stock	10/24/2007		S	600	D	\$ 31.38	8,871	D	
Common Stock	10/24/2007		S	60	D	\$ 31.39	8,811	D	
Common Stock	10/24/2007		S	400	D	\$ 31.4	8,411	D	

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10/24/2007	S	200	D	\$ 31.5	8,211	D
10/24/2007	S	100	D	\$ 31.51	8,111	D
10/24/2007	S	600	D	\$ 31.53	7,511	D
10/24/2007	S	200	D	\$ 31.74	7,311	D
10/24/2007	S	100	D	\$ 31.75	7,211	D
10/24/2007	S	400	D	\$ 31.76	6,811	D
10/24/2007	S	1,000	D	\$ 31.77	5,811	D
10/24/2007	S	400	D	\$ 31.78	5,411	D
10/24/2007	S	300	D	\$ 31.8	5,111	D
10/24/2007	S	260	D	\$ 31.82	4,851	D
10/24/2007	S	100	D	\$ 31.83	4,751	D
10/24/2007	S	100	D	\$ 31.84	4,651	D
10/24/2007	S	100	D	\$ 31.86	4,551	D
	10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007 10/24/2007	10/24/2007 S 10/24/2007 S	10/24/2007 S 100 10/24/2007 S 600 10/24/2007 S 200 10/24/2007 S 100 10/24/2007 S 400 10/24/2007 S 400 10/24/2007 S 300 10/24/2007 S 260 10/24/2007 S 100 10/24/2007 S 100	10/24/2007 S 100 D 10/24/2007 S 600 D 10/24/2007 S 200 D 10/24/2007 S 100 D 10/24/2007 S 400 D 10/24/2007 S 400 D 10/24/2007 S 300 D 10/24/2007 S 260 D 10/24/2007 S 100 D 10/24/2007 S 100 D	10/24/2007 S 100 D \$ 31.51 10/24/2007 S 600 D \$ 31.53 10/24/2007 S 200 D \$ 31.74 10/24/2007 S 100 D \$ 31.75 10/24/2007 S 400 D \$ 31.76 10/24/2007 S 1,000 D \$ 31.77 10/24/2007 S 400 D \$ 31.78 10/24/2007 S 300 D \$ 31.8 10/24/2007 S 260 D \$ 31.82 10/24/2007 S 100 D \$ 31.83 10/24/2007 S 100 D \$ 31.84	10/24/2007 S 100 D \$ 31.51 8,111 10/24/2007 S 600 D \$ 31.53 7,511 10/24/2007 S 200 D \$ 7,311 10/24/2007 S 100 D \$ 7,211 10/24/2007 S 400 D \$ 31.76 6,811 10/24/2007 S 1,000 D \$ 31.77 5,811 10/24/2007 S 400 D \$ 5,411 10/24/2007 S 300 D \$ 31.8 5,111 10/24/2007 S 260 D \$ 31.82 4,851 10/24/2007 S 100 D \$ 31.84 4,651 10/24/2007 S 100 D \$ 4,551

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.

SEC 1474 (9-02)

 $\label{thm:convergence} \begin{tabular}{ll} Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned \\ (e.g., puts, calls, warrants, options, convertible securities) \end{tabular}$

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5.	6. Date Exercisable and	7. Title and	8. Price of	9. Nu
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	Transaction	orNumber	Expiration Date	Amount of	Derivative	Deriv
Security	or Exercise		any	Code	of	(Month/Day/Year)	Underlying	Security	Secui
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	Derivativ	e	Securities	(Instr. 5)	Bene
	Derivative				Securities	S	(Instr. 3 and 4)		Own
	Security				Acquired				Follo
					(A) or				Repo
					Disposed				Trans
					of (D)				(Instr
					(Instr. 3,				

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4, and 5)

Date Expiration Exercisable Date

Code V (A) (D)

Amount or Number of Shares

Reporting Owners

Reporting Owner Name / Address

Director 10% Owner Officer Other

Greene Barry E

300 THIRD STREET

CAMBRIDGE, MA 02142

Signatures

By: /s/ Patricia L. Allen, Attorney-in-Fact For: Barry E.

Greene

10/26/2007

**Signature of Reporting Person Date

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) All sales reported on this Form 4 were made pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on September 24, 2007.

Remarks:

This Form 4 is the third of three filed by the reporting person to report transactions occurring on October 24, 2007.

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.

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