ALNYLAM PHARMACEUTICALS, INC.

Form 4

December 11, 2008

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL

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if no longer subject to Section 16. Form 4 or

Form 5

Check this box

SECURITIES Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, obligations Section 17(a) of the Public Utility Holding Company Act of 1935 or Section

may continue. See Instruction

30(h) of the Investment Company Act of 1940 1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person *

SHARP PHILIP A

2. Issuer Name and Ticker or Trading

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

Symbol

ALNYLAM

PHARMACEUTICALS, INC.

[ALNY]

(Last) (First) (Middle)

(04-4-)

3. Date of Earliest Transaction

(Month/Day/Year) 12/09/2008

(Street) 4. If Amendment, Date Original

Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to

Issuer

(Check all applicable)

_X__ Director 10% Owner Other (specify Officer (give title

6. Individual or Joint/Group Filing(Check

Applicable Line)

X Form filed by One Reporting Person Form filed by More than One Reporting

Person

CAMBRIDGE, MA 02142

300 THIRD STREET

(City)	(State)	Tabl	e I - No	n-D	erivative Se	curiti	es Acqu	iired, Disposed of	f, or Beneficial	ly Owned
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	tion Date, if Transaction(A		4. Securities Acquired a(A) or Disposed of (D) (Instr. 3, 4 and 5) (A) or			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)
Common Stock	09/23/2008		Code	V V	Amount 176,830	(D)	Price \$ 0	75,800	D	
Common Stock	09/23/2008		G	V	176,830	A	\$ 0	176,830	I	by Trust

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

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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 or 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 Underlying Securities (Instr. 3 and 4)	
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares
Stock Option (right to buy)	\$ 21.35	12/09/2008		A(2)	15,000	12/09/2009	12/08/2018	Common Stock	15,000

Reporting Owners

Reporting Owner Name / Address	Relationships						
Transfer de la companya de la compan	Director	10% Owner	Officer	Other			
SHARP PHILIP A							
300 THIRD STREET	X						
CAMBRIDGE, MA 02142							

Signatures

By: /s/ Patricia L. Allen, Attorney-in-Fact For: Phillip A.
Sharp

**Signature of Reporting Person

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 176,830 shares were previously reported as directly beneficially owned. On 9/23/2008, the shares were contributed to the "Phillip A. Sharp 2008 Grantor Retained Annuity Trust" (GRAT).

Date

(2) The option was granted to Dr. Sharp in connection with his service as Chairman of the Alnylam Scientific Advisory Board 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.

Reporting Owners 2