

ALNYLAM PHARMACEUTICALS, INC.

Form 4

December 11, 2008

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

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 OF
SECURITIES**

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

OMB APPROVAL

OMB
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(Print or Type Responses)

1. Name and Address of Reporting Person *
Schmidt John A Jr

2. Issuer Name **and** Ticker or Trading
Symbol
ALNYLAM
PHARMACEUTICALS, INC.
[ALNY]

5. Relationship of Reporting Person(s) to
Issuer

(Check all applicable)

____ Director ____ 10% Owner
____ Officer (give title below) ____ Other (specify below)

SVP, Chief Scientific Officer

300 THIRD STREET

(Street)

3. Date of Earliest Transaction
(Month/Day/Year)
12/09/2008

4. If Amendment, Date Original
Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check
Applicable Line)
____ Form filed by One Reporting Person
____ Form filed by More than One Reporting
Person

CAMBRIDGE, MA 02142

(City) (State) (Zip)

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	(D)	Price

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

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SEC 1474
(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative	2. Conversion	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if	4. Transaction	5. Number of Derivative	6. Date Exercisable and Expiration Date	7. Title and Amount of Underlying Securities	8.
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Security (Instr. 3)	or Exercise Price of Derivative Security	any (Month/Day/Year)	Code (Instr. 8)	Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	(Month/Day/Year)		(Instr. 3 and 4)		S (1)	
			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		15,000		<u>(1)</u>	12/08/2018	Common Stock	15,000

Reporting Owners

Reporting Owner Name / Address	Relationships
	Director 10% Owner Officer Other
Schmidt John A Jr 300 THIRD STREET CAMBRIDGE, MA 02142	SVP, Chief Scientific Officer

Signatures

By: /s/ Patricia L. Allen, Attorney-in-Fact For: John A. Schmidt Jr. 12/11/2008

__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) The stock option vests as to 25% of the shares on the 1st 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.

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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