

Greene Barry E
Form 4
February 23, 2012

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

OMB APPROVAL

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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, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
Greene Barry E

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)
President and COO

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)
02/21/2012

300 THIRD STREET
(Street)

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)
				(A) or (D) Code V Amount (D) Price			
Common Stock	02/21/2012		P ⁽¹⁾	1,860 A \$ 10.75	4,572	D	
Common Stock					1,849	I	by Managed Account ⁽²⁾

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

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SEC 1474 (9-02)

