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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**SCHEDULE 13G**

**UNDER THE SECURITIES EXCHANGE ACT OF 1934  
(AMENDMENT NO. 2)\***

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**ALNYLAM PHARMACEUTICALS, INC.**  
(Name of Issuer)

**Common Stock**  
(Title of Class of Securities)

**02043Q107**  
(CUSIP Number)

**December 31, 2017**  
(Date of Event Which Requires Filing of this Statement)

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Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  Dodge & Cox      94-1441976	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input type="checkbox"/>  N/A	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION  California - U.S.A.	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER  7,828,895
	6	SHARED VOTING POWER  0
	7	SOLE DISPOSITIVE POWER  8,231,595
	8	SHARED DISPOSITIVE POWER  0
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  8,231,595	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*  N/A	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  8.3%	
12	TYPE OF REPORTING PERSON*  IA	

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- Item 1(a) Name of Issuer:  
ALNYLAM PHARMACEUTICALS, INC.
- Item 1(b) Address of Issuer's Principal Executive Offices:  
300 Third Street  
Cambridge, MA 02142
- Item 2(a) Name of Person Filing:  
Dodge & Cox
- Item 2(b) Address of the Principal Office or, if none, Residence:  
555 California Street, 40th Floor  
San Francisco, CA 94104
- Item 2(c) Citizenship:  
California - U.S.A.
- Item 2(d) Title of Class of Securities:  
Common Stock
- Item 2(e) CUSIP Number:  
02043Q107
- Item 3 If the Statement is being filed pursuant to Rule 13d-1(b), or 13d-2(b), check whether the person filing is a:  
(e)  Investment Advisor registered under section 203 of the Investment Advisors Act of 1940
- Item 4 Ownership:
- (a) Amount Beneficially Owned:  
8,231,595
- (b) Percent of Class:  
8.3%

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- (c) Number of shares as to which such person has:
- (i) sole power to vote or direct the vote:  
7,828,895
  - (ii) shared power to vote or direct the vote:  
0
  - (iii) sole power to dispose or to direct the disposition of:  
8,231,595
  - (iv) shared power to dispose or to direct the disposition of:  
0

Item 5 Ownership of Five Percent or Less of a Class:  
Not applicable

Item 6 Ownership of More than Five Percent on Behalf of Another Person:  
The clients of Dodge & Cox, including investment companies registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive or power to direct the receipt of dividends from, and the proceeds from the sale of, ALNYLAM PHARMACEUTICALS, INC.

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company:  
Not applicable.

Item 8 Identification and Classification of Members of the Group:  
Not applicable.

Item 9 Notice of Dissolution of a Group:  
Not applicable.

Item 10 Certification:  
By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 9, 2018

DODGE & COX

By: /s/ Katherine M. Primas

Name: Katherine M. Primas

Title: Chief Compliance Officer