

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

1. Name and Address of Reporting Person* <u>Ausiello Dennis A</u>  (Last) (First) (Middle) 675 WEST KENDALL STREET HENRI A. TERMEER SQUARE  (Street) CAMBRIDGE MA 02142  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ALNYLAM PHARMACEUTICALS, INC. [ALNY]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 08/06/2024	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
Rule 10b5-1(c) Transaction Indication <input checked="" type="checkbox"/> Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.		

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	(A) or (D)	Price			
Common Stock	08/06/2024		M <sup>(1)</sup>		11,250	A	\$131.21	11,386	D	
Common Stock	08/06/2024		M <sup>(1)</sup>		9,000	A	\$105.26	20,386	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		1,627	D	\$259.56 <sup>(2)</sup>	18,759	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		3,742	D	\$260.4 <sup>(3)</sup>	15,017	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		6,212	D	\$261.63 <sup>(4)</sup>	8,805	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		4,367	D	\$262.79 <sup>(5)</sup>	4,438	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		3,408	D	\$263.72 <sup>(6)</sup>	1,030	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		632	D	\$264.95 <sup>(7)</sup>	398	D	
Common Stock	08/06/2024		S <sup>(1)</sup>		262	D	\$266.45 <sup>(8)</sup>	136	D	
Common Stock								3,500	I	by Trust <sup>(9)</sup>

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 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 Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (right to buy)	\$105.26	08/06/2024		M <sup>(1)</sup>			9,000	06/20/2019 <sup>(10)</sup>	06/19/2028	Common Stock	9,000	\$0.0	0	D	
Stock Option (right to buy)	\$131.21	08/06/2024		M <sup>(1)</sup>			11,250	06/01/2016 <sup>(11)</sup>	06/01/2025	Common Stock	11,250	\$0.0	0	D	

Explanation of Responses:

- All transactions reported on this Form 4 were made pursuant to a Rule 10b5-1(c) trading plan adopted by the reporting person on May 3, 2024.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$258.85 to \$259.85. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$259.87 to \$260.84. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$261.21 to \$262.21. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$262.26 to \$263.26. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$263.29 to \$264.20. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$264.37 to \$265.09. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$266.39 to \$266.66. The reporting person will provide to the issuer, any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.

9. The shares of ALNY common stock are held in a trust, of which the reporting person's spouse is the trustee.

10. This stock option was fully vested and exercisable as of June 20, 2019.

11. This stock option was fully vested and exercisable as of June 1, 2016.

By: Brett Budzinski, Attorney-  
in-Fact For: Dennis A. Ausiello 08/08/2024

\*\* Signature of Reporting Person      Date

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

\* 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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

**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 Number.**