

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>PYOTT DAVID E I</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.</u> [ALNY]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input type="checkbox"/> Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 06/24/2024	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	

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	06/24/2024		M ⁽¹⁾		17,560	A	\$88.95	17,696	D	
Common Stock	06/24/2024		M ⁽¹⁾		7,420	A	\$70.2	25,116	D	
Common Stock	06/24/2024		M ⁽¹⁾		7,470	A	\$71.99	32,586	D	
Common Stock	06/24/2024		S ⁽¹⁾		17,560	D	\$220	15,026	D	
Common Stock	06/24/2024		S ⁽¹⁾		7,420	D	\$221	7,606	D	
Common Stock	06/24/2024		S ⁽¹⁾		7,470	D	\$222	136	D	
Common Stock								27,900	I	by Trust ⁽²⁾

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)	\$70.2	06/24/2024		M ⁽¹⁾			7,420	06/03/2017 ⁽³⁾	06/03/2026	Common Stock	7,420	\$0.0	3,830	D	
Stock Option (right to buy)	\$71.99	06/24/2024		M ⁽¹⁾			7,470	06/02/2018 ⁽⁴⁾	06/01/2027	Common Stock	7,470	\$0.0	3,780	D	
Stock Option (right to buy)	\$88.95	06/24/2024		M ⁽¹⁾			17,560	(5)	12/18/2025	Common Stock	17,560	\$0.0	7,440	D	

Explanation of Responses:

- The transactions reported on this Form 4 were made pursuant to a Rule 10b5-1(c) trading plan adopted by the reporting person on August 11, 2023.
- The shares of ALNY common stock were purchased by the David E I Pyott Trust, of which the reporting person is trustee.
- This stock option was fully vested and exercisable as of June 3, 2017.
- This stock option was fully vested and exercisable as of June 2, 2018.
- This stock option was fully vested and exercisable as of December 18, 2018.

By: Brett Budzinski, Attorney-in-Fact For: David E.I. Pyott 06/26/2024

** 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.