

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

**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* <b>BONNEY MICHAEL W</b> (Last) (First) (Middle) <b>675 WEST KENDALL STREET</b> <b>HENRI A. TERMEER SQUARE</b> (Street) <b>CAMBRIDGE MA 02142</b> (City) (State) (Zip)			2. Issuer Name and Ticker or Trading Symbol <b>ALNYLAM PHARMACEUTICALS, INC.</b> [ <b>ALNY</b> ]			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) <b>08/02/2023</b>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
			4. If Amendment, Date of Original Filed (Month/Day/Year)			Rule 10b5-1(c) Transaction Indication <input 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	08/02/2023		M		22,477	A	\$0.0	22,477	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		300	D	\$181.08 <sup>(2)</sup>	22,177	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		500	D	\$182.45 <sup>(3)</sup>	21,677	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		560	D	\$183.75 <sup>(4)</sup>	21,117	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		1,535	D	\$184.89 <sup>(5)</sup>	19,582	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		1,714	D	\$185.99 <sup>(6)</sup>	17,868	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		1,389	D	\$187.04 <sup>(7)</sup>	16,479	D	
Common Stock	08/03/2023		S <sup>(1)</sup>		450	D	\$187.71 <sup>(8)</sup>	16,029	D	
Common Stock								4,000	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					
Restricted Stock Units	(10)	08/02/2023		M		22,477		(11)	(11)	Common Stock	\$0.0	0	D	

**Explanation of Responses:**

- Represents shares automatically sold by the Company on behalf of the reporting person pursuant to a mandatory sell-to-cover provision in the award agreement required to cover minimum statutory tax withholding obligations that became due upon the vesting and settlement of restricted stock units reported in this form.
- The price reported represents the weighted average sales price of shares sold in multiple transactions at prices ranging from \$181.00 to \$181.25. 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 \$182.13 to \$183.06. 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 \$183.20 to \$184.15. 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 \$184.48 to \$185.44. 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 \$185.49 to \$186.31. 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 \$186.53 to \$187.53. 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 \$187.58 to \$187.99. 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 shares of ALNY common stock were purchased by the Michael W. Bonney Revocable Trust, of which the reporting person is trustee.
- Each restricted stock unit represents a contingent right to receive one share of ALNY common stock.

11. The restricted stock units vest in full on the second anniversary of the grant date, August 2, 2021, provided the Reporting Person continues to serve as a director through such anniversary date, or earlier than such anniversary date if he ceases to serve as a director other than for cause or by his voluntary resignation as Executive Chair without the consent of the Board of Directors.

By: Stephen Hall, Attorney-in-  
Fact For: Michael W. Bonney 08/04/2023

\*\* 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.**