FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT	OF CHANGES	IN BENEFICIAL	OWNERSHIP

OMB APPROVAL

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

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

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

Name and Address of Reporting Person* Vaishnaw Akshay				ALN	2. Issuer Name and Ticker or Trading Symbol ALNYLAM PHARMACEUTICALS, INC. [ALNY]								5. Relationship of Reporting Person(s) to (Check all applicable) Director 10% (Check all applicable) Director 10% (Check all applicable)					
		st) LL STREET ER SQUARE	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) President, R&D 12/21/2021													
(Street)	IDGE M	A	02142	4. If Ar	4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City)	(St	ate) ((Zip)															
		Table	e I - Non-Deriva	ative S	ecurities <i>F</i>	cquir	ed, I	Disposed	of, or	Benefi	ciall	y Owne	ed					
1. Title of S	Security (Ins	tr. 3)	2. Transaction Date (Month/Day/Y	ear) Exe	Deemed ecution Date, ny onth/Day/Year)	3. Trans Code 8)		4. Securities Disposed Of	Acquire f (D) (Inst	ed (A) or tr. 3, 4 and	d 5)	5. Amour Securitie Beneficia Owned F Reported	s ally ollowing	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Ind Ber Ow	lature of irect neficial mership str. 4)		
						Code	v	Amount	(A) or (D)	Price		Transacti (Instr. 3 a	ion(s)	(mour 4)	(,,,		
Common	Stock		12/21/202	21		A ⁽¹⁾		5,417	A	\$0.0	0	16,0	632	D				
Common	Stock		12/22/202	21		F ⁽²⁾		2,415	D	\$189.	.13	14,2	217	D				
Common	Stock		12/22/202	21		F ⁽²⁾		1	D	\$190).5	14,2	216	D				
Common	Stock		12/22/202	21		F ⁽²⁾		122	D	\$186.	.48	14,0	094	D				
Common	Stock		12/23/202	21		S ⁽³⁾		124	D	\$186.	.22	13,9	970	D				
Common	Stock		12/23/202	21		S ⁽³⁾		137	D	\$187.	.08	13,8	833	D				
Common	Stock		12/23/202	21		S ⁽³⁾		130	D	\$187.	.35	13,7	703	D				
Common	Stock		12/23/202	21		S ⁽³⁾		127	D	\$188.	.26	13,5	576	D				
Common	Stock		12/23/202	21		S ⁽³⁾		73	D	\$189.	.01	13,5	503	D				
Common	Stock		12/23/202	21		S ⁽³⁾		8	D	\$189.	.18	13,4	495	D				
Common	Stock		12/23/202	21		S ⁽³⁾		144	D	\$189.	.24	13,3	351	D				
Common	Stock		12/23/202	21		S ⁽³⁾		144	D	\$190.	.02	13,2	207	D				
Common	Stock		12/23/202	21		S ⁽³⁾		5	D	\$190.	.27	13,2	202	D				
Common	Stock		12/23/202	21		S ⁽³⁾		73	D	\$190.	.33	13,1	129	D				
Common	Stock		12/23/202	21		S ⁽³⁾		142	D	\$190.	.39	12,9	987	D				
Common	Stock		12/23/202	21		S ⁽³⁾		125	D	\$190.	.86	12,8	862	D				
Common	Stock		12/23/202	21		S ⁽³⁾		1,000	D	\$191.4	45 ⁽⁴⁾	11,8	362	D				
Common	Stock		12/23/202	21		S ⁽³⁾		73	D	\$192.	.25	11,7	789	D				
Common	Stock		12/23/202	21		S ⁽³⁾		126	D	\$193.	.37	11,6	663	D				
Common	Stock		12/23/202	21		S ⁽³⁾		145	D	\$193.	.67	11,5	518	D				
Common	Stock		12/23/202	21		S ⁽³⁾		303	D	\$195.1	11 ⁽⁵⁾	11,2	215	D				
Common	Stock											51	15	I		anaged ccount ⁽⁶⁾		
		Та	ble II - Derivat		curities Ac Is, warran							Owned						
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. Transac Code (Ir 8)	5. Numl	ber 6. I Ex ive ies ed	Date E piratio	xercisable and n Date ay/Year)	7. Tit Amo Secu Unde Deriv	tle and ount of urities erlying vative urity (Instr	8. De Se (Ir	erivative ecurity nstr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactic (Instr. 4)	Owners Form: Direct (or Indir (I) (Inst	bhip D) ect	11. Nature of Indirect Beneficial Ownership (Instr. 4)		

		Tal	ole II - Derivati (e.g., pu					ired, Disp options, o	onvertib		or	-	k		
1. Title of	2.	3. Transaction	3A. Deemed	⊈ ode		(5A)Nu	m(D) r	Expertis Elater			Salnaires	8. Price of	9. Number of	10.	11. Nature
Derivative ESecularitatio	Conversion noofEircescosens	e(shonth/Day/Year)	Execution Date, if any	Transa Code (Deriv	ative	Expiration Do (Month/Day/)		Amou Secur		Derivative Security	derivative Securities	Ownership Form:	Beneficial
(Instr ₋ 3) 1. On Februa	Price of 17,28,2019, th	e reporting person wa	(Month/Day/Year) as granted performance inical development, r	8) ce-based	l restrict	Secu ed sto	rities	s (PSU) in conn	ection with th	Under	lying year end co	(Instr. 5) ompensation r	Beneficially eview. One third of Owned	Direct (D)	Ownership
upon the ach	iesement of each	ch of three specific cl	inical development, r	egulator	y or cor	masi 6	jal eve	nts. The People	, Culture and	CSECUI	sation Con	nmittee of the	Board determined	or indirect d (i) (instr. 4)	(instr. 4)
performance	criterion was n	net and the final one-	third of the PSU awa	rd vested	d as of I	Person	osed ¹ ,	2021.		3 and			Reported	. ,	
			ompany on behalf of		rting pe	rs@h(P	rsuant	to a mandatory	sell-to-cover	provisi	on in the P	SU award agr	e Transaction(a) to	o cover minim	ım
statutory tax	withholding of	ligations that became	due upon the vesting	g event.		and!	r. 3, 4						(Instr. 4)		
3. All sales r	eported on this	Form 4, other than th	e sell-to-cover for tax	xes on D	ecembe	er 22, 2	2021, w	ere made pursu	ant to a Rule	10b5-1	trading plai	adopted by i	he reporting perso	on on February	15, 2021.
4 C-1	s ranged from \$	191.14 to \$191.80.						•			0.1			•	
14 Sale Drice															
_														-	
5. Sale price	s ranged from \$	194.82 to \$195.43.													
5. Sale price	s ranged from \$	194.82 to \$195.43.	red by the reporting p	person u	nder the	ALN	Y 401(k) plan as a res	ult of the ALN	NY 401(k ∱mawnt n	g contribution	program.		•
5. Sale price	s ranged from \$	194.82 to \$195.43.	red by the reporting p	person u	nder the	ALN	Y 401(k) plan as a res	I	ı i	or i	ĺ	program,	I	[
5. Sale price	s ranged from \$	194.82 to \$195.43.	red by the reporting [person u	nder the	ALN	Y 401(k) plan as a res	Expira By:	/s/ Ma	or <u>ry Beth</u>	ĺ		: 	· ·

K. Vaishnaw

** Signature of Reporting Person Date

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

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.

 $^{^{\}star}$ 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).