#### ALNYLAM PHARMACEUTICALS, INC.

Form SC 13G/A February 23, 2006

# SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Schedule 13G (Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1 (b), (c) AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2 (b) (Amendment No. 3)\*

Alnylam Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

02043Q107

(CUSIP Number)

December 30, 2005

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

(Date of Event Which Requires Filing of this Statement)

Rule 13d-1(b)

Rule 13d-1(c)

X 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 disclosures provided in a prior cover page.

The information required on 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).

(Continued on following pages)

Page 1 of 16 Exhibit Index on Page 13

1		NAME OF REPORTING SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Polaris Venture Partners III, L.P. ("PVP III")											
2		CHECK	THE	APPRO	PRIATE	BOX IF	A MEMBE	R OF A	A GROU	JP*			
										(a)		(b)	X
3		SEC US	SE ON	ILY									
4		CITIZE		P OR	PLACE (	OF ORGAN	NIZATION						
BEI		UMBER OF SHARES NEFICIALLY EACH REPORTING PERSON WITH			5	SOLE VOTING POWER  365,852 shares, except that Polaris Venture  Management Co. III, L.L.C. ("Polaris III"), the general partner of PVP III, may be deemed to have sole power to vote these shares, and Jonathan A. Flint ("Flint"), Terrance G. McGui: ("McGuire") and Alan G. Spoon ("Spoon"), the managing members of Polaris III, may be deemed have shared power to vote these shares.							the co cGuire
					6		VOTING sponse t		5.				
					7	365,852 general sole po McGuire Polaris	SPOSITI  2 shares  L partne  ower to  e and Sp  s III, m  cose of	, excer of F disposed oon, tag be	ept the VP II se of the mandel	I, ma these nagin ed to	y be de shares g membe	emed t , and rs of	o have Flint,
					8		DISPOSI sponse t						
9		AGGREORE REPORT				FICIALLY	Y OWNED	BY EAC	СН			365 <b>,</b> 85	52
10		CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES											
11		PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9								1.37%			
12		TYPE (	OF RE	PORTI	NG PERS	SON							PN
CUSIP	NO.	. 02043	3Q107				13 G					Page 3	3 of 16
1		NAME (	OF RE	PORTI	NG								

SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

("Entrepreneurs' III")

Polaris Venture Partners Entrepreneurs' Fund III, L.P.

2

2		CHECK THE APPRO	PRIATE	BOX IF	A MEMBER	R OF A G	GROUP*	(1	o)	X
3		SEC USE ONLY								
4		CITIZENSHIP OR Delaware	PLACE (	OF ORGAN	IIZATION					
OWNED	BEN	UMBER OF SHARES REFICIALLY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 9,372 shares, except that Polaris III, general partner of Entrepreneurs' III, deemed to have sole power to vote these and Flint, McGuire and Spoon, the manamembers of Polaris III, may be deemed shared power to vote these shares.						may l sha: ing	res,
			6	-	VOTING E					
			7	9,372 s general deemed shares, managir	partner to have and Fla ng member	except to of Ent sole point, McG	chat Polaris repreneurs' ower to dispo Guire and Spo plaris III, a dispose of the	III, rose of con, the may be	may l the ne deer	se med to
			8		DISPOSIT					
9		AGGREGATE AMOUN REPORTING PERSO		FICIALLY	OWNED E	BY EACH				9,372
10		CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES								
11		PERCENT OF CLAS	S REPRI	ESENTED	BY AMOUN	NT IN RC	DW 9			0.04%
12		TYPE OF REPORTI	NG PERS	SON						PN
CUSIP	NO.	02043Q107			13 G			Pag	ge 4	of 16
1		NAME OF REPORTI SS OR I.R.S. ID Polaris V	ENTIFIC				RSON nd III, L.P.	("Four	nder	s' III")
2		CHECK THE APPRO	PRIATE	BOX IF	A MEMBER	R OF A G	GROUP* (a)	(}	٥)	X
3		SEC USE ONLY								
4		CITIZENSHIP OR Delaware	PLACE (	OF ORGAN	NIZATION					

BE	NUMBER OF SHARES ENEFICIALLY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 5,701 shares, except that Polaris III, the general partner of Founders' III, may be deemed to have sole power to vote these shares, and Flint, McGuire and Spoon, the managing members of Polaris III, may be deemed to have shared power to vote these shares.  SHARED VOTING POWER See response to row 5.						
		7	SOLE DISPOSITIVE POWER 5,701 shares, except that Polaris I general partner of Founders' III, may to have sole power to dispose of the and Flint, McGuire and Spoon, the may members of Polaris III, may be deem shared power to dispose of these shared	ay be deemed ese shares, anaging ed to have					
		8	SHARED DISPOSITIVE POWER See response to row 7.						
9	AGGREGATE AMOUN		EFICIALLY OWNED BY EACH	5,701					
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES								
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9								
12	TYPE OF REPORTING PERSON P								
CUSIP NC	). 02043Q107		13 G	Page 5 of 16					
1		ENTIFI	CATION NO. OF ABOVE PERSON  Management Co. III, L.L.C. ("Polari:	s III")					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*  (a) (b) X								
3	SEC USE ONLY								
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware								
BE	NUMBER OF SHARES ENEFICIALLY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 380,925 shares, of which 365,852 are owned by PVP III, 9,372 are directly Entrepreneurs' III and 5,701 are dir by Founders' III. Polaris III, the partner of PVP III, Entrepreneurs' Founders' III, may be deemed to have	y owned by rectly owned general III and					

to vote these shares, and Flint, McGuire and Spoon, the managing members of Polaris III, may be deemed to have shared power to vote these shares.

- 6 SHARED VOTING POWER See response to row 5.
- SOLE DISPOSITIVE POWER
  380,925 shares, of which 365,852 are directly owned by PVP III, 9,372 are directly owned by Entrepreneurs' III and 5,701 are directly owned by Founders' III. Polaris III, the general partner of PVP III, Entrepreneurs' III and Founders' III, may be deemed to have sole power to vote these shares, and Flint, McGuire and Spoon, the managing members of Polaris III, may be deemed to have shared power to dispose of these shares.
- 8 SHARED DISPOSITIVE POWER See response to row 7.
- 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
  REPORTING PERSON 380,925
- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 1.43%
- 12 TYPE OF REPORTING PERSON

00

(b) X

CUSIP NO. 02043Q107 13 G Page 6 of 16

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

  (a)
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen
  - 5 SOLE VOTING POWER 0 shares.

NUMBER OF SHARES

BENEFICIALLY 6 SHARED VOTING POWER
OWNED BY EACH REPORTING 380,925 shares, of which 365,852 are directly

	PERSON WITH		owned by PVP III, 9,372 are directly owned by Entrepreneurs' III and 5,701 are directly owned by Founders' III. Polaris III is the general partner of PVP III, Entrepreneurs' III and Founders' III. Flint is a managing member of Polaris III, and may be deemed to have shared power to vote these shares.					
		7	SOLE DISPOSITIVE POWER 0 shares.					
		8	SHARED DISPOSITIVE POWER 380,925 shares, of which 3 owned by PVP III, 9,372 ar Entrepreneurs' III and 5,7 by Founders' III. Polaris partner of PVP III, Entrep Founders' III. Flint is a Polaris III, and may be depower to dispose of these	e directly 01 are dire III is the reneurs' II managing me emed to hav	owned by ctly owned general I and mber of			
9	AGGREGATE AMOUNT REPORTING PERSON		FICIALLY OWNED BY EACH		380,925			
10	CHECK BOX IF THE EXCLUDES CERTAIN		EGATE AMOUNT IN ROW (9) ES					
11	PERCENT OF CLASS	REPRI	ESENTED BY AMOUNT IN ROW 9		1.43%			
12	TYPE OF REPORTING	G PER	SON		IN			
CUSIP NO	o. 02043Q107		13 G		Page 7 of 16			
1		NTIFI	CATION NO. OF ABOVE PERSON uire ("McGuire")					
2	CHECK THE APPROP	RIATE	BOX IF A MEMBER OF A GROUP	* (a)	(b) X			
3	SEC USE ONLY							
4	CITIZENSHIP OR P. U.S. Citizen	LACE (	OF ORGANIZATION					
		5	SOLE VOTING POWER 0 shares.					
BE	NUMBER OF SHARES ENEFICIALLY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER 380,925 shares, of which 3 owned by PVP III, 9,372 ar Entrepreneurs' III and 5,7	e directly	owned by			

by Founders' III. Polaris III is the general partner of PVP III, Entrepreneurs' III and Founders' III. McGuire is a managing member of Polaris III, and may be deemed to have shared power to vote these shares.

- 7 SOLE DISPOSITIVE POWER 0 shares.
- 8 SHARED DISPOSITIVE POWER
  380,925 shares, of which 365,852 are directly owned by PVP III, 9,372 are directly owned by Entrepreneurs' III and 5,701 are directly owned by Founders' III. Polaris III is the general partner of PVP III, Entrepreneurs' III and Founders' III. McGuire is a managing member of Polaris III, and may be deemed to have shared power to dispose of these shares.
- 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH
  REPORTING PERSON 380,925

  10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9)
  EXCLUDES CERTAIN SHARES

  11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

  1.43%

  12 TYPE OF REPORTING PERSON

CUSIP NO. 02043Q107 13 G Page 8 of 16

- NAME OF REPORTING
  SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
  Alan G. Spoon ("Spoon")
- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

  (a) (b) X
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION U.S. Citizen
  - 5 SOLE VOTING POWER 0 shares.

NUMBER OF
SHARES
BENEFICIALLY 6

OWNED BY EACH REPORTING
PERSON
WITH

SHARED VOTING POWER
380,925 shares, of which 365,852 are directly owned by PVP III, 9,372 are directly owned by Entrepreneurs' III and 5,701 are directly owned by Founders' III. Polaris III is the general partner of PVP III, Entrepreneurs' III and

ΤN

Founders' III. Spoon is a managing member of Polaris III, and may be deemed to have shared power to vote these shares.

- 7 SOLE DISPOSITIVE POWER 0 shares.
- 8 SHARED DISPOSITIVE POWER
  380,925 shares, of which 365,852 are directly owned by PVP III, 9,372 are directly owned by Entrepreneurs' III and 5,701 are directly owned by Founders' III. Polaris III is the general partner of PVP III, Entrepreneurs' III and Founders' III. Spoon is a managing member of Polaris III, and may be deemed to have shared power to dispose of these shares.
- 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

380,925

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

1.43%

12 TYPE OF REPORTING PERSON

IN

CUSIP NO. 02043Q107

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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, Massachusetts 02142

ITEM 2(A). NAME OF PERSONS FILING

This Statement is filed by Polaris Venture Partners III, L.P., a Delaware limited partnership ("PVP III"), Polaris Venture Partners Entrepreneurs' Fund III, L.P., a Delaware limited partnership ("Entrepreneurs' III"), Polaris Venture Partners Founders' Fund III, L.P., a Delaware limited partnership ("Founders' III"), Polaris Venture Management Co. III, L.L.C., a Delaware limited liability company ("Polaris III"), Jonathan A. Flint ("Flint"), Terrance G. McGuire ("McGuire") and Alan G. Spoon ("Spoon"). Flint, McGuire and Spoon are the managing members of Polaris III. The foregoing entities and individuals are collectively referred to as the "Reporting Persons."

Polaris III, the general partner of PVP III, Entrepreneurs' III and Founders' III, may be deemed to have sole power to vote and sole power to dispose of shares of the issuer directly owned by PVP III, Entrepreneurs' III and Founders' III. Flint, McGuire and Spoon are the managing members of

Polaris III and may be deemed to have shared power to vote and shared power to dispose of shares of the issuer directly owned by PVP III, Entrepreneurs' III and Founders' III.

ITEM 2(B). ADDRESS OF PRINCIPAL OFFICE

The address for each of the Reporting Persons is:

Polaris Venture Partners 1000 Winter Street, Suite 3350 Waltham, Massachusetts 02451

ITEM 2(C) CITIZENSHIP

PVP III, Entrepreneurs' III and Founders' III are Delaware limited partnerships; Polaris III is a Delaware Limited Liability Company; Flint, McGuire and Spoon are United States citizens.

ITEM 2(D) AND (E). TITLE OF CLASS OF SECURITIES AND CUSIP NUMBER

Common Stock
CUSIP # 02043Q107

ITEM 3. Not Applicable

ITEM 4. OWNERSHIP

The following information with respect to the ownership of the Common Stock of the issuer by the persons filing this Statement is provided as of December 30, 2005:

(a) Amount beneficially owned:

See Row 9 of cover page for each Reporting Person.

(b) Percent of Class:

CUSIP NO. 02043Q107

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See Row 11 of cover page for each Reporting Person.

- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or to direct
     the vote:

See Row 5 of cover page for each Reporting Person.

(ii) Shared power to vote or to direct
 the vote:

See Row 6 of cover page for each Reporting Person.

(iii) Sole power to dispose or to direct the disposition of:

See Row 7 of cover page for each Reporting Person.

(iv) Shared power to dispose or to direct the disposition of:

> See Row 8 of cover page for each Reporting Person.

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.

> Under certain circumstances set forth in the limited partnership agreements of PVP III, Entrepreneurs' III and Founders' III, the general and limited partners of each of such entities may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the issuer owned by each such entity of which they are a partner.

IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ITEM 7. 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.

NOTICE OF DISSOLUTION OF GROUP. TTEM 9.

Not applicable.

CERTIFICATION. ITEM 10.

Not applicable.

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#### SIGNATURES

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 22, 2006

POLARIS VENTURE PARTNERS III, L.P., /s/ Kevin Littlejohn a Delaware Limited Partnership

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Signature

Kevin Littlejohn Authorized Signatory

POLARIS VENTURE PARTNERS /s/ Kevin Littlejohn ENTREPRENEURS' FUND III, L.P., a Delaware Limited Partnership Signature Kevin Littlejohn Authorized Signatory POLARIS VENTURE PARTNERS /s/ Kevin Littlejohn FOUNDERS' FUND III, L.P., ----a Delaware Limited Partnership Signature Kevin Littlejohn Authorized Signatory POLARIS VENTURE MANAGEMENT CO. III, L.L.C., /s/ Kevin Littlejohn a Delaware Limited Liability Company Signature Kevin Littlejohn Authorized Signatory JONATHAN A. FLINT /s/ Kevin Littlejohn \_\_\_\_\_ Signature Kevin Littlejohn Authorized Signatory Page 12 of 16 TERRANCE G. MCGUIRE /s/ Kevin Littlejohn Signature Kevin Littlejohn Authorized Signatory ALAN G. SPOON /s/ Kevin Littlejohn \_\_\_\_\_ Signature Kevin Littlejohn Authorized Signatory

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EXHIBIT INDEX

Exhibit Exhibit A: Agreement of Joint Filing Exhibit B: Reference to Kevin Littlejohn as Authorized Signatory Page 14 of 16 EXHIBIT A Agreement of Joint Filing The undersigned hereby agree that a single Schedule 13G (or any amendment thereto) relating to the Common Stock of Alnylam Pharmaceuticals, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13G. Dated: February 22, 2006 POLARIS VENTURE PARTNERS III, L.P., /s/ Kevin Littlejohn a Delaware Limited Partnership \_\_\_\_\_ Signature Kevin Littlejohn Authorized Signatory POLARIS VENTURE PARTNERS /s/ Kevin Littlejohn ENTREPRENEURS' FUND III, L.P., \_\_\_\_\_ a Delaware Limited Partnership Signature Kevin Littlejohn Authorized Signatory POLARIS VENTURE PARTNERS /s/ Kevin Littlejohn FOUNDERS' FUND III, L.P., a Delaware Limited Partnership Signature Kevin Littlejohn Authorized Signatory POLARIS VENTURE MANAGEMENT CO. III, L.L.C., /s/ Kevin Littlejohn a Delaware Limited Liability Company Signature Kevin Littlejohn Authorized Signatory JONATHAN A. FLINT /s/ Kevin Littlejohn

Sequenti

Numbered

14

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\_\_\_\_\_

Signature

Kevin Littlejohn Authorized Signatory

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TERRANCE G. MCGUIRE /s/ Kevin Littlejohn

\_\_\_\_\_

Signature

Kevin Littlejohn Authorized Signatory

ALAN G. SPOON /s/ Kevin Littlejohn

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Signature

Kevin Littlejohn Authorized Signatory

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#### EXHIBIT B

REFERENCE TO KEVIN LITTLEJOHN AS AUTHORIZED SIGNATORY

Kevin Littlejohn has signed the enclosed documents as Authorized Signatory. Note that copies of the applicable Agreement to File Jointly and Statement Appointing Designated Filer and Authorized Signatory are already on file with the appropriate agencies.