

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

-----  
(Date of Event Which Requires Filing of this Statement)

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

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

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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 APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
 (a) (b) X

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

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. McGuire ("McGuire") and Alan G. Spoon ("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.

7 SOLE DISPOSITIVE POWER  
 365,852 shares, except that Polaris III, the general partner of PVP III, may be deemed to have sole power to dispose of 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 365,852

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 REPORTING PERSON PN

CUSIP NO. 02043Q107

13 G

Page 3 of 16

1 NAME OF REPORTING  
 SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 Polaris Venture Partners Entrepreneurs' Fund III, L.P.  
 ("Entrepreneurs' III")

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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

5 SOLE VOTING POWER  
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH  
9,372 shares, except that Polaris III, the general partner of Entrepreneurs' 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.

6 SHARED VOTING POWER  
See response to row 5.

7 SOLE DISPOSITIVE POWER  
9,372 shares, except that Polaris III, the general partner of Entrepreneurs' III, may be deemed to have sole power to dispose of 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 9,372

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.04%

12 TYPE OF REPORTING PERSON PN

CUSIP NO. 02043Q107

13 G

Page 4 of 16

1 NAME OF REPORTING PERSON  
SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Polaris Venture Partners Founders' Fund III, L.P. ("Founders' 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

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

<p>5</p> <p>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</p>	<p>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.</p>	
<p>6</p>	<p>SHARED VOTING POWER See response to row 5.</p>	
<p>7</p>	<p>SOLE DISPOSITIVE POWER 5,701 shares, except that Polaris III, the general partner of Founders' III, may be deemed to have sole power to dispose of 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.</p>	
<p>8</p>	<p>SHARED DISPOSITIVE POWER See response to row 7.</p>	
<p>9</p>	<p>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</p>	<p>5,701</p>
<p>10</p>	<p>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES</p>	
<p>11</p>	<p>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9</p>	<p>0.02%</p>
<p>12</p>	<p>TYPE OF REPORTING PERSON</p>	<p>PN</p>

CUSIP NO. 02043Q107

13 G

Page 5 of 16

<p>1</p>	<p>NAME OF REPORTING SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Polaris Venture Management Co. III, L.L.C. ("Polaris III")</p>
<p>2</p>	<p>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) (b) X</p>
<p>3</p>	<p>SEC USE ONLY</p>
<p>4</p>	<p>CITIZENSHIP OR PLACE OF ORGANIZATION Delaware</p>
<p>5</p> <p>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</p>	<p>SOLE 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, the general partner of PVP III, Entrepreneurs' III and Founders' III, may be deemed to have sole power</p>

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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.

7 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

CUSIP NO. 02043Q107

13 G

Page 6 of 16

1 NAME OF REPORTING  
SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Jonathan A. Flint ("Flint")

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

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

PERSON owned by PVP III, 9,372 are directly owned by  
 WITH 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 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. Flint 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

13 G

Page 7 of 16

1 NAME OF REPORTING  
 SS OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 Terrance G. McGuire ("McGuire")

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  
 OWNED BY EACH REPORTING  
 PERSON  
 WITH

6 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

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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	IN

CUSIP NO. 02043Q107

13 G

Page 8 of 16

1	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 OWNED BY EACH REPORTING PERSON WITH	6	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

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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

13 G

Page 9 of 16

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



Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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

13 G

Page 10 of 16

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:

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

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.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH 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.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

ITEM 10. CERTIFICATION.

Not applicable.

Page 11 of 16

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.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn

-----  
Signature

Kevin Littlejohn  
Authorized Signatory

Edgar Filing: ALNYLAM PHARMACEUTICALS, INC. - Form SC 13G/A

POLARIS VENTURE PARTNERS  
ENTREPRENEURS' FUND III, L.P.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

POLARIS VENTURE PARTNERS  
FOUNDERS' FUND III, L.P.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

POLARIS VENTURE  
MANAGEMENT CO. III, L.L.C.,  
a Delaware Limited Liability Company

/s/ Kevin Littlejohn  
-----  
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

Page 13 of 16

EXHIBIT INDEX

Found

Exhibit  
-----

Sequenti  
Numbered  
-----

Exhibit A: Agreement of Joint Filing

14

Exhibit B: Reference to Kevin Littlejohn as Authorized Signatory

16

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.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

POLARIS VENTURE PARTNERS  
ENTREPRENEURS' FUND III, L.P.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

POLARIS VENTURE PARTNERS  
FOUNDERS' FUND III, L.P.,  
a Delaware Limited Partnership

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

POLARIS VENTURE  
MANAGEMENT CO. III, L.L.C.,  
a Delaware Limited Liability Company

/s/ Kevin Littlejohn  
-----  
Signature

Kevin Littlejohn  
Authorized Signatory

JONATHAN A. FLINT

/s/ Kevin Littlejohn

-----  
Signature

Kevin Littlejohn  
Authorized Signatory

Page 15 of 16

TERRANCE G. MCGUIRE

/s/ Kevin Littlejohn

-----  
Signature

Kevin Littlejohn  
Authorized Signatory

ALAN G. SPOON

/s/ Kevin Littlejohn

-----  
Signature

Kevin Littlejohn  
Authorized Signatory

Page 16 of 16

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.