ALNYLAM PHARMACEUTICALS, INC. Form SC 13G/A February 13, 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 RULE 13d-2(b)

(AMENDMENT NO. 2)*

Alnylam Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value per share

(Title of Class of Securities)

02043Q107

(CUSIP Number)

December 31, 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)
|X| Rule 13d-1(c)
|_| 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 the disclosures provided in a prior cover page.

The information required in 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).

| 1 | NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) | | |
|----|--|---|--|
| | Abingworth Managemer | nt Limited | |
| 2 | CHECK THE APPROPRIAT | TE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) _ (b) _ | |
| 3 | SEC USE ONLY | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | |
| | England | | |
| | | 5 SOLE VOTING POWER | |
| | | 0 | |
| | NUMBER OF | 6 SHARED VOTING POWER | |
| | SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 2,150,000 | |
| | | 7 SOLE DISPOSITIVE POWER | |
| | | 0 | |
| | | 8 SHARED DISPOSITIVE POWER | |
| | | 2,150,000 | |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | |
| | 2,150,000 shares | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) _ | | |
| 11 | PERCENT OF CLASS RE | PRESENTED BY AMOUNT IN ROW 9 | |
| | 10.3% | | |
| 12 | TYPE OF REPORTING | PERSON (SEE INSTRUCTIONS) | |
| | PN | | |
| | | | |

| | Edgar Filing: AL | Edgar Filing: ALNYLAM PHARMACEUTICALS, INC Form SC 13G/A | | | |
|----|---|---|--|--|--|
| | I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) | | | | |
| | Abingworth Biovent | cures III A L.P. | | | |
| 2 | CHECK THE APPROPR | IATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) _ (b) _ | | | |
| 3 | SEC USE ONLY | | | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | |
| | England | | | | |
| | | 5 SOLE VOTING POWER | | | |
| | | 0 | | | |
| | NUMBER OF | 6 SHARED VOTING POWER | | | |
| | SHARES BENEFICIALLY OWNED BY | 2,000,000 shares | | | |
| | EACH REPORTING | 7 SOLE DISPOSITIVE POWER | | | |
| | PERSON WITH: | 0 | | | |
| | | 8 SHARED DISPOSITIVE POWER | | | |
| | | 2,000,000 shares | | | |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | |
| | 2,000,000 shares | | | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | | | |
| 11 | PERCENT OF CLASS | REPRESENTED BY AMOUNT IN ROW 9 | | | |
| | 9.6% | | | | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | | | | |
| | PN | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 1 | NAME OF REPORTING I.R.S. IDENTIFICA | PERSONS TION NOS. OF ABOVE PERSONS (ENTITIES ONLY) | | | |

Abingworth Bioventures III B L.P.

3

| 2 | CHECK THE APPROPRIA | TE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) _ (b) _ | | | |
|----|--|---|--|--|--|
| 3 | SEC USE ONLY | | | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | |
| | England | | | | |
| | | 5 SOLE VOTING POWER | | | |
| | | 0 | | | |
| | NUMBER OF | 6 SHARED VOTING POWER | | | |
| | SHARES BENEFICIALLY OWNED BY | 2,000,000 shares | | | |
| | EACH REPORTING PERSON WITH: | 7 SOLE DISPOSITIVE POWER | | | |
| | | 0 | | | |
| | | 8 SHARED DISPOSITIVE POWER | | | |
| | | 2,000,000 shares | | | |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | |
| | 2,000,000 shares | | | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) _ | | | | |
| 11 | PERCENT OF CLASS R | EPRESENTED BY AMOUNT IN ROW 9 | | | |
| | 9.6% | | | | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | | | | |
| | PN | | | | |
| | | | | | |
| | | | | | |

1 NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Abingworth Bioventures III C L.P.

| 2 | CHECK THE APPROPI | RIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) _ (b) _ | |
|--------|---|--|--|
| 3 | SEC USE ONLY | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | |
| | Delaware | | |
| | | 5 SOLE VOTING POWER | |
| | | 0 | |
| | NUMBER OF | 6 SHARED VOTING POWER | |
| | SHARES BENEFICIALLY OWNED BY | 2,000,000 shares | |
| | EACH REPORTING | 7 SOLE DISPOSITIVE POWER | |
| | PERSON WITH: | 0 | |
| | | 8 SHARED DISPOSITIVE POWER | |
| | | 2,000,000 shares | |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | |
| | 2,000,000 shares | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | |
| 11 | PERCENT OF CLASS | S REPRESENTED BY AMOUNT IN ROW 9 | |
| | 9.6% | | |
| L2 | | | |
| | PN | | |
| | | | |
| 1 | NAME OF REPORTING | G PERSONS ATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) | |
| | Abingworth Biover | ntures III Executives L.P. | |
| | | | |

| | Edgar Filing: ALNYLAM PHARMACEUTICALS, INC Form SC 13G/A | | |
|----|---|----------------------------------|--|
| | | (a) _ (b) _ | |
| 3 | SEC USE ONLY | | |
| 4 | CITIZENSHIP OR Delaware | PLACE OF ORGANIZATION | |
| | | 5 SOLE VOTING POWER | |
| | | 0 | |
| | NUMBER OF SHARES | 6 SHARED VOTING POWER | |
| | BENEFICIALLY OWNED BY EACH REPORTING | 2,000,000 shares | |
| | | 7 SOLE DISPOSITIVE POWER | |
| | PERSON WITH: | 0 | |
| | | 8 SHARED DISPOSITIVE POWER | |
| | | 2,000,000 shares | |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | |
| | 2,000,000 shares | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | |
| 11 | PERCENT OF CLAS | s represented by amount in row 9 | |
| | 9.6% | | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | | |
| | PN | | |

ITEM 1(A). NAME OF ISSUER: Alnylam Pharmaceuticals, Inc. (the "Issuer")

- ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES: 300 Third Street, Cambridge, Massachusetts 02142
- ITEM 2(A). NAME OF PERSONS FILING: Abingworth Management Limited
 ("Abingworth Management"), Abingworth Bioventures III A L.P.
 ("ABV III A"), Abingworth Bioventures III B L.P. ("ABV III B"),
 Abingworth Bioventures III C L.P. ("ABV III C"), and Abingworth

Bioventures III Executives L.P. ("ABV III Executives" and together with ABV III A, ABV III B and ABV III C, the "Funds"). The foregoing individuals are collectively referred to as the "Reporting Persons."

- ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE: The business address for Abingworth Management, ABV III A, ABV III B, ABV III C and ABV III Executives is c/o Abingworth Management Limited, Princess House, 38 Jermyn Street, London, England SW1Y 6DN.
- ITEM 2(C). CITIZENSHIP: Abingworth Management is a corporation organized under the laws of England. ABV III A, ABV III B and ABV III C are limited partnerships organized under the laws of England. ABV III Executives is a limited partnership organized under the laws of Delaware.
- ITEM 2(D). TITLE OF CLASS OF SECURITIES: Common Stock, \$0.01 par value per share
- ITEM 2(E). CUSIP NUMBER: 02043Q107
- ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13d-1(b) OR 13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:

Not applicable

ITEM 4. OWNERSHIP:

(a) Amount Beneficially Owned: ABV III A is the record owner of 1,004,001 shares of Common Stock (the "ABV III A Shares") as of December 31, 2005. ABV III B is the record owner of 612,874 shares of Common Stock (the "ABV III B Shares") as of December 31, 2005. ABV III C is the record owner of 367,126 shares of Common Stock (the "ABV III C Shares") as of December 31, 2005. ABV III Executives is the record owner of 15,999 shares of Common Stock ("ABV III Executives Shares" and together with ABV III A Shares, ABV III B Shares and ABV III C Shares the "ABV III Shares") as of December 31, 2005. Collectively, the Funds beneficially own 2,000,000 shares of Common Stock.

The Funds share a manager, Abingworth Management, and are affiliated funds, and, on this basis, may be deemed to beneficially own the shares held by one another. Each of the Funds disclaims beneficial ownership of such shares of Common Stock except for the shares, if any, such ABV III Fund holds of record. Abingworth Management as the manager of ABV III A, ABV III B, ABV III C, ABV III Executives and Abingworth Bioequities Master Fund Limited ("ABE") may be deemed to beneficially own the ABV III Shares and the shares held of record by ABE, representing an aggregate of 2,150,000 shares of Common Stock.

(b) Percent of Class: The Funds, collectively, beneficially own 9.6% of the outstanding Common Stock of the Issuer. Abingworth Management may be deemed to beneficially own the ABV III Shares and the shares of Common Stock held of record by ABE, representing an aggregate of 10.3% of the outstanding Common Stock of the Issuer.

The foregoing percentages are calculated based on the 20,913,576 shares of Common Stock reported to be outstanding as of September 30, 2005 in the Issuer's Form 10-Q filed with the Securities Exchange Commission on November 14, 2005.

- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote: see line 5 of cover sheets.
 - (ii) shared power to vote or to direct the vote: see line 6 of cover sheets.
 - (iii) sole power to dispose or to direct the disposition: see line 7 of cover sheets.
 - (iv) shared power to dispose or to direct the disposition: see line 8 of cover sheets.
- 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.

Not applicable.

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.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of his knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct. Date: February 9, 2006 ABINGWORTH MANAGEMENT LIMITED By: /s/ James Abell _____ Name: James Abell Title: Executive Director ABINGWORTH BIOVENTURES III A L.P. By: Abingworth Management Limited, its Manager By: /s/ James Abell _____ Name: James Abell Title: Executive Director ABINGWORTH BIOVENTURES III B L.P. By: Abingworth Management Limited, its Manager By: /s/ James Abell _____ Name: James Abell Title: Executive Director ABINGWORTH BIOVENTURES III C L.P. By: Abingworth Management Limited, its Manager Bv: /s/ James Abell _____ Name: James Abell Title: Executive Director ABINGWORTH BIOVENTURES III EXECUTIVES L.P. By: Abingworth Management Limited, its Manager

/s/ James Abell By: Name: James Abell Title: Executive Director

EXHIBIT 1

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of shares of Common Stock of Alnylam Pharmaceuticals, Inc.

EXECUTED as a sealed instrument this 9th day of February, 2006.

ABINGWORTH MANAGEMENT LIMITED

By: /s/ James Abell Name: James Abell Title: Executive Director

ABINGWORTH BIOVENTURES III A L.P.

By: Abingworth Management Limited, its Manager

By: /s/ James Abell Name: James Abell Title: Executive Director

ABINGWORTH BIOVENTURES III B L.P.

By: Abingworth Management Limited, its Manager

By: /s/ James Abell Name: James Abell Title: Executive Director

ABINGWORTH BIOVENTURES III C L.P.

By: Abingworth Management Limited, its Manager

By: /s/ James Abell Name: James Abell Title: Executive Director

ABINGWORTH BIOVENTURES III EXECUTIVES L.P.

By: Abingworth Management Limited, its Manager

By: /s/ James Abell

Name: James Abell Title: Executive Director