ARCH VENTURE FUND V LP Form SC 13G/A February 14, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. 4)*

Alnylam Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

02043Q107

(CUSIP Number)

DECEMBER 31, 2006

(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 could 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).

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CUSIP NO. 02043Q107

SCHEDULE 13G

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). NAMES OF PERSONS FILING: ARCH Venture Fund V, L.P. ("ARCH Venture Fund V"); ARCH V Entrepreneurs Fund, L.P. ("ARCH V Entrepreneurs Fund"); ARCH Venture Partners V, L.P. ("AVP V LP"); ARCH Venture Partners V, LLC ("AVP V LLC") (collectively, the "Reporting Entities" and individually, each a "Reporting Entity"); and Steven Lazarus ("Lazarus"), Keith Crandell ("Crandell"), Robert Nelsen ("Nelsen") and Clinton Bybee ("Bybee") (collectively, the "Managing Directors" and individually, each a "Managing Director"). The Reporting Entities and the Managing Directors collectively are referred to as the "Reporting Persons".
- Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE: 8725 W. Higgins Road, Suite 290, Chicago, IL 60631.
- Item 2(c). CITIZENSHIP: ARCH Venture Fund V, ARCH V Entrepreneurs Fund, and AVP
 V LP are limited partnerships organized under the laws of the State of
 Delaware. AVP V LLC is a limited liability company organized under the laws
 of the State of Delaware. Each Managing Director is a US citizen.
- Item 2(d). TITLE OF CLASS OF SECURITIES: Common Stock, \$.01 par value (the "Common Stock").
- Item 2(e). CUSIP NUMBER: 02043Q107
- Item 3. IF THIS STATEMENT IS FILED PURSUANT TO SS.SS. 240.13d-1(b) OR 240.13d-2(b) OR (c), CHECK WHETHER THE PERSON IS A:

Not applicable.

Item 4. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Each reporting person has ceased to own beneficially more than 5% of the outstanding Common Stock of the Issuer.

Item 5. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

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 13, 2007

ARCH VENTURE FUND V, L.P.

By:	y: ARCH Venture Partners V, L.P. its General Partner					
	By:	ARCH Ven its Gene	ture Partn ral Partne		LLC	
		By:	*			
			Crandell ing Direct	or		
ARCH	V ENTREPR	RENEURS FUN	D, L.P.			
Ву:	By: ARCH Venture Partners V, L.P. its General Partner					
	By:	ARCH Ven its Gene	ture Partn ral Partne		LLC	
		Ву:	*			
			Crandell ing Direct	or		
ARCH	VENTURE P	PARTNERS V,	L.P.			
Ву:	By: ARCH Venture Partners V, LLC its General Partner					
	Ву:	*				
	Keith Crandell Managing Director					
ARCH	VENTURE P	PARTNERS V,	LLC			
Ву:		*				
	Keith Crandell Managing Director					
		*				
Steve	en Lazarus	3		_		
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Keith Crandell

-----Robert Nelsen * -----Clinton Bybee

*

* By: /s/ Mark McDonnell

Mark McDonnell as Attorney-in-Fact

This Schedule 13G was executed by Mark McDonnell pursuant to Powers of Attorney attached hereto as EXHIBIT 2 and incorporated herein by reference.

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CUSIP NO. 02043Q107

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 stock of Alnylam Pharmaceuticals, Inc.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

Dated: February 13, 2007

ARCH VENTURE FUND V, L.P.

By: ARCH Venture Partners V, L.P. its General Partner

By: ARCH Venture Partners V, LLC its General Partner

Ву: *

-----Keith Crandell Managing Director

ARCH V ENTREPRENEURS FUND, L.P.

By: ARCH Venture Partners V, L.P. its General Partner

By: ARCH Venture Partners V, LLC its General Partner * By: _____ Keith Crandell Managing Director ARCH Venture Partners V, L.P. ARCH Venture Partners V, LLC By: Its General Partner * By: _____ Keith Crandell Managing Director Page 5 of 8 Pages 13G CUSIP NO. 02043Q107 ARCH VENTURE PARTNERS V, LLC Ву: * _____ Keith Crandell Managing Director * _____ Steven Lazarus * _____ Keith Crandell * _____ Robert Nelsen * _____ Clinton Bybee * By: /s/ Mark McDonnell _____ Mark McDonnell as Attorney-in-Fact _____

This Schedule 13G was executed by Mark McDonnell pursuant to Powers of Attorney attached hereto as EXHIBIT 2 and incorporated herein by reference.

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CUSIP NO. 98411C100

POWERS OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark McDonnell his true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his capacity as a general partner of any partnership, pursuant to Sections 13 and 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the By-laws of the National Association of Securities Dealers, Inc., granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 8th day of June, 2004 $\,$

ARCH VENTURE FUND V, L.P.

- By: ARCH Venture Partners V, L.P. its General Partner
 - By: ARCH Venture Partners V, LLC its General Partner

By: /s/ Keith Crandell

EXHIBIT 2

Managing Director

ARCH V ENTREPRENEURS FUND, L.P.

- By: ARCH Venture Partners V, L.P. its General Partner
 - By: ARCH Venture Partners V, LLC its General Partner
 - By: /s/ Keith Crandell

Managing Director

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CUSIP NO. 98411C100

ARCH VENTURE PARTNERS V, L.P.

- By: ARCH Venture Partners V, LLC its General Partner
 - By: /s/ Keith Crandell

Managing Director

ARCH VENTURE PARTNERS V, LLC

By: /s/ Keith Crandell Managing Director

/s/ Steven Lazarus Steven Lazarus

/s/ Keith Crandell

------ Keith Crandell

/s/ Robert Nelsen Robert Nelsen

/s/ Clinton Bybee Clinton Bybee

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