

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): December 20, 2021 (December 14, 2021)

Anylam Pharmaceuticals, Inc.

Delaware
(State or Other Jurisdiction
of Incorporation)

001-36407
(Commission
File Number)

77-0602661
(IRS Employer
Identification No.)

**675 West Kendall Street,
Henri A. Termeer Square
Cambridge, Massachusetts**
(Address of Principal Executive Offices)

02142
(Zip Code)

Registrant's telephone number, including area code: (617) 551-8200

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, \$0.01 par value per share	ALNY	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

(e)

As previously announced, Yvonne L. Greenstreet, MBChB, MBA, Alnylam Pharmaceuticals, Inc.'s (the "Company") current President and Chief Operating Officer, has been appointed Chief Executive Officer of the Company effective January 1, 2022. On December 14, 2021, the Board of Directors (the "Board") of the Company approved, at the recommendation of the People, Culture and Compensation Committee ("Compensation Committee") of the Board, and the Company entered into, an employment agreement with Dr. Greenstreet governing the terms of her employment as its Chief Executive Officer (the "Agreement"). The principal terms of the Agreement are summarized below.

The Agreement has an initial term through December 31, 2023 and will automatically renew for one year periods unless written notice is given by either party.

Dr. Greenstreet's current compensation for the 2021 performance year will continue in accordance with the Company's current compensation plans and practices. Effective with her appointment as Chief Executive Officer, for the 2022 performance year, Dr. Greenstreet will receive an annual base salary of \$850,000 and a target bonus of 100% of her base salary. Dr. Greenstreet will also receive initial equity awards, representing her new role as Chief Executive Officer and her annual long-term incentive award, and a cash award, as described below. Dr. Greenstreet's compensation thereafter will be established and determined by the Board, following its consideration of the recommendations of the Compensation Committee.

The Compensation Committee approved the grant, effective as of December 31, 2021 (“Grant Date”), to Dr. Greenstreet of non-qualified stock options having a Grant Date fair value of \$5,000,000 as determined in accordance with Financial Accounting Standards Board, Accounting Standards Codification, Topic 718, of stock options granted under the Company’s equity plans. The stock options will have a ten-year term and an exercise price equal to the closing price of the Company’s common stock on the Nasdaq Global Select Market on the Grant Date. The stock options will vest over a four-year period with 25% of the award vesting on the first anniversary of the Grant Date and then an additional 6.25% of the award vesting at the end of each three-month period thereafter until the fourth anniversary of the Grant Date.

In addition, Dr. Greenstreet will be granted non-qualified stock options to purchase shares of the Company’s common stock having a Grant Date fair value of \$2,500,000 and performance stock units (“PSUs”) having a Grant Date fair value of \$7,500,000 at the same time annual equity awards are granted to the Company’s Management Board (expected to be in February 2022), with the same terms and conditions, including performance criteria for the PSUs, applicable to the awards granted to the Company’s Management Board.

Dr. Greenstreet will receive a one-time award of \$250,000 on January 1, 2022 to facilitate her transition to the Boston area in connection with her serving as Chief Executive Officer of the Company. In the event Dr. Greenstreet terminates her employment with the Company without Good Reason or she is terminated by the Company for Cause, as such terms are defined in the Agreement, within the following 24 months, Dr. Greenstreet will be required to repay all or a portion of the gross amount of the award. Effective January 1, 2022, the Company will no longer provide any housing or travel relocation benefits to Dr. Greenstreet.

If Dr. Greenstreet’s employment is terminated by the Company other than for Cause or by Dr. Greenstreet for Good Reason prior to a Change in Control, as such terms are defined in the Agreement, she will not receive any cash severance, her outstanding unvested equity awards will continue to vest until the second anniversary of the termination date, and her outstanding stock options shall remain exercisable until the earlier of the second anniversary of the termination date and the original expiration dates of such options; provided that in the event that a Change in Control occurs on or before the second anniversary of the termination date, her then-outstanding stock options will be treated in the same manner as the then-outstanding stock options held by continuing members of the Company’s Management Board.

If Dr. Greenstreet’s employment is terminated by the Company other than for Cause or by Dr. Greenstreet for Good Reason within eighteen (18) months after a Change in Control, as such terms are defined in the Agreement, Dr. Greenstreet will receive (i) a lump sum amount in cash equal to two (2) times the sum of (x) her annual base salary and (y) her target bonus for the fiscal year in which the Change in Control occurred, (ii) a monthly cash payment for up to twenty-four (24) months equal to the monthly employer contribution the Company would have paid to provide Dr. Greenstreet with health insurance if she had remained employed, and (iii) all outstanding stock options and other stock-based awards shall immediately accelerate and become fully exercisable and nonforfeitable, and the performance criteria shall be deemed satisfied for any awards subject to performance conditions.

The foregoing summary is qualified in its entirety by reference to the Agreement, a copy of which is attached hereto as Exhibit 10.1 and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

- 10.1 [Employment Agreement, dated December 14, 2021, between Alnylam Pharmaceuticals, Inc. and Dr. Yvonne L. Greenstreet](#)
- 104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ALNYLAM PHARMACEUTICALS, INC.

Date: December 20, 2021

By: /s/ Jeffrey V. Poulton

Jeffrey V. Poulton

Executive Vice President, Chief Financial Officer

EMPLOYMENT AGREEMENT

This Employment Agreement (“Agreement”) is effective as of the 14th day of December 2021 by and between Alnylam Pharmaceuticals, Inc., a Delaware corporation (the “Company”), and Dr. Yvonne L. Greenstreet, MBChB, MBA (the “Executive”).

1. Purpose. The Company considers it in the best interests of its stockholders to promote and preserve the continuous employment of key management personnel. Therefore, the Board has determined that appropriate steps should be taken to set forth the terms of the Executive’s employment as Chief Executive Officer of the Company.

2. Position and Duties.

(a) The Executive will continue to serve as President, Chief Operating Officer of the Company until December 31, 2021. Effective January 1, 2022, the Executive will serve as Chief Executive Officer of the Company and will report directly and solely to the Company’s Board of Directors (the “Board”) and will have the duties, responsibilities and functions customarily associated with such position in a company the size and nature of the Company, subject to the direction of the Board and such specific responsibilities as may be assigned by the Executive Chair of the Board (the “Executive Chair”) from time to time (in consultation with the Executive Chair and the Executive). The Executive’s place of employment will be at the Company’s offices in Cambridge, Massachusetts, and she will continue to be a member of the Company’s Management Board.

(b) The Executive will continue to devote her full working time to the performance of her duties for the Company. Additionally, it is understood and agreed that the Executive’s current service on boards of directors and other bodies as specified on Attachment A to this Agreement continue to be permitted and that the Executive may, with the Board’s prior written consent, serve on the board of directors of other companies or of civic, charitable, educational or other non-profit organizations so long as such activities do not interfere with, or conflict with, her duties for, or obligations to, the Company or create a potential business or fiduciary conflict.

3. Term. The Executive’s employment under this Agreement will continue for a term ending on December 31, 2023 (the “Initial Term”). Following the Initial Term, the term will automatically renew for one-year periods unless either party notifies the other party in writing of non-renewal at least 90 days prior to the end of the Initial Term or such one-year period (the Initial Term and any subsequent renewal periods, the “Term”).

4. Compensation and Benefits.

(a) The Executive’s current compensation for the 2021 performance year will continue in accordance with the Company’s current compensation plans and practices.

(b) The Executive’s compensation for the 2022 performance year shall be as follows:

(i) Annual Base Salary. The Executive will receive an annual base salary of \$850,000. The Company currently has 26 pay periods annually with payments on Fridays (or on the preceding day in the event of a holiday). This position is exempt, and thus not eligible for overtime pay.

(ii) Annual Incentive Program. The Executive will be eligible to participate in the Company's Annual Incentive Program, as may be amended by the People, Culture and Compensation Committee of the Board (the "Compensation Committee") from time to time. The Executive's incentive target will be 100% of her annual base salary and is subject to achievement of the Company's annual corporate goals. Achievement of Company goals will be determined in the sole discretion of the Company's Board of Directors and the Compensation Committee.

(iii) Initial Awards. The Executive will be granted the awards in Section 4(d) below.

(c) The Executive's compensation thereafter during the Term will be established and determined by the Board following its consideration of the recommendations of the Compensation Committee, with the objective of aligning the Executive's target total direct compensation with chief executive officer target total direct compensation of the Company's peer group as approved by the Compensation Committee. The Executive shall be eligible to participate in the Company's long-term incentive program on the same basis as other members of the Management Board.

(d) Initial Awards.

(i) On December 31, 2021, the Executive will be granted a stock option to purchase shares of the Company's common stock having a grant date fair value of \$5,000,000 (the "Initial Stock Option Grant") as determined in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, of stock options granted under the Company's equity plans ("FASB ASC Topic 718"). The Initial Stock Option Grant will be subject to the Company's 2018 Stock Incentive Plan, as may be amended from time to time (the "2018 Plan") and the Company's standard stock option agreement under the 2018 Plan. The exercise price of the Initial Stock Option Grant shall be equal to the closing price of the Company's common stock on the Nasdaq Global Select Market on the grant date. The Initial Stock Option Grant will vest over a four year period with 25% of the award vesting on the first anniversary of the grant date and then an additional 6.25% of the award vesting at the end of each three-month period thereafter until the fourth anniversary of the grant date, when the Initial Stock Option Grant will be fully vested, subject to the Executive continuing to be an eligible Participant (as defined in the 2018 Plan) on each vesting date.

(ii) The Executive will receive a one-time lump sum cash award of \$250,000 (the "Initial Cash Award") on January 1, 2022 (the "Award Date") to facilitate her transition to the Boston area in connection with her serving as Chief Executive Officer of the Company. In the event that the Executive terminates her employment with the Company without Good Reason (as defined below) or the Executive is terminated by the Company for Cause (as defined below) within 24 months following the Award Date, the Executive will be required to repay the gross amount of the Initial Cash Award based on

the following scale: 0-12 months following the Award Date: 100% of the Initial Cash Award; 13-24 months following the Award Date: 50% of the Initial Cash Award. Any such repayment will be required within 30 days following the Executive's Date of Termination (as defined below) and the Executive agrees that any such repayment amount may be deducted from monies owed to her by the Company, including her last regular paycheck, to the extent permitted by law. In the event the Company is unable to deduct the full gross amount from the Executive's last paycheck, the Executive is required to fulfill her remaining repayment obligations within 30 days following the Date of Termination. By signing this Agreement, the Executive confirms her obligations under this section and consents to the Company making deductions from the Executive's wages.

(iii) In addition, the Executive will be granted a stock option to purchase shares of the Company's common stock having a grant date fair value of \$2,500,000 and performance stock units ("PSUs") having a grant date fair value of \$7,500,000 at the same time annual equity awards are granted to the Company's Management Board (expected to be in February 2022), with the same terms and conditions, including performance criteria for the PSUs, applicable to the awards granted to the Company's Management Board. The grant date fair value of such stock option shall be determined in accordance with FASB ASC Topic 718. The grant date fair value of such PSUs shall be converted into a number of PSUs by dividing such grant value by the closing price of the Company's common stock on the Nasdaq Global Select Market on the grant date.

(e) Benefits. The Executive will continue to be eligible and participate in the Company's comprehensive benefits program as in effect from time to time on a basis no less favorable than applicable to the other members of the Company's Management Board. Effective January 1, 2022, the Company will no longer provide any housing or travel relocation benefits to the Executive.

(f) Executive will continue to have the right to exercise her outstanding, vested and unexercised non-qualified stock options in accordance with the terms and conditions of the 2018 Plan and the award agreements pursuant to which such options were granted. In accordance with the Company's practices and applicable law, and subject to blackout periods, the Executive shall have the right to implement 10b5-1 trading plans to sell her existing stock holdings or exercise and hold or sell vested, expiring stock options. In addition, any outstanding, vested and unexercised non-qualified stock options held by the Executive on its expiration date shall be exercised by the Company on its expiration by a "net exercise" arrangement and with withholding satisfied by shares retained from the stock option, each as provided under the applicable provisions of the 2018 Plan and approved by the Compensation Committee, as a result of which the Executive shall receive the number of shares of common stock underlying the option reduced by the number of shares equal to the aggregate exercise price of the option divided by the fair market value on the date of exercise and further reduced by the number of shares equal to the aggregate withholding due divided by the fair market value on such date; *provided*, that where stock is being used to satisfy such tax obligations, the total tax withholding cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), unless withholding at a higher rate would not

result in adverse accounting treatment (in which case such withholding shall not exceed maximum statutory withholding rates). For the avoidance of doubt, (i) net shares delivered in respect of such option exercise shall be subject to any blackout, holding periods or stock ownership guidelines applicable to the Executive from time-to-time, (ii) all awards made to the Executive under the 2018 Plan continue to be subject to the Company's clawback policies in effect from time to time or as required by applicable law and (iii) all awards made to the Executive prior to August 2018 are subject to only the Company's Clawback Policy, effective December 17, 2014, attached as Attachment B, except as otherwise required by applicable law.

(g) The Company will reimburse the Executive for reasonable legal fees and expenses incurred by the Executive in connection with the negotiation and preparation of this Agreement in an amount not to exceed \$15,000 as soon as reasonably practicable following the date hereof.

5. Terminating Event. The Executive remains employed on an "at-will" basis. A "Terminating Event" shall mean any of the events provided in this Section 5:

(a) Termination by the Company for Cause. The Company may terminate the Executive's employment at any time for Cause, for Disability or in the event of death. For purposes of this Agreement, "Cause" shall mean:

(i) conduct by the Executive constituting a material act of misconduct in connection with the performance of her duties, including, without limitation, misappropriation of funds or property of the Company or any of its subsidiaries or affiliates other than the occasional, customary and de minimis use of Company property for personal purposes; or

(ii) the commission by the Executive of any felony or a misdemeanor involving moral turpitude, deceit, dishonesty or fraud, or any conduct by the Executive that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries and affiliates if the Executive were retained in her position; or

(iii) continued deliberate failure by the Executive of her material duties and responsibilities to the Company (other than by reason of the Executive's physical or mental illness, incapacity or disability); or

(iv) a material breach of any provision of any agreement(s) between the Executive and the Company relating to noncompetition, nonsolicitation, nondisclosure and/or assignment of inventions, including the Executive's Employee Nondisclosure, Noncompetition and Assignment of Intellectual Property Agreement; or

(v) a material violation by the Executive of the Company's written policies, including but not limited to any Code of Conduct, Anti-Bribery or Insider Trading Policy; or

(vi) failure to cooperate reasonably in any material respect with a bona fide internal investigation of a potential material matter or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or willful failure to preserve documents or other materials known to be relevant to such investigation or the willful inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

A Terminating Event shall not be deemed to have occurred pursuant to this Section 5(a) solely as a result of the Executive being an employee of any direct or indirect successor to the business or assets of the Company, rather than continuing as an employee of the Company following a Change in Control.

For purposes hereof, the Executive will be considered "Disabled" if, as a result of the Executive's incapacity due to physical or mental illness, the Executive shall have been absent from her duties to the Company on a fulltime basis for 180 calendar days in the aggregate in any 12-month period.

Notwithstanding the foregoing, "Cause" shall not be found under clause (iii) or clause (vi) unless the Executive has failed to cure (if curable) any alleged deficiency within 30 days after written notice from the Board which identifies in reasonable detail the alleged conduct for which a "Cause" determination is being contemplated.

(b) Termination by the Executive for Good Reason. The Executive may terminate her employment with the Company for Good Reason. For purposes of this Agreement, "Good Reason" shall mean that the Executive has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events:

(i) a material diminution in the Executive's responsibilities, duties or authority or a diminution in the Executive's title or reporting relationship;

(ii) a diminution in the Executive's base salary or bonus opportunity except for across-the-board reductions based on the Company's financial performance similarly affecting all or substantially all senior management employees of the Company;

(iii) a material change in the geographic location at which the Executive provides services to the Company; or

(iv) the material breach by the Company of this Agreement, which will be deemed to include the Company giving the Executive a notice of non-renewal of this Agreement, or any other material written agreement with the Executive.

"Good Reason Process" shall mean that (i) the Executive reasonably determines in good faith that a "Good Reason" condition has occurred; (ii) the Executive notifies the Company in writing of the first occurrence of the Good Reason condition within 60 days of the first occurrence of such condition; (iii) the Executive cooperates in good faith with the Company's efforts, for a period not less than 30 days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) the Executive terminates her employment within 60 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

Assigning duties to the Executive Chair from time to time consistent with that role will not constitute Good Reason.

(c) Termination After a Change in Control. A “Change in Control” shall be deemed to have occurred upon the occurrence of any one of the following events:

(i) any “person,” as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “Act”) (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries), together with all “affiliates” and “associates” (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the “beneficial owner” (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50 percent or more of the combined voting power of the Company’s then outstanding securities having the right to vote in an election of the Board (“Voting Securities”) (in such case other than as a result of an acquisition of securities directly from the Company); or

(ii) the date a majority of the members of the Board is replaced during any 24-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or

(iii) the consummation of (x) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate 50 percent or more of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), other than a merger or consolidation which would result in a majority of the board of directors of the combined entity being comprised of members of the board of directors of the pre-transaction Company and the chief executive officer of the combined entity being the chief executive officer of the pre-transaction Company, in each case immediately following the consummation of such merger or consolidation and continuing for one year following such consummation, or (y) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred for purposes of the foregoing clause (i) solely as the result of an acquisition of securities by the Company that, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of shares of Voting Securities beneficially owned by any person to 50 percent or more of the combined voting power of all then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50 percent or more of the combined voting power of all then outstanding Voting Securities, then a “Change in Control” shall be deemed to have occurred for purposes of the foregoing clause (i).

(d) Termination without Cause or Resignation by Executive without Good Reason. The Executive may resign her position at any time upon 60-days' prior written notice to the Company in accordance with Section 11(a) hereof. The Company may terminate Executive's employment at any time without Cause upon 60-days' prior written notice in accordance with Section 11(a) hereof. The Company may accelerate the effective date of such notice period by providing compensation in lieu of the notice period, subject to Section 9 hereof.

6. Effect of a Terminating Event.

(a) In the event the Company terminates the Executive's employment without Cause or the Executive terminates her employment for Good Reason prior to a Change in Control, subject to the Executive signing a separation agreement containing, among other provisions, a general release of claims in favor of the Company and related persons and entities, confidentiality, return of property and mutual non-disparagement, in a form and manner satisfactory to the Company (the "Separation Agreement and Release") and the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination, and the Executive's compliance with Section 7 of this Agreement, the following shall occur:

(i) All outstanding unvested equity awards held by the Executive on the Termination Date shall continue to vest until the second anniversary of the Termination Date; provided that any awards subject to performance conditions shall vest subject to the satisfaction of the performance criteria for such awards on or prior to the second anniversary of the Termination Date.

(ii) All outstanding stock options held by the Executive on the Termination Date that are then exercisable or become exercisable pursuant to Section 6(a)(i) above shall remain exercisable until the earlier of the second anniversary of the Termination Date and the original expiration dates of such options; provided that in the event that a Change in Control occurs on or before the second anniversary of the Termination Date, the Executive's then-outstanding stock options will be treated in the same manner as the then-outstanding stock options held by the continuing members of the Company's Management Board.

(iii) The Company and the Executive shall use reasonable, good faith efforts to agree on the language of internal and public statements relating to the Executive's termination.

For the avoidance of doubt, all outstanding equity awards will stop vesting and all outstanding stock options will cease to be exercisable upon the date of any material breach by the Executive of her obligations hereunder or under her Employee Nondisclosure, Noncompetition and Assignment of Intellectual Property Agreement dated as of the date hereof. The Executive shall promptly return to the Company, upon the Compensation Committee's request, any amounts realized as a result of clause (i) of this Section 6(a) in the event the Compensation Committee determines that the Executive has engaged in significant misconduct resulting in a

violation of a significant Company policy, law or regulation relating to manufacturing, promotion, marketing or sale of products or product candidates that causes material harm to the Company. For the avoidance of doubt, notwithstanding the foregoing, all awards made to the Executive prior to August 2018 are subject to only the Company's Clawback Policy, effective December 17, 2014, attached as Attachment B, except as otherwise required by applicable law.

(b) In the event the Company terminates the Executive's employment without Cause or the Executive terminates her employment for Good Reason within 18 months after a Change in Control, subject to the Executive signing a Separation Agreement and Release and the Separation Agreement and Release becoming irrevocable, all within 60 days after the Date of Termination, the following shall occur:

(i) the Company shall pay the Executive a lump sum amount in cash equal to 2 times the sum of (x) the Executive's annual base salary in effect immediately prior to the Terminating Event (or the Executive's annual base salary in effect immediately prior to the Change in Control, if higher) and (y) the Executive's target bonus for the fiscal year in which the Change in Control occurred;

(ii) if the Executive was participating in the Company's group health plan immediately prior to the Date of Termination and elects COBRA health continuation, then the Company shall pay to the Executive a monthly cash payment for 24 months or the Executive's COBRA health continuation period, whichever ends earlier, in an amount equal to the monthly employer contribution that the Company would have made to provide health insurance to the Executive if the Executive had remained employed by the Company;

(iii) notwithstanding anything to the contrary in any applicable option agreement or stock-based award agreement, all stock options and other stock-based awards held by the Executive shall immediately accelerate and become fully exercisable or nonforfeitable, and the performance criteria shall be deemed satisfied for any awards subject to performance conditions, as of the Executive's Date of Termination. The Executive shall also be entitled to any other rights and benefits with respect to stock-related awards, to the extent and upon the terms provided in the employee stock option or incentive plan or any agreement or other instrument attendant thereto pursuant to which such options or awards were granted; and

(iv) the Company and the Executive shall use reasonable, good faith efforts to agree on the language of internal and public statements relating to the Executive's termination.

The amounts payable under this Section 6(b) shall be paid or commence to be paid within 60 days after the Date of Termination; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, such payment shall be paid or commence to be paid in the second calendar year by the last day of such 60-day period.

7. Post-Termination Covenants.

(a) Nondisclosure and Noncompetition. The Executive hereby acknowledges that she lawfully entered into the Employee Nondisclosure, Noncompetition and Assignment of Intellectual Property Agreement and that it currently remains in effect. In further consideration for benefits provided to the Executive in this Agreement, by signing this Agreement, the Executive is reaffirming the post-employment restrictive covenants and the other terms and conditions of the Employee Nondisclosure, Noncompetition and Assignment of Intellectual Property Agreement.

(b) Cooperation. In addition to, and not in limitation of, the Executive's duties as a director, officer and employee of the Company and obligations under the Company's Code of Conduct and other Company policies, the Executive and the Company agree to reasonably cooperate following the Termination Date in any investigation, defense or prosecution of any claims, investigations, actions or other matters now in existence or which may be brought in the future against or on behalf of the Company, including (if applicable and without limitation) with respect to the investigatory response to the subpoena from the U.S. Attorney's Office for the District of Massachusetts. The Executive's cooperation following the Termination Date in connection with such claims, investigations or actions shall include, but not be limited to, being reasonably available to meet with the Company's counsel to prepare for discovery or any mediation, arbitration, trial, administrative hearing or other proceeding or to act as a witness when reasonably requested by the Company at mutually agreeable times and at locations mutually convenient to the Executive and the Company. The Company shall reimburse the Executive for all reasonable and documented out of pocket expenses incurred in the provision of such assistance following the Termination Date, and if such assistance becomes extensive, the Company will compensate the Executive at an hourly rate to be mutually agreed based on the Executive's annual base salary in effect on the Termination Date divided by 1,800.

(c) Non-Disparagement. The Company will use best reasonable efforts to cause current members of the Company's Management Board and its Board of Directors not to make or publish any written or oral disparaging or defamatory statements about the Executive and the Executive agrees not to make or publish any written or oral disparaging or defamatory statements about the Company, members of its Management Board or its Board of Directors.

8. Additional Limitation.

(a) Anything in this Agreement to the contrary notwithstanding, in the event that the amount of any compensation, payment or distribution by the Company to or for the benefit of the Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and the applicable regulations thereunder (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Code, then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be \$1.00 less than the amount at which the Executive becomes subject to the excise tax imposed by Section 4999 of the Code; provided that such reduction shall only occur if it would result in the Executive receiving a higher After Tax Amount (as defined below) than the Executive would receive if the Aggregate Payments were not subject to such

reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G of the Code: (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A of the Code; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c).

(b) For purposes of this Section 8, the “After Tax Amount” means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on the Executive as a result of the Executive’s receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, the Executive shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes.

(c) The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to Section 8(a) shall be made by a nationally recognized accounting firm, or other consulting firm that provides such services, selected by the Company (the “Accounting Firm”), which shall provide detailed supporting calculations both to the Company and the Executive within 15 business days of the Date of Termination, if applicable, or at such earlier time as is reasonably requested by the Company or the Executive. Any determination by the Accounting Firm shall be binding upon the Company and the Executive.

9. Section 409A.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of the Executive’s “separation from service” within the meaning of Section 409A of the Code, the Company determines that the Executive is a “specified employee” within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Executive becomes entitled to under this Agreement on account of the Executive’s separation from service would be considered deferred compensation subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after the Executive’s separation from service, or (B) the Executive’s death.

(b) The parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(c) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Executive during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided, or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year. Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(d) To the extent that any payment or benefit described in this Agreement constitutes “non-qualified deferred compensation” under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Executive’s termination of employment, then such payments or benefits shall be payable only upon the Executive’s “separation from service.” The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(e) The Company makes no representation or warranty and shall have no liability to the Executive or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

10. Withholding. All payments made by the Company to the Executive under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

11. Notice and Date of Termination.

(a) Notice of Termination. During the Term, any purported termination of the Executive’s employment (except for a termination for Cause, without Good Reason or by reason of death) shall be communicated at least 60 days in advance by written Notice of Termination from one party hereto to the other party hereto in accordance with this Section 11. For purposes of this Agreement, a “Notice of Termination” shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon. The Company may pay the Executive base salary in lieu of notice within 60 days after the Date of Termination, subject to Section 9 above.

(b) Date of Termination. “Date of Termination” shall mean: (i) if the Executive’s employment is terminated by her death, the date of the Executive’s death; (ii) if the Executive’s employment is terminated on account of the Executive’s Disability, the date on which Notice of Termination is given; (iii) if the Executive’s employment is terminated by the Company for Cause, the date on which a Notice of Termination is given after the end of any applicable cure period as described in Section 5(a) hereof; (iv) if the Executive’s employment is terminated by the Executive’s resignation without Good Reason or by the Company without Cause, 60 days

after the date on which a Notice of Termination is given; and (v) if the Executive's employment is terminated by the Executive for Good Reason, the date on which a Notice of Termination is given after the end of the Cure Period. Notwithstanding the foregoing, in the event that the Executive gives a Notice of Termination to the Company, the Company may unilaterally accelerate the Date of Termination and pay the Executive compensation owed for the notice period, subject to Section 9 above, and such acceleration shall not result in a termination by the Company for purposes of this Agreement.

12. No Mitigation. The Company agrees that, if the Executive's employment by the Company is terminated during the term of this Agreement, the Executive is not required to seek other employment or to attempt in any way to reduce any amounts payable to the Executive by the Company pursuant to Section 6(b) hereof. Further, the amount of any payment provided for in this Agreement shall not be reduced by any compensation earned by the Executive as the result of employment by another employer or by retirement benefits.

13. Arbitration of Disputes. Any controversy or claim arising out of or relating to this Agreement or the breach thereof or otherwise arising out of the Executive's employment or the termination of that employment (including, without limitation, any claims of unlawful employment discrimination whether based on age or otherwise) shall, to the fullest extent permitted by law, be settled by confidential arbitration by a single arbitrator under the auspices of the American Arbitration Association ("AAA") in Boston, Massachusetts in accordance with the Employment Dispute Resolution Rules of the AAA, including, but not limited to, the rules and procedures applicable to the selection of an arbitrator. The parties agree that the parties shall bear their own costs and attorney's fees except when Massachusetts law provides that the prevailing party is to be awarded their costs and attorney fees. Notwithstanding the above, the Company shall pay the entire filing fee for any arbitration involving clawback, forfeiture or recoupment of vested options. In the event that any person or entity other than the Executive or the Company may be a party with regard to any such controversy or claim, such controversy or claim shall be submitted to arbitration subject to such other person or entity's agreement. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. This Section 13 shall be specifically enforceable. Notwithstanding the foregoing, this Section 13 shall not preclude either party from pursuing a court action for the sole purpose of obtaining a temporary restraining order or a preliminary injunction in circumstances in which such relief is appropriate; provided that any other relief shall be pursued through an arbitration proceeding pursuant to this Section 13.

14. Consent to Jurisdiction. To the extent that any court action is permitted consistent with or to enforce Section 13 of this Agreement, the parties hereby consent to the jurisdiction of the Superior Court of the Commonwealth of Massachusetts and the United States District Court for the District of Massachusetts. Accordingly, with respect to any such court action, the Executive (a) submits to the personal jurisdiction of such courts; (b) consents to service of process; and (c) waives any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction or service of process.

15. Protected Disclosures. The Executive understands that nothing contained in this Agreement or any other agreement limits the Executive's ability to communicate with any federal, state or local governmental agency or commission, including to provide documents or other information, without notice to the Company. The Executive also understands that nothing in this Agreement or any other agreement limits the Executive's ability to share compensation information concerning the Executive or others, except that this does not permit the Executive to disclose compensation information concerning others that the Executive obtains because the Executive's job responsibilities require or allow access to such information.

16. Defend Trade Secrets Act of 2016. The Executive understands that pursuant to the federal Defend Trade Secrets Act of 2016, the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (a) is made (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal

17. Integration. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes in all respects all prior agreements between the parties concerning such subject matter, including, for the avoidance of doubt, the Letter Agreement dated August 12, 2016 between the Executive and the Company and the Change in Control Agreement dated November 7, 2017 between the Executive and the Company. Notwithstanding the foregoing, the Employee Nondisclosure, Noncompetition and Assignment of Intellectual Property Agreement dated as of the date hereof between the Executive and the Company and the Indemnification Agreement dated September 16, 2016 between the Executive and the Company shall remain in full force and effect and are not superseded by this Agreement. For the avoidance of doubt, (i) the Executive's rights and responsibilities with respect to outstanding stock options held by the Executive on the date of this Agreement shall be governed by the terms of the award agreement pursuant to which such options were granted, the 2018 Plan and related policies in effect on the date of this Agreement as modified herein and (ii) all awards made to the Executive prior to August 2018 are subject to only the Company's Clawback Policy, effective December 17, 2014, attached as Attachment B, except as otherwise required by applicable law.

18. Successor to the Executive. This Agreement shall inure to the benefit of and be enforceable by the Executive's personal representatives, executors, administrators, heirs, distributees, devisees and legatees. In the event of the Executive's death after a Terminating Event but prior to the completion by the Company of all payments due her under this Agreement, the Company shall continue such payments to the Executive's beneficiary designated in writing to the Company prior to the Executive's death (or to her estate, if the Executive fails to make such designation).

19. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any Section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

20. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

21. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Executive at the last address the Executive has filed in writing with the Company, or to the Company at its main office, attention of the Board of Directors.

22. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Executive and by a duly authorized representative of the Company.

23. Effect on Other Plans. An election by the Executive to resign after a Change in Control under the provisions of this Agreement shall not be deemed a voluntary termination of employment by the Executive for the purpose of interpreting the provisions of any of the Company's benefit plans, programs or policies. Nothing in this Agreement shall be construed to limit the rights of the Executive under the Company's benefit plans, programs or policies except as otherwise provided in Section 8 hereof.

24. Governing Law. This is a Massachusetts contract and shall be construed under and be governed in all respects by the laws of the Commonwealth of Massachusetts, without giving effect to the conflict of laws principles of such Commonwealth. With respect to any disputes concerning federal law, such disputes shall be determined in accordance with the law as it would be interpreted and applied by the United States Court of Appeals for the First Circuit.

25. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a material breach of this Agreement.

26. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

[Remainder of this page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date and year first above written.

ALNYLAM PHARMACEUTICALS, INC.

By: /s/ Amy W. Schulman

Name: Amy W. Schulman

Title: People, Culture and Compensation
Committee Chair

/s/ Dr. Yvonne L. Greenstreet, MBChB, MBA

Dr. Yvonne L. Greenstreet, MBChB, MBA