
**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): April 9, 2019 (April 8, 2019)

Alynlam Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-36407
(Commission
File Number)

77-0602661
(IRS Employer
Identification No.)

300 Third Street, Cambridge, MA
(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))

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 1.01. Entry into a Material Definitive Agreement.

Regeneron Collaboration

Master Agreement

On April 8, 2019, Alnylam Pharmaceuticals, Inc. (the “Company”) entered into a global, strategic collaboration with Regeneron Pharmaceuticals, Inc. (“Regeneron”) to discover, develop and commercialize RNA interference (“RNAi”) therapeutics for a broad range of diseases by addressing therapeutic targets expressed in the eye and central nervous system (“CNS”), in addition to a select number of targets expressed in the liver (the “Collaboration”). The Collaboration is governed by a Master Agreement, dated April 8, 2019, by and between the Company and Regeneron (the “Master Agreement”), which will become effective upon closing of the Equity Transaction (as defined below) (the “Effective Date”), subject to clearance under the Hart-Scott Rodino Antitrust Improvement Act of 1976, as amended (the “HSR Act”), and other customary closing conditions.

Under the terms of the Collaboration, the Company will work exclusively with Regeneron to discover RNAi therapeutics for eye and CNS diseases for an initial five-year research period, subject under certain circumstances to extension for up to an additional two years (the “Initial Research Term”). Regeneron has an option to extend the Initial Research Term (the “Research Term Extension Period,” together with the Initial Research Term, the “Research Term”), subject to payment of a research term extension fee of up to \$400 million. The Collaboration will also cover a select number of RNAi therapeutic programs designed to target genes expressed in the liver, which will include the parties’ previously-announced collaboration to identify RNAi therapeutics for the chronic liver disease nonalcoholic steatohepatitis. The Company retains broad global rights to all of its other unpartnered liver-directed clinical and preclinical pipeline programs.

Regeneron will lead development and commercialization for all programs targeting eye diseases (subject to limited exceptions), with the Company entitled to certain potential milestone and royalty payments pursuant to the terms of a license agreement, as further described below under the heading “*Form of License Agreement*” (the “Form of License Agreement” and each, a “License Agreement”). The parties will alternate leadership on CNS and liver programs, with the lead party retaining global development and commercial responsibility. For CNS and liver programs, both parties will have the option at lead candidate selection to enter into a co-co collaboration agreement, as further described below under the heading “*Form of Co-Co Collaboration Agreement*” (the “Form of Co-Co Collaboration Agreement” and each, a “Co-Co Collaboration Agreement”), to participate equally in potential future profits of programs led by the other party. If the non-lead party elects to not enter into a Co-Co Collaboration Agreement with respect to a given CNS or liver program, the parties will enter into a License Agreement with respect to such program and the lead party will be the “Licensee” for the purposes of the License Agreement. If the lead party for a CNS or liver program elects to not enter into the Co-Co Collaboration Agreement, then leadership of the program will transfer to the other party and the former non-lead party will be the “Licensee” for the purposes of the License Agreement.

In addition, the parties have agreed to evaluate anti-C5 antibody-siRNA combinations for C5 complement-mediated diseases including evaluating the combination of Regeneron’s pozelimab (REGN3918), currently in Phase 1 development, and the Company’s cemisiran, currently in Phase 2 development. The Company will retain control of cemisiran monotherapy development, and Regeneron will lead combination product development. The parties will negotiate and enter into a Co-Co Collaboration Agreement to equally share investment and potential future profits on the monotherapy program, and a License Agreement pursuant to which Regeneron will be solely responsible for all development and commercialization costs and the Company will receive low double-digit royalties and commercial milestones of up to \$325 million on any potential combination product sales, in each case in accordance with the terms set forth in the agreed-upon term sheet attached to the Master Agreement.

The Collaboration will be governed by a joint steering committee that will be comprised of an equal number of representatives from each party.

In connection with the Master Agreement, Regeneron will make a \$400 million upfront payment to the Company and purchase \$400 million of the Company’s equity, as further detailed below under *Equity Placement*. The Company is also eligible to receive up to an additional \$200 million in milestone payments upon achievement of

certain criteria during early clinical development for the eye and CNS programs. The parties plan to advance programs directed to 30 targets under the Collaboration during the Initial Research Term. For each program, Regeneron will provide the Company with \$2.5 million in funding at program initiation and an additional \$2.5 million at lead candidate identification, with the potential for approximately \$30 million in annual discovery funding to the Company as the Collaboration reaches steady state.

Regeneron has the right to terminate the Master Agreement for convenience upon ninety days' notice to the Company. The termination of the Master Agreement does not affect the term of any License Agreement or Co-Co Collaboration Agreement then in effect. In addition, either party may terminate the Master Agreement for a material breach by, or insolvency of, the other party. Unless earlier terminated pursuant to its terms, the Master Agreement will remain in effect with respect to each program until (a) such program becomes a terminated program or (b) the parties enter into a License Agreement or Co-Co Collaboration Agreement with respect to such program.

The Master Agreement includes various representations, warranties, covenants, dispute escalation and resolution mechanisms, indemnities and other provisions customary for transactions of this nature.

Form of License Agreement

Following lead candidate selection for an eye program (except in limited circumstances) or upon a party's election to not enter into a Co-Co Collaboration Agreement following candidate selection for a CNS or liver program, the parties will enter into a License Agreement for the applicable program.

Under the Form of License Agreement, the licensee will be solely responsible for development of collaboration products arising from such program, except that in the event that Regeneron is the licensee, Regeneron may request that the Company perform certain research activities at Regeneron's expense. The licensee is required to use commercially reasonable efforts to develop a collaboration product for the purposes of achieving regulatory approval in each Major Market Country (as defined in the Form of License Agreement).

In addition, the licensee will be solely responsible for all commercialization activities for collaboration products arising out of the applicable program, and the licensee is required to use commercially reasonable efforts to commercialize a collaboration product following receipt of regulatory approval in each Major Market Country (as defined in the Form of License Agreement). Under the Form of License Agreement, the licensee books all sales of collaboration products.

Under the Form of License Agreement, the Company is responsible for the manufacture of all early stage supply requirements, regardless of which party is the licensee. The Company will also be responsible for manufacturing late stage supply requirements if the Company is the licensee. In the event that Regeneron is the licensee, the parties will enter into an early stage supply agreement, pursuant to which Regeneron will pay the Company for the early stage manufacturing costs, and Regeneron may manufacture late stage supply requirements, or the parties can agree to have the Company be responsible for all or some of such manufacturing on Regeneron's behalf. Regeneron will pay the Company for the manufacturing costs associated with any late stage supply requirements performed by the Company on Regeneron's behalf.

Except for the specific activities described above that are performed by the Company at Regeneron's request, the licensee will be responsible for its own costs and expenses incurred in connection with the development and commercialization of the collaboration products under the Form of License Agreement. The licensee will pay to the licensor certain development and/or commercialization milestone payments totaling up to \$150 million for each collaboration product, consisting of up to \$60 million in development milestones and up to \$90 million in commercial milestones. In addition, following the first commercial sale of the applicable collaboration product under a License Agreement, the licensee is required to make certain tiered royalty payments, ranging from low double-digits up to 20%, to the licensor based on the aggregate annual net sales of the collaboration product, subject to customary reductions.

The parties have the right to terminate a given License Agreement for the other party's material breach, subject to cure rights, or in the event of the other party's insolvency. Additionally, the licensee may terminate a License Agreement for convenience upon ninety days' notice to the licensor. Unless earlier terminated pursuant to its terms, each License Agreement will remain in effect until the expiration of the last royalty term for the last collaboration product under the applicable License Agreement.

The Form of License Agreement includes various representations, warranties, covenants, dispute escalation and resolution mechanisms, indemnities and other provisions customary for transactions of this nature.

Form of Co-Co Collaboration Agreement

Upon a party's election to enter into a Co-Co Collaboration Agreement following lead candidate selection for a CNS or liver program or, in limited circumstances for an eye program, the parties will enter into a Co-Co Collaboration Agreement for the applicable program.

Under the Form of Co-Co Collaboration Agreement, the parties will each perform development activities in accordance with the plan and budget approved by the joint steering committee. Following the completion of a Phase 2 clinical trial, the lead party is required to use commercially reasonable efforts to obtain regulatory approval of a collaboration product in each Major Market Country (as defined in the Form of Co-Co Collaboration Agreement).

The Form of Co-Co Collaboration Agreement provides for certain opportunities for each party to opt-out of any further development activities under the applicable Co-Co Collaboration Agreement along with the cost-sharing arrangement (the "Opt-Out Right"), subject to continued sharing of costs through defined points. In the event that a party exercises its Opt-Out Right, the opt-out party will no longer have any obligation to perform any development activities with respect to any collaboration product under the applicable Co-Co Collaboration Agreement, except that if the Company exercises its Opt-Out Right, the Company will still be required to, at Regeneron's request, perform certain development activities in accordance with a plan and budget to be reasonably agreed to by the parties.

Under the Form of Co-Co Collaboration Agreement, the lead party has the sole right to commercialize the collaboration products under the applicable Co-Co Collaboration Agreement in accordance with the plan and budget approved by the joint steering committee. Following receipt of regulatory approval in the applicable country, the lead party is required to use commercially reasonable efforts to obtain regulatory approval of a collaboration product in each Major Market Country (as defined in the Form of Co-Co Collaboration Agreement). Under the Form of Co-Co Collaboration Agreement, the lead party books all sales of a collaboration product.

Under the Form of Co-Co Collaboration Agreement, the parties have similar rights and obligations with respect to early stage and late stage manufacturing to those set forth in the Form of License Agreement.

Under the Form of Co-Co Collaboration Agreement, the parties share equally all costs of, and profits from, development and commercialization activities. In the event that a party exercises its Opt-Out Right, the lead party will be responsible for all costs and expenses incurred in connection with the development and commercialization of the collaboration products under the applicable Co-Co Collaboration Agreement, subject to continued sharing of costs through defined points. Once a party exercises its Opt-Out Right, following the first commercial sale of the applicable collaboration product under a Co-Co Collaboration Agreement, the lead party is required to make certain tiered royalty payments, ranging from low double-digits up to 20%, to the other party based on the aggregate annual net sales of the collaboration product and the timing of the exercise of the Opt-Out Right, subject to customary reductions and a reduction for opt-out transition costs.

Each party has the right to terminate a given Co-Co Collaboration Agreement for the other party's material breach, subject to cure rights, or in the event of the other party's insolvency. Additionally, if a party exercises its Opt-Out Right, the lead party may terminate its obligations to develop and commercialize the collaboration products under the applicable Co-Co Collaboration Agreement, in which case the lead party will attempt to license, sell, grant or transfer to a third party the right to develop and commercialize the collaboration products under the applicable Co-Co Collaboration Agreement, and the parties will share any proceeds according to a defined allocation percentage. Unless earlier terminated pursuant to its terms, each Co-Co Collaboration Agreement will remain in effect until (a) if neither party has exercised its Opt-Out Right, the first date on which the lead party is no longer developing or

commercializing any collaboration products under the applicable Co-Co Collaboration Agreement or (b) if a party has exercised its Opt-Out Right, the date of expiration of the last royalty term for the last collaboration product under the applicable Co-Co Collaboration Agreement.

The Form of Co-Co Collaboration Agreement includes various representations, warranties, covenants, dispute escalation and resolution mechanisms, indemnities and other provisions customary for transactions of this nature.

Equity Placement

The Company has agreed to sell to Regeneron 4,444,445 shares of its common stock, par value \$.01 per share (the "Common Stock"), for aggregate cash consideration of \$400 million, or \$90.00 per share, pursuant to the terms of a Stock Purchase Agreement, dated April 8, 2019 (the "Stock Purchase Agreement"), by and between Regeneron and the Company (the "Equity Transaction"). If at the time of closing of the Equity Transaction (which will occur no earlier than the conclusion of the Company's 2019 annual meeting of stockholders) a sufficient number of authorized shares of Common Stock under the Company's Restated Certificate of Incorporation is not available, the \$400 million of equity under the Stock Purchase Agreement will instead be issued in the form of 1,481,482 shares of the Company's Series A Redeemable Convertible Preferred Stock, par value \$.01 per share (the "Preferred Stock"), at a purchase price of \$270.00 per share, that will convert automatically into Common Stock on a 1-for-3 basis upon stockholder approval of additional authorized shares of Common Stock. This sale does not involve a public offering and is therefore exempt from registration under Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"). Based on 106,437,145 shares of Common Stock outstanding as of April 8, 2019, following the Equity Transaction Regeneron will beneficially own approximately 4.0% of the outstanding shares of Common Stock (on a pro forma, and if Preferred Stock is issued, on an as converted, basis). The Stock Purchase Agreement contains customary representations, warranties, and covenants of each of the parties thereto. Subject to customary closing conditions, including the expiration or early termination of the applicable pre-merger waiting period under the HSR Act, the Equity Transaction is expected to close during the second quarter of 2019.

As a condition to consummating the transactions contemplated by the Stock Purchase Agreement, the Company and Regeneron have entered into an investor agreement dated April 8, 2019 (the "Investor Agreement"). Under the Investor Agreement, until the expiration or termination of the Research Term under the Master Agreement (subject to extension by one year if the Research Term or Master Agreement is terminated by Regeneron at will, or by up to two years if as of the expiration or termination of the Research Term, Regeneron owns more than 19.99% of the Company's outstanding shares (on an as-converted basis)), Regeneron and its affiliates will be bound by certain "standstill" provisions. The standstill provisions include agreements not to acquire more than 30% of the Company's outstanding shares of Common Stock and Preferred Stock (on an as-converted basis), call stockholder meetings, nominate directors other than those approved by the Company's Board of Directors, subject to certain limited exceptions, or propose or support a proposal to acquire the Company.

Further, under the Investor Agreement, Regeneron has agreed to vote, and cause its affiliates to vote, all shares of the Company's voting securities Regeneron is entitled to vote in a manner as recommended by the Company's Board of Directors, except with respect to certain change of control transactions, liquidation or dissolution of the Company, or, after the standstill term, any contested election of directors.

Under the Investor Agreement, Regeneron has agreed not to dispose of any of the purchased shares or any shares of Common Stock beneficially owned by it immediately after the closing of the Master Agreement, until the earlier of (i) the four-year anniversary of the closing of the Equity Transaction and (ii) the termination of the Collaboration (the "Lock-Up Period"), subject to limited exceptions. Following the expiration of the Lock-Up Period, if at any time Regeneron beneficially owns at least 9.9% of the Company's outstanding shares (on an as-converted basis), then until such time as Regeneron beneficially owns less than 5% of the Company's outstanding shares (on an as-converted basis), Regeneron will not dispose of any shares except (a) pursuant to a registered underwritten public offering pursuant to the Investor Agreement, (b) in a manner consistent with the volume limitations set forth in Rule 144 under the Securities Act, or (c) as otherwise approved by the Company.

Under the Investor Agreement, following the Lock-Up Period, Regeneron will have three demand rights to require the Company to conduct a registered underwritten public offering with respect to the shares of Common Stock beneficially owned by Regeneron (or issued or issuable upon conversion of the Preferred Stock, if applicable)

immediately after the closing of the Equity Transaction. In addition, following the Lock-Up Period, subject to certain conditions, Regeneron will be entitled to participate in registered underwritten public offerings by the Company if other selling stockholders are included in the registration. The rights and restrictions under the Investor Agreement are subject to termination upon the occurrence of certain events.

Amendment of Genzyme Agreements

Collaboration Amendment

On April 8, 2019, the Company and Genzyme Corporation (“Genzyme”) entered into Amendment No. 3 (the “Collaboration Amendment”) to the Master Collaboration Agreement dated January 11, 2014 (the “Original Collaboration Agreement”), as amended by Amendment No. 1 to the Master Collaboration Agreement dated July 1, 2015 (“Amendment No. 1”) and Amendment No. 2 to the Master Collaboration Agreement dated January 6, 2018 (“Amendment No. 2”) (the Original Collaboration Agreement, together with Amendment No. 1 and Amendment No. 2 and including the License Terms appended to the Original Collaboration Agreement, the “Master Agreement”). Pursuant to the Collaboration Amendment, the Company and Genzyme have agreed to conclude the research and option phase under the Master Agreement.

In connection and simultaneously with entering into the Collaboration Amendment, the Company and Genzyme also entered into the A&R ALN-AT3 Global License Terms with respect to ALN-AT3 (fitusiran) and certain back-up products (the “A&R AT3 License Terms”). The A&R AT3 License Terms amend and restate the ALN-AT3 Global License Terms entered into by the Company and Genzyme on January 6, 2018 to modify certain of the business terms. The material collaboration terms for fitusiran, as previously announced, will continue unchanged.

In connection with entering into the Collaboration Amendment and the A&R AT3 License Terms, the Company has agreed to advance, at its cost, a selected investigational asset in an undisclosed rare genetic disease through the end of IND-enabling studies. Following completion of such studies, the Company will transition, at its cost, such asset to Genzyme. Thereafter, Genzyme will fund all potential future development and commercialization costs for such asset. If this asset is approved, the Company will be eligible to receive tiered double-digit royalties on global net sales.

Amended and Restated Investor Agreement

In connection with the Collaboration Amendment, the Company and Genzyme also entered into an Amended and Restated Investor Agreement, dated April 8, 2019 (the “A&R Investor Agreement”), which amends and restates the Investor Agreement entered into by the Company and Genzyme on February 27, 2014 (the “Original Investor Agreement”). Pursuant to the A&R Investor Agreement, Genzyme is released from the lock-up restrictions under the Original Investor Agreement and is permitted to sell shares of the Company’s Common Stock in transactions approved by the Company or in fully bought block sale transactions satisfying the conditions set forth in the A&R Investor Agreement.

Under the A&R Investor Agreement, until the earlier of (i) the fifth anniversary of the expiration of the last to expire royalty term or the earlier termination of the Master Agreement, as amended by the Collaboration Amendment, and (ii) the date after December 31, 2021 on which the beneficial ownership of Genzyme and its affiliates no longer represents at least 5% of the outstanding shares of Common Stock, Genzyme and its affiliates will be bound by certain “standstill” provisions. The standstill provisions include agreements not to acquire more than 30% of the outstanding shares of Common Stock, call stockholder meetings, nominate directors other than those approved by the Company’s Board of Directors, subject to certain limited exceptions, or propose or support a proposal to acquire the Company.

The A&R Investor Agreement provides that Genzyme will continue to vote, and cause its affiliates to vote, all shares of the Company’s voting securities they are entitled to vote, up to a maximum of 20% of the Company’s outstanding shares of Common Stock, in a manner either as recommended by the Company’s Board of Directors or proportionally with the votes cast by other stockholders of the Company, except with respect to certain change of control transactions or any liquidation or dissolution of the Company, as in the Original Investor Agreement. Until

Genzyme owns less than 7.5% of the Company's outstanding shares of Common Stock, if the Company issues Common Stock or securities convertible into or exercisable for Common Stock to (i) a third party that holds at least 30% of the Company's outstanding shares of Common Stock or, (ii) in connection with a collaboration or license transaction to a third party that will initially hold at least the percentage of the Company's outstanding shares of Common Stock represented by the shares originally purchased by Genzyme on February 27, 2014, then the Company will offer Genzyme an opportunity to amend the standstill and voting provisions in the A&R Investor Agreement to be consistent with the terms provided to such third party.

Under the A&R Investor Agreement, Genzyme no longer has registration rights or the conditional right to appoint one individual to the Company's Board of Directors. Genzyme continues to be entitled to certain financial information rights until Genzyme and its affiliates no longer beneficially own at least 2.5% of the Company's outstanding shares of Common Stock.

The foregoing description of each of the Master Agreement, the Form of License Agreement, the Form of Co-Co Collaboration Agreement, the Stock Purchase Agreement, the Investor Agreement, the Collaboration Amendment, the A&R AT3 License Terms and the A&R Investor Agreement does not purport to be complete and is qualified in its entirety by reference to each such agreement, copies of which the Company expects to file as exhibits to its Quarterly Report on Form 10-Q for the quarter ending June 30, 2019.

Item 3.02. Unregistered Sales of Equity Securities.

The information set forth under the heading "*Equity Placement*" in Item 1.01 is incorporated herein by reference.

Item 7.01. Regulation FD Disclosure.

On April 8, 2019, the Company issued a press release concerning the Regeneron Collaboration and the Equity Transaction, and a press release concerning the Genzyme Collaboration Amendment, copies of which are being furnished as Exhibit 99.1 and Exhibit 99.2, respectively, to this Report on Form 8-K. The information in this Item 7.01 and Exhibits 99.1 and 99.2 attached hereto is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

99.1 [Press Release of Alnylam Pharmaceuticals, Inc. announcing Regeneron Collaboration and Equity Transaction, dated April 8, 2019](#)

99.2 [Press Release of Alnylam Pharmaceuticals, Inc. announcing Amendment of Genzyme Agreements, dated April 8, 2019](#)

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: April 9, 2019

By: /s/ Laurie B. Keating

Laurie B. Keating

Executive Vice President, Chief Legal Officer



Anylam Pharmaceuticals, Inc.

Christine Regan Lindenboom
(Investors and Media)
617-682-4340

Josh Brodsky
(Investors)
617-551-8276

Regeneron Investor Relations

Mark Hudson
Tel: +1 (914) 847-3482
Mark.hudson@regeneron.com

Regeneron Media Relations

Hala Mirza
Tel: +1 (914) 847-3422
Hala.mirza@regeneron.com

Anylam and Regeneron Announce Broad Collaboration to Discover, Develop and Commercialize RNAi Therapeutics Focused on Ocular and Central Nervous System (CNS) Diseases

– Companies to Also Jointly Advance Select Number of Preclinical Disease Programs with Targets Expressed in the Liver and Treatments for C5 Complement-Mediated Diseases –

– Regeneron to Invest \$800 million Through Upfront Cash and Equity Investment in Anylam, with up to Additional \$200 Million in Potential Near-Term Milestones –

– Anylam to Host Conference Call Today, Monday, April 8th at 8:30 am ET –

CAMBRIDGE, Mass., and TARRYTOWN, NY, April 8, 2019 – [Anylam Pharmaceuticals, Inc.](#) (Nasdaq: ALNY), the leading RNAi therapeutics company, and Regeneron Pharmaceuticals, Inc. (NASDAQ: REGN), announced today a collaboration to discover, develop and commercialize new RNA interference (RNAi) therapeutics for a broad range of diseases by addressing disease targets expressed in the eye and central nervous system (CNS), in addition to a select number of targets expressed in the liver. The collaboration will leverage both companies' scientific and technological expertise and will build on Anylam's recent preclinical data showing potent and highly durable delivery of RNAi therapeutics to achieve target gene silencing in the eye and CNS. The collaboration will also benefit from Regeneron's industry-leading *VelociSuite*[®] technologies and capabilities from the Regeneron Genetics Center (RGC).

Under the terms of the alliance, Alnylam will work exclusively with Regeneron to discover RNAi therapeutics for eye and CNS diseases. Regeneron will lead development and commercialization for all programs targeting eye diseases, with Alnylam entitled to potential milestone and royalty payments. The companies will jointly advance and alternate leadership on CNS programs, with the lead party retaining global development and commercial responsibility. For CNS programs, both companies will have the option at candidate selection to participate equally in potential future profits of programs led by the other party.

The collaboration also includes a select number of RNAi therapeutic programs designed to target genes expressed in the liver, which can influence a wide variety of diseases throughout the body. These programs include a planned joint effort evaluating anti-C5 antibody-siRNA combinations for C5 complement-mediated diseases including evaluating the combination of Regeneron's pozelimab (REGN3918), currently in Phase 1 development, with Alnylam's cemdisiran, currently in Phase 2 development. Alnylam will retain control of cemdisiran monotherapy development, and Regeneron will lead combination development. The parties will equally share investment and potential future profits on the monotherapy program, and Alnylam will receive royalties on any potential combination product sales. For all other alliance liver programs, the parties will alternate leadership and participate equally in potential profits. The companies will continue their previously-announced collaboration to identify RNAi therapeutics for the chronic liver disease nonalcoholic steatohepatitis (NASH) based on novel RGC findings. Alnylam retains broad global rights to all of its other unpartnered liver-directed clinical and preclinical pipeline programs.

"At Regeneron we believe the best use of our resources is to invest in potentially game-changing science that will yield innovative medicines for patients with serious diseases. This collaboration couples proven and emerging RNAi technology, which holds important promise in many diseases, with Regeneron's world-leading genetics research and target discovery engine," said George D. Yancopoulos, M.D., Ph.D., President and Chief Scientific Officer of Regeneron. "This collaboration enables us to reach targets inside the cell complementing our expertise in antibodies, which are ideal for extracellular targets and those on the cell surface. Through the RGC and our other research groups, we are already identifying additional targets that may be well-suited for RNAi-based drug development, particularly in the eye and CNS."

"This new industry-leading alliance is aimed at realizing what we believe to be a significant opportunity for RNAi therapeutics as potentially transformative medicines for ocular and CNS diseases. We are thrilled to collaborate with Regeneron, a like-minded science-based organization, to significantly accelerate our efforts to bring RNAi therapeutics to patients," said John Maraganore, Ph.D., Chief Executive Officer of Alnylam. "Importantly, the alliance structure enables Alnylam to continue to build its industry-leading pipeline of RNAi therapeutics while retaining significant product rights. In addition, the near-term payments under this new agreement will strengthen Alnylam's balance sheet with over \$2 billion in *pro forma* cash upon closing of the transaction, supporting our global efforts to develop and commercialize multiple products as potentially breakthrough medicines and advance our profile toward sustainable profitability."

Regeneron has agreed to make a \$400 million upfront payment to Alnylam and to purchase \$400 million of Alnylam equity at a price per share of \$90.00 (4.44 million common shares), based on the volume-weighted average price over the last fifteen-trading-day period. Alnylam is eligible to receive up to an additional \$200 million in milestone payments upon achievement of certain criteria during early clinical development for the eye and CNS programs. The companies plan to advance programs directed to 30 targets and introduce many into clinical development during the initial five-year discovery period, which includes an option to extend. For each program, Regeneron will provide Alnylam with \$2.5 million in funding at program initiation and an additional \$2.5 million at lead candidate identification, translating to the potential for approximately \$30 million in annual discovery funding to Alnylam as the alliance reaches steady state. The alliance and equity-related agreements are subject to customary closing conditions and clearances, including clearance under the Hart-Scott Rodino Antitrust Improvements Act.

Alnylam, alongside multiple other leading life sciences companies, is also a member of Regeneron's pre-competitive consortium to sequence the DNA of 500,000 individuals in the UK Biobank health resource and subsequently make the data publicly available to the global research community.

Alnylam Conference Call Information

Alnylam Management will discuss this collaboration via conference call on Monday, April 8, 2019 at 8:30 am ET. A webcast presentation will also be available on the Investors page of the Company's website, www.alnylam.com. To access the call, please dial 800-289-0438 (domestic) or 323-794-2423 (international) five minutes prior to the start time and refer to conference ID 2197882. A replay of the call will be available beginning at 11:30 am ET on the day of the call. To access the replay, please dial 888-203-1112 (domestic) or 719-457-0820 (international) and refer to conference ID 2197882.

About Alnylam Pharmaceuticals

Alnylam (Nasdaq: ALNY) is leading the translation of RNA interference (RNAi) into a whole new class of innovative medicines with the potential to transform the lives of people afflicted with rare genetic, cardio-metabolic, hepatic infectious, and central nervous system (CNS)/ocular diseases. Based on Nobel Prize-winning science, RNAi therapeutics represent a powerful, clinically validated approach for the treatment of a wide range of severe and debilitating diseases. Founded in 2002, Alnylam is delivering on a bold vision to turn scientific possibility into reality, with a robust discovery platform. Alnylam's first U.S. FDA-approved RNAi therapeutic is ONPATPRO® (patisiran) lipid complex injection available in the U.S. for the treatment of the polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis in adults. In the EU, ONPATPRO is approved for the treatment of hATTR amyloidosis in adults with stage 1 or stage 2 polyneuropathy. Alnylam has a deep pipeline of investigational medicines, including five product candidates that are in late-stage development. Looking forward, Alnylam will continue to execute on its "Alnylam 2020" strategy of building a multi-product, commercial-stage biopharmaceutical company with a sustainable pipeline of RNAi-based medicines to address the needs of patients who have limited or inadequate treatment options. Alnylam employs over 1,000 people worldwide and is headquartered in Cambridge, MA. For more information about our people, science and pipeline, please visit www.alnylam.com and engage with us on Twitter at [@Alnylam](https://twitter.com/Alnylam) or on [LinkedIn](https://www.linkedin.com/company/alnylam).

About Regeneron Pharmaceuticals, Inc.

Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to seven FDA-approved treatments and numerous product candidates in development, all of which were homegrown in our laboratories. Our medicines and pipeline are designed to help patients with eye disease, heart disease, allergic and inflammatory diseases, pain, cancer, infectious diseases and rare diseases.

Regeneron is accelerating and improving the traditional drug development process through our proprietary *VelociSuite*[®] technologies, such as *VelocImmune*[®] which produces optimized fully-human antibodies, and ambitious research initiatives such as the Regeneron Genetics Center, which is conducting one of the largest genetics sequencing efforts in the world.

For additional information about the company, please visit www.regeneron.com or follow @Regeneron on Twitter.

Alnylam Forward-Looking Statements

Various statements in this release concerning Alnylam's future expectations, plans and prospects, including, without limitation, Alnylam's views with respect to the potential of RNAi therapeutics to achieve target gene silencing in the CNS and eye, Regeneron's participation in the development and commercialization of RNAi therapeutics directed to CNS, eye and a select number of liver targets, as well as the planned joint effort evaluating an anti-C5 antibody-siRNA combination as well as a monotherapy approach, the parties plans to advance 30 targets and file multiple Investigational New Drug Applications during the discovery period, Alnylam's expectations regarding funding for each program under the collaboration at various stages of development, its expectations regarding the receipt of upfront cash and an equity investment, as well as potential development, regulatory and sales milestones and royalties from Regeneron, its expectations regarding available cash for its operations through multiple product launches, and expectations regarding its "Alnylam 2020" guidance for the advancement and commercialization of RNAi therapeutics, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results and future plans may differ materially from those indicated by these forward-looking statements as a result of various important risks, uncertainties and other factors, including, without limitation: Alnylam's ability to discover and develop novel drug candidates and delivery approaches; successfully demonstrate the efficacy and safety of its product candidates; the pre-clinical and clinical results for its product candidates, which may not be replicated or continue to occur in other subjects or in additional studies or otherwise support further development of product candidates for a specified indication or at all; actions or advice of regulatory agencies, which may affect the design, initiation, timing, continuation and/or progress of clinical trials or result in the need for additional pre-clinical and/or clinical testing; delays, interruptions or failures in the manufacture and supply of its product candidates; Regeneron's ability to successfully advance

and develop programs targeting eye diseases, resulting in the potential payment of milestones and royalties to Alnylam; the parties ability to successfully develop and commercialize CNS programs; obtaining, maintaining and protecting intellectual property; Alnylam's ability to enforce its intellectual property rights against third parties and defend its patent portfolio against challenges from third parties; obtaining and maintaining regulatory approval, pricing and reimbursement for products; progress in establishing a commercial and ex-United States infrastructure, successfully launching, marketing and selling its approved products globally; Alnylam's ability to successfully expand the indication for ONPATTRO in the future; competition from others using technology similar to Alnylam's and others developing products for similar uses; Alnylam's ability to manage its growth and operating expenses, obtain additional funding to support its business activities, and establish and maintain strategic business alliances and new business initiatives; Alnylam's dependence on third parties for development, manufacture and distribution of products; the outcome of litigation; the risk of government investigations; and unexpected expenditures; as well as those risks more fully discussed in the "Risk Factors" filed with Alnylam's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) and in other filings that Alnylam makes with the SEC. In addition, any forward-looking statements represent Alnylam's views only as of today and should not be relied upon as representing its views as of any subsequent date. Alnylam explicitly disclaims any obligation, except to the extent required by law, to update any forward-looking statements.

Regeneron Forward-Looking Statements and Use of Digital Media

This press release includes forward-looking statements that involve risks and uncertainties relating to future events and the future performance of Regeneron Pharmaceuticals, Inc. ("Regeneron" or the "Company"), and actual events or results may differ materially from these forward-looking statements. Words such as "anticipate," "expect," "intend," "plan," "believe," "seek," "estimate," variations of such words, and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements concern, and these risks and uncertainties include, among others, the nature, timing, and possible success and therapeutic applications of Regeneron's or its collaborators' products, product candidates, and research and clinical programs now underway or planned, such as the RNA interference programs discussed in this press release (including programs evaluating anti-C5 antibody-siRNA combinations for C5 complement-mediated diseases and RNAi therapeutics for the chronic liver disease nonalcoholic steatohepatitis); the extent to which the results from the research and development programs conducted by Regeneron or its collaborators (including based on the collaboration discussed in this press release) may be replicated in other studies and lead to therapeutic applications; the potential for any license or collaboration agreement, including Regeneron's agreements with Sanofi, Bayer, and Teva Pharmaceutical Industries Ltd. (or their respective affiliated companies, as applicable), as well as Regeneron's collaborations with Alnylam Pharmaceuticals, Inc. discussed in this news release, to be cancelled or terminated without any product success; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's late-stage product candidates and new indications for marketed products; unforeseen safety issues resulting from the administration of products and product candidates in patients, including serious complications or side effects in connection with the use of Regeneron's or its collaborators' product candidates in clinical trials; ongoing regulatory obligations and oversight impacting

Regeneron's marketed products, research and clinical programs, and business, including those relating to patient privacy; determinations by regulatory and administrative governmental authorities which may delay or restrict Regeneron's or its collaborators' ability to continue to develop or commercialize products and product candidates; competing drugs and product candidates that may be superior to Regeneron's or its collaborators' products and product candidates; uncertainty of market acceptance and commercial success of Regeneron's or its collaborators' products and product candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary) on the commercial success of Regeneron's or its collaborators' products and product candidates; the ability of Regeneron to manufacture and manage supply chains for multiple products and product candidates; the ability of Regeneron's collaborators, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron's products and product candidates; the availability and extent of reimbursement of the Company's products from third-party payers, including private payer healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid; coverage and reimbursement determinations by such payers and new policies and procedures adopted by such payers; unanticipated expenses; the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its financial projections or guidance and changes to the assumptions underlying those projections or guidance; and risks associated with intellectual property of other parties and pending or future litigation relating thereto, including without limitation the patent litigation and other related proceedings relating to EYLEA® (afibercept) Injection, and Dupixent® (dupilumab) Injection, and Praluent® (alirocumab) Injection, the ultimate outcome of any such proceedings, and the impact any of the foregoing may have on Regeneron's business, prospects, operating results, and financial condition. A more complete description of these and other material risks can be found in Regeneron's filings with the U.S. Securities and Exchange Commission, including its Form 10-K for the year ended December 31, 2018. Any forward-looking statements are made based on management's current beliefs and judgment, and the reader is cautioned not to rely on any forward-looking statements made by Regeneron. Regeneron does not undertake any obligation to update publicly any forward-looking statement, including without limitation any financial projection or guidance, whether as a result of new information, future events, or otherwise.

Regeneron uses its media and investor relations website and social media outlets to publish important information about the Company, including information that may be deemed material to investors. Financial and other information about Regeneron is routinely posted and is accessible on Regeneron's media and investor relations website (<http://newsroom.regeneron.com>) and its Twitter feed (<http://twitter.com/regeneron>).

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Contacts:
Alnylam Pharmaceuticals, Inc.
 Christine Regan Lindenboom
 (Investors and Media)
 617-682-4340



Josh Brodsky
 (Investors)
 617-551-8276

Alnylam and Sanofi Conclude Research and Option Phase of 2014 RNAi Therapeutics Collaboration

– Alnylam to Advance Selected Investigational Asset in an Undisclosed Rare Genetic Disease Through the End of IND-Enabling Studies –

– Material Collaboration Terms for Patisiran, Vutrisiran, and Fitusiran, as Previously Announced, Remain Unchanged –

CAMBRIDGE, Mass., April 8, 2019 – [Alnylam Pharmaceuticals, Inc.](#) (Nasdaq: ALNY), the leading RNAi therapeutics company, announced today that Alnylam and Sanofi have agreed to conclude the research and option phase of the companies' 2014 RNAi therapeutics alliance in rare genetic diseases. The material collaboration terms for patisiran, vutrisiran, and fitusiran, as previously announced, will continue unchanged.

"Our landmark 2014 rare disease alliance with Sanofi resulted in the advancement of three Phase 3 programs – patisiran, vutrisiran, and fitusiran – and the global launch of ONPATTRO, the world's first RNAi therapeutic. We're pleased to now conclude the research and product option phase of the collaboration, allowing Alnylam to focus on future continued growth of its rare disease pipeline," said Yvonne Greenstreet, MBChB, MBA, Chief Operating Officer of Alnylam. "We couldn't be more pleased with the success of this alliance over the last five years, advancing RNAi therapeutics to patients afflicted with rare diseases around the world, and we look forward to our continued collaboration with Sanofi on our alliance programs."

As part of the agreement, Alnylam will advance a selected investigational asset in an undisclosed rare genetic disease through the end of IND-enabling studies. Sanofi will be responsible for any potential further development or commercialization of this asset. If this product is approved, Alnylam will be eligible to receive tiered double-digit royalties on its global net sales. In addition, Alnylam and Sanofi have agreed to amend certain terms of the companies' equity agreement, with Sanofi obtaining a release of its lock-up of Alnylam stock holdings, subject to certain trading restrictions, amongst other provisions.

About RNAi

RNAi (RNA interference) is a natural cellular process of gene silencing that represents one of the most promising and rapidly advancing frontiers in biology and drug development today. Its discovery has been heralded as "a major scientific breakthrough that happens once every decade

or so,” and was recognized with the award of the 2006 Nobel Prize for Physiology or Medicine. By harnessing the natural biological process of RNAi occurring in our cells, a new class of medicines, known as RNAi therapeutics, is now a reality. Small interfering RNA (siRNA), the molecules that mediate RNAi and comprise Alnylam’s RNAi therapeutic platform, function upstream of today’s medicines by potently silencing messenger RNA (mRNA) – the genetic precursors – that encode for disease-causing proteins, thus preventing them from being made. This is a revolutionary approach with the potential to transform the care of patients with genetic and other diseases.

About Alnylam Pharmaceuticals

Alnylam (Nasdaq: ALNY) is leading the translation of RNA interference (RNAi) into a whole new class of innovative medicines with the potential to transform the lives of people afflicted with rare genetic, cardio-metabolic, hepatic infectious, and central nervous system (CNS)/ocular diseases. Based on Nobel Prize-winning science, RNAi therapeutics represent a powerful, clinically validated approach for the treatment of a wide range of severe and debilitating diseases. Founded in 2002, Alnylam is delivering on a bold vision to turn scientific possibility into reality, with a robust discovery platform. Alnylam’s first U.S. FDA-approved RNAi therapeutic is ONPATTRO® (patisiran) lipid complex injection available in the U.S. for the treatment of the polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis in adults. In the EU, ONPATTRO is approved for the treatment of hATTR amyloidosis in adults with stage 1 or stage 2 polyneuropathy. Alnylam has a deep pipeline of investigational medicines, including five product candidates that are in late-stage development. Looking forward, Alnylam will continue to execute on its “Alnylam 2020” strategy of building a multi-product, commercial-stage biopharmaceutical company with a sustainable pipeline of RNAi-based medicines to address the needs of patients who have limited or inadequate treatment options. Alnylam employs over 1,000 people worldwide and is headquartered in Cambridge, MA. For more information about our people, science and pipeline, please visit www.alnylam.com and engage with us on Twitter at [@Alnylam](https://twitter.com/Alnylam) or on [LinkedIn](https://www.linkedin.com/company/alnylam).

Alnylam Forward-Looking Statements

Various statements in this release concerning Alnylam’s future expectations, plans and prospects, including, without limitation, Alnylam’s views with respect to the potential for RNAi therapeutics, including patisiran, vutrisiran, and fitusiran, its expectations regarding its alliance with Sanofi and the potential for the receipt of future royalties on partnered programs, the release of Sanofi from the lock-up restrictions on its stock holdings in Alnylam, and its “Alnylam 2020” guidance for the advancement and commercialization of RNAi therapeutics, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results and future plans may differ materially from those indicated by these forward-looking statements as a result of various important risks, uncertainties and other factors, including, without limitation, Alnylam’s ability to discover and develop novel drug candidates and delivery approaches, successfully demonstrate the efficacy and safety of its product candidates, the pre-clinical and clinical results for its product candidates, which may not be replicated or continue to occur in other subjects or in additional studies or otherwise support further development of product candidates for a specified indication or at all, actions or advice of regulatory agencies, which may affect the design, initiation, timing, continuation and/or progress of clinical trials or result in the need for additional pre-clinical and/or clinical testing, delays,

interruptions or failures in the manufacture and supply of its product candidates, obtaining, maintaining and protecting intellectual property, Alnylam's ability to enforce its intellectual property rights against third parties and defend its patent portfolio against challenges from third parties, obtaining and maintaining regulatory approval, pricing and reimbursement for products, progress in establishing a commercial and ex-United States infrastructure, successfully launching, marketing and selling its approved products globally, Alnylam's ability to successfully expand the indication for ONPATTRO in the future, competition from others using technology similar to Alnylam's and others developing products for similar uses, Alnylam's ability to manage its growth and operating expenses, obtain additional funding to support its business activities, and establish and maintain strategic business alliances and new business initiatives, Alnylam's dependence on third parties for development, manufacture and distribution of products, the outcome of litigation, the risk of government investigations, and unexpected expenditures, as well as those risks more fully discussed in the "Risk Factors" filed with Alnylam's most recent Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC) and in other filings that Alnylam makes with the SEC. In addition, any forward-looking statements represent Alnylam's views only as of today and should not be relied upon as representing its views as of any subsequent date. Alnylam explicitly disclaims any obligation, except to the extent required by law, to update any forward-looking statements.

With the exception of ONPATTRO (patisiran), none of Alnylam's investigational therapeutics have been approved by the U.S. Food and Drug Administration, European Medicines Agency, or any other regulatory authority and no conclusions can or should be drawn regarding the safety or effectiveness of such investigational therapeutics.