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): January 7, 2019 (January 7, 2019)

Alnylam Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in Charter)

Delaware	001-36407	77-0602661
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

300 Third Street, Cambridge, MA	02142
(Address of Principal Executive Offices)	(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 2.02. Results of Operations and Financial Condition.

On January 7, 2019, Alnylam Pharmaceuticals, Inc. (the "Company") pre-announced its unaudited fourth quarter 2018 global net product revenues for ONPATTRO® (patisiran) and provided additional updates on the product's commercial launch. The Company reported $11-12 million in global net product revenues (unaudited) for the fourth quarter of 2018 for ONPATTRO. The Company also updated its cash guidance for the year ended December 31, 2018, stating that it now expects to end 2018 with $1.1 billion (unaudited) in cash, cash equivalents, marketable securities, and restricted investments, excluding securities.

The information in this Item 2.02 and Exhibit 99.1 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 of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

The following exhibit relating to Item 2.02 shall be deemed to be furnished, and not filed:

99.1 Press Release of Alnylam Pharmaceuticals, Inc. dated January 7, 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: January 7, 2019

By: /s/ Manmeet S. Soni
Manmeet S. Soni
Senior Vice President, Chief Financial Officer

Exhibit 99.1

Contacts:
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Alnylam Announces Unaudited Fourth Quarter 2018 Global Revenues for ONPATTRO® (patisiran) and Provides Additional Commercial Updates

– Achieved Fourth Quarter 2018 ONPATTRO Unaudited Global Net Product Revenues of $11-12 Million –

– Over 200 Patients on Commercial ONPATTRO in U.S. and EU from Launch Through Year-End 2018 –

– Maintained Strong Balance Sheet with Unaudited Year-End Cash and Investments Balance of Approximately $1.1 Billion –

CAMBRIDGE, Mass., January 7, 2019 – Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY), the leading RNAi therapeutics company, today pre-announced its unaudited fourth quarter 2018 global net product revenues for ONPATTRO and provided additional updates on the product's commercial launch. These updates will be discussed during a webcast presentation at the 37th Annual J.P. Morgan Healthcare Conference in San Francisco, California today, Monday, January 7, 2019, at 10:30 a.m. PT (1:30 p.m. ET). Specifically, the Company reported:

- ONPATTRO global net product revenues (unaudited) for the fourth quarter of 2018 were $11-12 million.
- As of year-end 2018, over 200 patients in the U.S. and EU were receiving commercial ONPATTRO treatment, and approximately 550 total patients worldwide, including patients on commercial drug and patients in clinical studies and in the Company's global Expanded Access Program (EAP), were being treated with patisiran.
- In the U.S., a total of 250 Start Forms were submitted as of year-end 2018. Of these, approximately 50% were from patients previously treated on the ONPATTRO EAP.
    - The Start Forms came from a diverse range of prescribing physician specialties, including 44% neurologists, 35% cardiologists, and 21% from other specialties.
    - For Start Forms received, 62% of patients were covered by Medicare, 32% were covered by commercial insurers, and 6% were covered by other government insurers.

- Significant progress has been made with value-based agreements (VBAs) in the U.S. and with market access efforts in the EU. Since launch, Alnylam has completed full VBAs with Harvard Pilgrim Healthcare, Humana, and another top five U.S. payer. Additional VBAs are under negotiation with over 15 other commercial payers with the potential to cover over 90% of commercial lives in the U.S.

"2018 was a landmark year for Alnylam, marked by the approval and launch in the U.S. and EU of ONPATTRO, heralding the arrival of RNAi therapeutics as a whole new class of medicines. Our unaudited fourth quarter 2018 global net product revenues of $11-12 million, with over 200 patients receiving treatment with commercial ONPATTRO in the U.S. and EU since launch, reflect strong patient and physician demand and excellent commercial execution by our U.S. and EU teams," said John Maraganore, Ph.D., Chief Executive Officer of Alnylam. "As we enter 2019, we are excited to continue our global launch of ONPATTRO, bringing the benefits of this innovative therapy to hATTR patients with polyneuropathy around the world, while also working to potentially expand the label for ONPATTRO to include ATTR amyloidosis patients with cardiomyopathy. We also look forward to achieving meaningful milestones across our broad late-stage pipeline of investigational RNAi therapeutics."

In addition, the Company today reported that at December 31, 2018, it had cash, cash equivalents and marketable debt securities, and restricted investments, excluding equity securities, of approximately $1.1 billion (unaudited). The Company intends to provide 2019 financial guidance on non-GAAP R&D and SG&A expenses and year-end cash balance in connection with its full, audited fourth quarter and year-end 2018 financial results in February 2019.

About ONPATTRO® (patisiran)

Patisiran, based on Nobel Prize-winning science, is an intravenously administered RNAi therapeutic targeting transthyretin (TTR) for the treatment of hereditary ATTR amyloidosis. It is designed to target and silence TTR messenger RNA, thereby blocking the production of TTR protein before it is made. Patisiran blocks the production of TTR in the liver, reducing its accumulation in the body's tissues in order to halt or slow down the progression of the disease. In August 2018, patisiran received U.S. Food and Drug Administration (FDA) approval for the treatment of the polyneuropathy of hATTR amyloidosis in adults, as well as European Medicines Agency marketing authorization for the treatment of hATTR amyloidosis in adults with Stage 1 or Stage 2 polyneuropathy.

Important Safety Information

Infusion-Related Reactions

Infusion-related reactions (IRRs) have been observed in patients treated with ONPATTRO. In a controlled clinical study, 19 percent of ONPATTRO-treated patients experienced IRRs, compared to 9 percent of placebo-treated patients. The most common symptoms of IRRs with ONPATTRO were flushing, back pain, nausea, abdominal pain, dyspnea, and headache.

To reduce the risk of IRRs, patients should receive premedication with a corticosteroid, paracetamol, and antihistamines (H1 and H2 blockers) at least 60 minutes prior to ONPATTRO infusion. Monitor patients during the infusion for signs and symptoms of IRRs. If an IRR occurs,

consider slowing or interrupting the infusion and instituting medical management as clinically indicated. If the infusion is interrupted, consider resuming at a slower infusion rate only if symptoms have resolved. In the case of a serious or life-threatening IRR, the infusion should be discontinued and not resumed.

Reduced Serum Vitamin A Levels and Recommended Supplementation

ONPATTRO treatment leads to a decrease in serum vitamin A levels. Supplementation at the recommended daily allowance (RDA) of vitamin A is advised for patients taking ONPATTRO. Higher doses than the RDA should not be given to try to achieve normal serum vitamin A levels during treatment with ONPATTRO, as serum levels do not reflect the total vitamin A in the body.

Patients should be referred to an ophthalmologist if they develop ocular symptoms suggestive of vitamin A deficiency (e.g. night blindness).

Adverse Reactions

The most common adverse reactions that occurred in patients treated with ONPATTRO were respiratory-tract infection (29 percent) and infusion-related reactions (19 percent).

About LNP Technology

Alnylam has licenses to Arbutus Biopharma LNP intellectual property for use in RNAi therapeutic products using LNP technology.

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 new class of innovative medicines with the potential to improve the lives of people afflicted with rare genetic, cardio-metabolic, hepatic infectious, and central nervous system (CNS) 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. ONPATTRO® (patisiran) lipid complex injection, available in the U.S. for the treatment of the polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis in adults, is Alnylam’s first U.S. FDA-approved RNAi therapeutic. 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 three 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 or on LinkedIn.

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, its unaudited global net ONPATTRO revenue for the fourth quarter of 2018, its unaudited cash, cash equivalents and marketable debt securities, and restricted investments balance, excluding equity securities, as of December 31, 2018, its plans to provide guidance on its 2019 non-GAAP R&D expenses, non-GAAP SG&A expenses, and year-end cash balance in February 2019, expectations regarding global market access for ONPATTRO and negotiations with third-party payers in the U.S., plans to continue the global launch of ONPATTRO for hATTR patients with polyneuropathy around the world and work to potentially expand the label for ONPATTRO to include ATTR amyloidosis patients with cardiomyopathy, 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, 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.