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): July 28, 2022

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.)

675 West Kendall Street, Henri A. Termeer Square Cambridge, Massachusetts	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))

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 2.02. Results of Operations and Financial Condition

On July 28, 2022, Alnylam Pharmaceuticals, Inc. (the "Company") announced its financial results for the quarter ended June 30, 2022. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in Item 2.02 of this Form 8-K (including Exhibit 99.1) 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 a 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 dated July 28, 2022.
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.

Date: July 28, 2022

ALNYLAM PHARMACEUTICALS, INC.

By: /s/ Jeffrey V. Poulton
Jeffrey V. Poulton
Executive Vice President, Chief Financial Officer

Exhibit 99.1

Alnylam Pharmaceuticals Reports Second Quarter 2022 Financial Results and Highlights Recent Period Activity

− Achieved Second Quarter 2022 Global Net Product Revenues of $214 Million for ONPATTRO®, GIVLAARI®, and OXLUMO® (33% Growth vs. Same Period Last Year) –

− Received FDA Approval of AMVUTTRA™ (vutrisiran) for the Treatment of the Polyneuropathy of Hereditary Transthyretin-Mediated Amyloidosis in Adults –

− Expects to Report Topline Results from APOLLO-B Phase 3 Trial of Patisiran in Patients with ATTR Amyloidosis with Cardiomyopathy Within the Next Three Weeks –

– Reiterated 2022 Financial Guidance, Including Combined Net Product Revenues of $870-$930 Million –

CAMBRIDGE, Mass.--(BUSINESS WIRE)--July 28, 2022--Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY), the leading RNAi therapeutics company, today reported its consolidated financial results for the second quarter ended June 30, 2022 and reviewed recent business highlights.

“We’re pleased with our second quarter results which delivered strong growth in both patient demand and product revenues. A notable achievement in the quarter was the recent approval of AMVUTTRA, which becomes our fifth RNAi therapeutic approved in under four years, and marks our continued progress in building a multi-product TTR franchise. We’re excited to have initiated the U.S. launch and look forward to potential additional global approvals and subsequent rollout,” said Yvonne Greenstreet, MBChB, Chief Executive Officer of Alnylam. “We are also eager for a number of important milestones over the rest of the year, including topline results from the APOLLO-B Phase 3 study of patisiran in ATTR amyloidosis with cardiomyopathy patients, which we’ve announced today are expected within the next three weeks. Additionally, we plan to continue to advance our robust pipeline, with clinical data expected across several prevalent disease programs in NASH, HBV, gout, and early-onset Alzheimer’s disease with ALN-APP, our first investigational RNAi therapeutic targeting a CNS disorder. We believe the first half of 2022 has been one of steady progress and commercial execution, and we look forward to the many important milestones through the end of the year, moving us further along our path toward achieving our *Alnylam P^{5}x25* goals.”

Second Quarter 2022 and Recent Significant Corporate Highlights

Commercial Performance

TTR Franchise: ONPATTRO® (patisiran) & AMVUTTRA™ (vutrisiran)

- Achieved global net product revenues for ONPATTRO for the second quarter of 2022 of $153 million, representing a 12% increase compared to Q1 2022.
- Attained over 2,400 hATTR amyloidosis patients with polyneuropathy worldwide on commercial ONPATTRO treatment as of June 30, 2022, up from over 2,200 commercial patients as of March 31, 2022, representing 9% quarterly growth.
- Received 133 Start Forms in the U.S. for AMVUTTRA from launch through July 22, 2022 with 34% representing patients new to Alnylam and 66% representing patients switching from ONPATTRO.

GIVLAARI® (givosiran)

- Achieved global net product revenues for the second quarter of 2022 of $45 million, representing a 28% increase compared to Q1 2022.
- Attained over 420 patients worldwide on commercial GIVLAARI treatment as of June 30, 2022, up from over 400 commercial patients as of March 31, 2022, representing 5% quarterly growth.

OXLUMO® (lumasiran)

- Achieved global net product revenues for the second quarter of 2022 of $15 million, representing a 2% increase compared to Q1 2022.
- Attained over 200 patients worldwide on commercial OXLUMO treatment as of June 30, 2022, up from over 160 commercial patients as of March 31, 2022, representing 25% quarterly growth.

Leqvio® (inclisiran)

- Launch in the U.S. and other markets is ongoing, with focus on patient onboarding, removing access hurdles and enhancing medical education.

R&D Highlights

Vutrisiran (the non-proprietary name for AMVUTTRA), a subcutaneously administered RNAi therapeutic in development for the treatment of ATTR amyloidosis and Stargardt Disease

- Received FDA approval of AMVUTTRA for the treatment of the polyneuropathy of hereditary transthyretin-mediated amyloidosis in adults.
- Received a positive opinion from the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) recommending approval of vutrisiran for the treatment of hereditary transthyretin-mediated amyloidosis (hATTR amyloidosis) in adult patients with stage 1 or stage 2 polyneuropathy.
- Reported new 18-month results from exploratory cardiac endpoints from the HELIOS-A Phase 3 study in hATTR amyloidosis patients with polyneuropathy.

Lumasiran (the non-proprietary name for OXLUMO), for the treatment of primary hyperoxaluria type 1 (PH1), and in development for the treatment of recurrent kidney stone disease

- Presented new results from the ILLUMINATE-A Phase 3 study in patients with PH1.
- Presented new results from the 12-month analysis of the ILLUMINATE-B Phase 3 open-label pediatric study in patients less than six years of age with PH1.
- Presented new results from the ILLUMINATE-C Phase 3 study in patients with advanced PH1.

Cemdisiran, in development for the treatment of complement-mediated diseases, in collaboration with Regeneron.

- Reported positive topline results from the Phase 2 study in patients with immunoglobulin A nephropathy (IgAN).
- Alnylam is working with Regeneron to finalize plans for the Phase 3 clinical development of cemdisiran in IgAN, with the potential to initiate a program by late 2022.

Fitusiran, in development for the treatment of hemophilia A or B with and without inhibitors, in collaboration with Sanofi.

- Sanofi presented positive data from the Phase 3 ATLAS-PPX study evaluating the efficacy and safety of once-monthly fitusiran (80 mg) in adults and adolescents with severe hemophilia A or B who were previously treated with prior factor or bypassing agent (BPA) prophylaxis.
    - The study met the primary endpoint and demonstrated fitusiran prophylaxis significantly reduced bleeding episodes compared to prior factor or BPA prophylaxis.

Early- and mid-stage investigational RNAi therapeutic pipeline programs and RNAi platform

- Published preclinical results in *Nature Biotechnology* based on novel conjugate technology facilitating delivery of siRNA to the CNS and other extrahepatic tissues.
- Vir Biotechnology presented new results from its ongoing Phase 2 clinical trial of **ALN-HBV02 (VIR-2218)**, as well as preclinical data evaluating ALN-HBV02 in combination with VIR-3434, in patients with chronic hepatitis B virus infection.
- Initiated a Phase 1 study of **ALN-XDH** in patients with gout.
- Published research findings in *Nature Communications* identifying mutations in the *INHBE* gene associated with protection against abdominal obesity and metabolic syndrome.

Upcoming Events

Alnylam announces today that it expects to report topline results from the pivotal APOLLO-B Phase 3 study of **patisiran** in ATTR amyloidosis patients with cardiomyopathy within the next three weeks.

In addition, the Company announces today that it plans to present results from the Phase 2 study of **cemdisiran** in patients with IgAN at the 18th European Meeting on Complement in Human Disease (EMCHD) being held August 26-29, 2022 in Bern, Switzerland.

In addition, in mid- and late-2022, Alnylam intends to:

- Launch **vutrisiran** in the EU, assuming a favorable adoption of the CHMP opinion by the European Commission, for the treatment of hATTR amyloidosis patients with polyneuropathy.
- Report topline results from Part B of the Phase 1 study of **ALN-HSD** in patients with NASH.
- Report results on a biannual dose regimen for **vutrisiran**.
- Initiate a Phase 3 study of **vutrisiran** in patients with Stargardt Disease.
- File an Investigational New Drug (IND) application and initiate a Phase 1 study for **ALN-TTRsc04** in healthy volunteers.
- Complete enrollment in the Phase 2 study of **lumasiran** in patients with recurrent renal stones.
- Complete enrollment in the KARDIA-2 Phase 2 study of **zilebesiran** (at or around year-end).
- Vir Biotechnology plans to report additional results from its Phase 2 study of **ALN-HBV02** in combination with VIR-3434 in patients with chronic HBV infection in the second half of 2022.
- Report preliminary results from the Phase 1 study of **ALN-APP** in patients with early-onset Alzheimer's disease.
- Report preliminary results from the Phase 1 study of **ALN-XDH** in patients with gout.

Financial Results for the Quarter Ended June 30, 2022

Financial Highlights

	Three Months Ended June 30,	
(in thousands, except per share amounts)	**2022**	**2021**
Net product revenues	$ 213,515	$ 160,811
Net revenue from collaborations	$ 9,025	$ 59,395
Royalty revenue	$ 2,278	$ 347
GAAP Operating loss	$(191,686)	$(146,160)
Non-GAAP Operating loss	$(161,215)	$(114,082)
GAAP Other expense, net	$ (82,987)	$ (42,171)
Non-GAAP Other expense, net	$ (81,890)	$ (37,737)
GAAP Net loss	$(277,402)	$(189,559)
Non-GAAP Net loss	$(245,834)	$(153,047)
GAAP Net loss per common share – basic and diluted	$ (2.29)	$ (1.61)
Non-GAAP Net loss per common share – basic and diluted	$ (2.03)	$ (1.30)

Net Product Revenues

(in thousands, except percentages)	Three Months Ended June 30, 2022	2021	Year over Year % Growth As Reported	At CER*
ONPATTRO net product revenues	$ 153,428	$ 113,839	35%	42%
GIVLAARI net product revenues	45,150	30,630	47%	53%
OXLUMO net product revenues	14,937	16,342	(9)%	(4)%
Total	$ 213,515	$ 160,811	33%	40%

* CER = Constant Exchange Rate, representing growth calculated as if the exchange rates had remained unchanged from those used in the second quarter 2021. CER is a Non-GAAP measure.

- Net product revenues increased 33% at actual currency during the second quarter of 2022, as compared to the prior year, and 40% at CER. The increase is primarily due to increased patients on ONPATTRO and GIVLAARI.

Net Revenues from Collaborations

- Net revenues from collaborations decreased 85% during the second quarter of 2022, as compared to the prior year, primarily due to a decrease in revenue from our collaboration with Regeneron resulting from the timing of reimbursable activities.

Second Quarter 2022 Expenses

(in thousands)	Three Months Ended June 30, 2022	2021
GAAP research and development expenses	$ 205,712	$ 182,635
Non-GAAP research and development expenses	$ 195,074	$ 169,549
GAAP selling, general and administrative expenses	$ 169,984	$ 145,323
Non-GAAP selling, general and administrative expenses	$ 150,151	$ 126,331

Research & Development (R&D) Expenses

- GAAP and Non-GAAP R&D expenses increased during the second quarter of 2022, as compared to the prior year, primarily due to increased early development and study activities, increased employee headcount and other expenses to support our development activities.

Selling, General & Administrative (SG&A) Expenses

- GAAP and Non-GAAP SG&A expenses increased during the second quarter of 2022, as compared to the prior year, primarily due to increased employee headcount and other expenses to support our commercial portfolio.

Other Financial Highlights

- GAAP other expense, net, increased during the second quarter of 2022, as compared to the prior year, primarily due to an approximate $32 million increase in the fair value of our development derivative liability and an increase in interest expenses of approximately $9 million related to additional draws on our term loan facility.
- Cash, cash equivalents and marketable securities were $2.11 billion as of June 30, 2022, compared to $2.44 billion as of December 31, 2021, with the decrease primarily due to our operating loss in the second quarter of 2022.

A reconciliation of our GAAP to non-GAAP results for the current quarter is included in the tables of this press release.

2022 Financial Guidance[1]

Full year 2022 financial guidance is reiterated and consists of the following:

Combined net product revenues for ONPATTRO, GIVLAARI, OXLUMO and AMVUTTRA	$870 million - $930 million
Net revenues from collaborations and royalties	$175 million - $225 million
GAAP R&D and SG&A expenses	$1,620 million - $1,700 million
Non-GAAP R&D and SG&A expenses[2]	$1,390 million - $1,450 million

[1] Guidance utilizes April 18, 2022 FX rates of: 1 EUR = 1.08 USD; 1 GBP = 1.31 USD; 1 CHF = 1.06 USD; 1 CAD = 0.79 USD; 1 USD = 126 JPY.
[2] Primarily excludes $230-$250 million of stock-based compensation expense from estimated GAAP R&D and SG&A expenses.

Use of Non-GAAP Financial Measures

This press release contains non-GAAP financial measures, including expenses adjusted to exclude certain non-cash expenses and non-recurring gains outside the ordinary course of the Company's business and revenue growth excluding the impact of changes in foreign exchange rates. These measures are not in accordance with, or an alternative to, GAAP, and may be different from non-GAAP financial measures used by other companies.

The items included in GAAP presentations but excluded for purposes of determining non-GAAP financial measures for the periods presented in this press release are stock-based compensation expenses and realized and unrealized (gains) losses on marketable equity securities. The Company has excluded the impact of stock-based compensation expense, which may fluctuate from period to period based on factors including the variability associated with performance-based grants for stock options and restricted stock units and changes in the Company's stock price, which impacts the fair value of these awards. The Company has excluded the impact of the realized and unrealized (gains) losses on marketable equity securities because the Company does not believe these adjustments accurately reflect the performance of the Company's ongoing operations for the period in which such gains or losses are reported, as their sole purpose is to adjust amounts on the balance sheet.

Percentage changes in revenue growth at CER are presented excluding the impact of changes in foreign currency exchange rates for investors to understand the underlying business performance. The current period's foreign currency revenue values are converted into U.S. dollars using the average exchange rates from the prior period.

The Company believes the presentation of non-GAAP financial measures provides useful information to management and investors regarding the Company's financial condition and results of operations. When GAAP financial measures are viewed in conjunction with non-GAAP financial measures, investors are provided with a more meaningful understanding of the Company's ongoing operating performance and are better able to compare the Company's performance between periods. In addition, these non-GAAP financial measures are among those indicators the Company uses as a basis for evaluating performance, allocating resources and planning and forecasting future periods. Non-GAAP financial measures are not intended to be considered in isolation or as a substitute for GAAP financial measures. A reconciliation between GAAP and non-GAAP measures is provided later in this press release.

Conference Call Information

Management will provide an update on the Company and discuss second quarter 2022 results as well as expectations for the future via conference call on Thursday, July 28, 2022 at 8:30 am ET. To access the call, please register online at https://register.vevent.com/register/BId099ca291c69486ea91a87453136e78a. Participants are requested to register at a minimum 15 minutes before the start of the call. A replay of the call will be available two hours after the call and archived on the same web page for six months.

A live audio webcast of the call will be available on the Investors section of the Company's website at www.alnylam.com/events. An archived webcast will be available on the Alnylam website approximately two hours after the event.

About ONPATTRO® (patisiran)

ONPATTRO is an RNAi therapeutic that was approved in the United States and Canada for the treatment of the polyneuropathy of hATTR amyloidosis in adults. ONPATTRO is also approved in the European Union, Switzerland and Brazil for the treatment of hATTR amyloidosis in adults with Stage 1 or Stage 2 polyneuropathy, and in Japan for the treatment of hATTR amyloidosis with polyneuropathy. ONPATTRO is an intravenously administered RNAi therapeutic targeting transthyretin (TTR) and should be administered via a healthcare professional. It is designed to target and silence TTR messenger RNA, thereby blocking the production of TTR protein before it is made. ONPATTRO 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 polyneuropathy associated with the disease. For more information about ONPATTRO, including the full U.S. Prescribing Information, visit ONPATTRO.com.

About GIVLAARI® (givosiran)

GIVLAARI is an RNAi therapeutic targeting aminolevulinic acid synthase 1 (ALAS1) approved in the United States and Brazil for the treatment of adults with acute hepatic porphyria (AHP). GIVLAARI is also approved in the European Union for the treatment of AHP in adults and adolescents aged 12 years and older. In the pivotal study, givosiran was shown to significantly reduce the rate of porphyria attacks that required hospitalizations, urgent healthcare visits or intravenous hemin administration at home compared to placebo. GIVLAARI is Alnylam's first commercially available therapeutic based on its Enhanced Stabilization Chemistry ESC-GalNAc conjugate technology to increase potency and durability. GIVLAARI is administered via subcutaneous injection once monthly at a dose based on actual body weight and should be administered by a healthcare professional. GIVLAARI works by specifically reducing elevated levels of ALAS1 messenger RNA (mRNA), leading to reduction of toxins associated with attacks and other disease manifestations of AHP. For more information about GIVLAARI, including the full U.S. Prescribing Information, visit GIVLAARI.com.

About OXLUMO® (lumasiran)

OXLUMO is an RNAi therapeutic targeting hydroxyacid oxidase 1 (HAO1) for the treatment of primary hyperoxaluria type 1 (PH1) to lower urinary oxalate levels in pediatric and adult patients. HAO1 encodes glycolate oxidase (GO), an enzyme upstream of the disease-causing defect in PH1. OXLUMO works by degrading HAO1 messenger RNA and reducing the synthesis of GO, which inhibits hepatic production of oxalate – the toxic metabolite responsible for the clinical manifestations of PH1. In the pivotal ILLUMINATE-A study, OXLUMO was shown to significantly reduce levels of urinary oxalate relative to placebo, with the majority of patients reaching normal or near-normal levels. Injection site reactions (ISRs) were the most common drug-related adverse reaction. In the ILLUMINATE-B pediatric Phase 3 study, OXLUMO demonstrated an efficacy and safety profile consistent to that observed in ILLUMINATE-A. OXLUMO utilizes Alnylam's Enhanced Stabilization Chemistry (ESC)-GalNAc conjugate technology designed to increase potency and durability. OXLUMO is administered via subcutaneous injection once monthly for three months, then once quarterly thereafter at a dose based on actual body weight. For patients who weigh less than 10 kg, ongoing dosing remains monthly. OXLUMO should be administered by a healthcare professional. For more information about OXLUMO, including the full U.S. Prescribing Information, visit OXLUMO.com.

About AMVUTTRA™ (vutrisiran)

AMVUTTRA™ (vutrisiran) is an RNAi therapeutic approved in the United States for the treatment of the polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis in adults. It is a double-stranded small interfering RNA (siRNA) that targets mutant and wild-type transthyretin (TTR) messenger RNA (mRNA). Using Alnylam's Enhanced Stabilization Chemistry (ESC)-GalNAc-conjugate delivery platform, AMVUTTRA is designed for increased potency and high metabolic stability to allow for subcutaneous injection once every three months (quarterly). Results from the pivotal HELIOS-A Phase 3 study demonstrate AMVUTTRA rapidly reduces serum TTR levels, has the potential to reverse neuropathy impairment relative to baseline and improves other key measures of disease burden relative to external placebo in patients with the polyneuropathy of hATTR amyloidosis. For more information about AMVUTTRA, including the full U.S. Prescribing Information, visit AMVUTTRA.com.

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 or disease pathway 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) has led 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 and prevalent diseases with unmet need. Based on Nobel Prize-winning science, RNAi therapeutics represent a powerful, clinically validated approach yielding transformative medicines. Since its founding 20 years ago, Alnylam has led the RNAi Revolution and continues to deliver on a bold vision to turn scientific possibility into reality. Alnylam's commercial RNAi therapeutic products are ONPATTRO® (patisiran), GIVLAARI® (givosiran), OXLUMO® (lumasiran), AMVUTTRA™ (vutrisiran), and Leqvio® (inclisiran) being developed and commercialized by Alnylam's partner, Novartis. Alnylam has a deep pipeline of investigational medicines, including multiple product candidates that are in late-stage development. Alnylam is executing on its "*Alnylam P^{5}x25*" strategy to deliver transformative medicines in both rare and common diseases benefiting patients around the world through sustainable innovation and exceptional financial performance, resulting in a leading biotech profile. Alnylam 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, on LinkedIn, or on Instagram.

Alnylam Forward Looking Statements

Various statements in this release concerning Alnylam's expectations, plans, aspirations and goals, including, without limitation, our aspiration to become a leading biotech company and the planned achievement of our "*Alnylam P^{5}x25*" strategy, the launch of AMVUTTRA in the U.S. for the treatment of the polyneuropathy of hATTR amyloidosis in adults, and the ongoing review and potential approval of vutrisiran by other regulatory authorities, the expected timing of topline data from the APOLLO-B Phase 3 clinical study, the achievement of additional pipeline milestones and data, including relating to ongoing clinical studies of vutrisiran, zilebesiran, lumasiran, cemdisiran, ALN-HBV02 (Vir 2218), ALN-HSD, ALN-APP and ALN-XDH, the initiation of a Phase 3 clinical study for vutrisiran in Stargardt disease and the filing of an IND for ALN-TTRsc04, the expected range of net product revenues and net revenues from collaborations and royalties for 2022, and the expected range of aggregate annual GAAP and non-GAAP R&D and SG&A expenses for 2022, 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: the direct or indirect impact of the COVID-19 global pandemic or any future pandemic on Alnylam's business, results of operations and financial condition and the effectiveness or timeliness of Alnylam's efforts to mitigate the impact of the pandemic; the potential impact of the recent leadership transition on Alnylam's ability to attract and retain talent and to successfully execute on its "*Alnylam P^{5}x25*" strategy; Alnylam's ability to discover and develop novel drug candidates and delivery approaches and successfully demonstrate the efficacy and safety of its product candidates, including patisiran; the pre-clinical and clinical results for its product candidates; actions or advice of regulatory agencies and Alnylam's ability to obtain and maintain regulatory approval for its product candidates, as well as favorable pricing and reimbursement; successfully launching, marketing and selling its approved products globally; delays, interruptions or failures in the manufacture and supply of its product candidates or its marketed products; obtaining, maintaining and protecting intellectual property; Alnylam's ability to successfully expand the indication for ONPATTRO, AMVUTTRA or OXLUMO in the future; Alnylam's ability to manage its growth and operating expenses through disciplined investment in operations and its ability to achieve a self-sustainable financial profile in the future without the need for future equity financing; Alnylam's ability to maintain strategic business collaborations; Alnylam's dependence on third parties for the development and commercialization of certain products, including Novartis, Regeneron and Vir; the outcome of litigation; the potential impact of a current government investigation and the risk of future 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 its other SEC filings. 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.

This release discusses investigational RNAi therapeutics and uses of previously approved RNAi therapeutics in development and is not intended to convey conclusions about efficacy or safety as to those investigational therapeutics or uses. There is no guarantee that any investigational therapeutics or expanded uses of commercial products will successfully complete clinical development or gain health authority approval.

ALNYLAM PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Statements of Operations				
Revenues:				
Net product revenues	$ 213,515	$ 160,811	$ 400,387	$ 296,580
Net revenues from collaborations	9,025	59,395	34,970	101,192
Royalty revenue	2,278	347	2,720	347
Total revenues	224,818	220,553	438,077	398,119
Operating costs and expenses:				
Cost of goods sold	34,038	30,256	57,495	53,279
Cost of collaborations and royalties	6,770	8,499	18,940	16,538
Research and development	205,712	182,635	375,605	368,534
Selling, general and administrative	169,984	145,323	324,455	292,182
Total operating costs and expenses	416,504	366,713	776,495	730,533
Loss from operations	(191,686)	(146,160)	(338,418)	(332,414)
Other (expense) income:				
Interest expense	(42,609)	(33,416)	(84,971)	(65,931)
Other (expense) income, net	(40,378)	(8,755)	(90,640)	10,739
Total other expense, net	(82,987)	(42,171)	(175,611)	(55,192)
Loss before income taxes	(274,673)	(188,331)	(514,029)	(387,606)
Provision for income taxes	(2,729)	(1,228)	(3,714)	(2,244)
Net loss	$(277,402)	$(189,559)	$(517,743)	$(389,850)
Net loss per common share - basic and diluted	$ (2.29)	$ (1.61)	$ (4.29)	$ (3.32)
Weighted-average common shares used to compute basic and diluted net loss per common share	120,896	117,772	120,646	117,428

ALNYLAM PHARMACEUTICALS, INC.
RECONCILIATION OF SELECTED GAAP MEASURES TO NON-GAAP MEASURES
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Reconciliation of GAAP to Non-GAAP research and development:				
GAAP Research and development	$ 205,712	$ 182,635	$ 375,605	$ 368,534
Less: Stock-based compensation expenses	(10,638)	(13,086)	(22,255)	(37,461)
Non-GAAP Research and development	$ 195,074	$ 169,549	$ 353,350	$ 331,073
Reconciliation of GAAP to Non-GAAP selling, general and administrative:				
GAAP Selling, general and administrative	$ 169,984	$ 145,323	$ 324,455	$ 292,182
Less: Stock-based compensation expenses	(19,833)	(18,992)	(37,509)	(50,307)
Non-GAAP Selling, general and administrative	$ 150,151	$ 126,331	$ 286,946	$ 241,875
Reconciliation of GAAP to Non-GAAP operating loss:				
GAAP Operating loss	$(191,686)	$(146,160)	$(338,418)	$(332,414)
Add: Stock-based compensation expenses	30,471	32,078	59,764	87,768
Non-GAAP Operating loss	$(161,215)	$(114,082)	$(278,654)	$(244,646)
Reconciliation of GAAP to Non-GAAP Other (expense) income:				
GAAP Total other expense, net	$ (82,987)	$ (42,171)	$(175,611)	$ (55,192)
Add: Unrealized loss on marketable equity securities	1,097	4,434	32,258	(42,582)
Non-GAAP Other expense, net	$ (81,890)	$ (37,737)	$(143,353)	$ (97,774)
Reconciliation of GAAP to Non-GAAP net loss:				
GAAP Net loss	$(277,402)	$(189,559)	$(517,743)	$(389,850)
Add: Stock-based compensation expenses	30,471	32,078	59,764	87,768
Add (Less): Realized and unrealized loss (gain) on marketable equity securities	1,097	4,434	32,258	(42,582)
Non-GAAP Net loss	$(245,834)	$(153,047)	$(425,721)	$(344,664)
Reconciliation of GAAP to Non-GAAP net loss per common share-basic and diluted:				
GAAP Net loss per common share - basic and diluted	$ (2.29)	$ (1.61)	$ (4.29)	$ (3.32)
Add: Stock-based compensation expenses	0.25	0.27	0.50	0.75
Add (Less): Realized and unrealized loss (gain) on marketable equity securities	0.01	0.04	0.27	(0.36)
Non-GAAP Net loss per common share - basic and diluted	$ (2.03)	$ (1.30)	$ (3.53)	$ (2.93)

Please note that the figures presented above may not sum exactly due to rounding

ALNYLAM PHARMACEUTICALS, INC.
RECONCILIATION OF GAAP TO NON-GAAP
PRODUCT REVENUE GROWTH AT CONSTANT CURRENCY
(Unaudited)

	June 30, 2022	
	Three Months Ended	**Six Months Ended**
ONPATTRO net product revenue growth, as reported	35%	35%
Less: Impact of foreign currency translation	7	6
ONPATTRO net product revenue growth at constant currency	42%	41%
GIVLAARI net product revenue growth, as reported	47%	45%
Less: Impact of foreign currency translation	6	5
GIVLAARI net product revenue growth at constant currency	53%	50%
OXLUMO net product revenue growth, as reported	(9)%	16%
Less: Impact of foreign currency translation	5	6
OXLUMO net product revenue growth at constant currency	(4)%	22%
Total net product revenue growth, as reported	33%	35%
Less: Impact of foreign currency translation	7	6
Total net product revenue growth at constant currency	40%	41%

ALNYLAM PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)
(Unaudited)

	June 30, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 575,558	$ 819,975
Marketable debt securities	1,504,154	1,548,617
Marketable equity securities	30,901	66,972
Accounts receivable, net	142,271	198,571
Inventory	88,976	86,363
Prepaid expenses and other current assets	129,778	88,078
Total current assets	2,471,638	2,808,576
Property, plant and equipment, net	508,201	501,958
Operating lease right-of-use assets	223,921	231,675
Restricted investments	49,390	40,891
Other assets	77,267	60,204
Total assets	$ 3,330,417	$ 3,643,304
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 52,418	$ 73,426
Accrued expenses	421,243	395,174
Operating lease liability	41,236	40,548
Deferred revenue	114,292	149,483
Liability related to the sale of future royalties	28,496	37,079
Total current liabilities	657,685	695,710
Operating lease liability, net of current portion	272,016	281,347
Deferred revenue, net of current portion	175,341	152,360
Long-term debt	677,723	675,697
Liability related to the sale of future royalties, net of current portion	1,214,311	1,151,024
Other liabilities	157,301	98,963
Total liabilities	3,154,377	3,055,101
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock, $0.01 par value per share, 5,000 shares authorized and no shares issued and outstanding as of June 30, 2022 and December 31, 2021	—	—
Common stock, $0.01 par value per share, 250,000 shares authorized; 120,992 shares issued and outstanding as of June 30, 2022; 120,182 shares issued and outstanding as of December 31, 2021	1,210	1,202
Additional paid-in capital	6,172,990	6,058,453
Accumulated other comprehensive loss	(42,224)	(33,259)
Accumulated deficit	(5,955,936)	(5,438,193)
Total stockholders' equity	176,040	588,203
Total liabilities and stockholders' equity	$ 3,330,417	$ 3,643,304

This selected financial information should be read in conjunction with the consolidated financial statements and notes thereto included in Alnylam's Annual Report on Form 10-K which includes the audited financial statements for the year ended December 31, 2021.

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