

Alnylam Pharma (ALNY)

\$151.11 (As of 07/30/20)

Price Target (6-12 Months): **\$158.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 08/04/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:F

Value: F

Growth: D

Momentum: C

Summary

Alnylam's drug Onpattro has been witnessing strong uptake since its launch. In November 2019, the FDA approved its second product, Givlaari (givosiran) for acute hepatic porphyria. Meanwhile, an NDA for lumasiran is under priority review with the FDA, with approval expected in late 2020 which should boost growth prospects. It expects to advance additional late-stage programs, namely vutrisiran inclisiran and fitusiran. It has a landmark ocular and CNS disease alliance with Regeneron to develop and commercialize new RNAi therapeutics for a broad range of diseases. Although we are pleased with Alnylam's broad and promising pipeline, the company heavily relies on partnerships for supporting operations, which remains a concern.

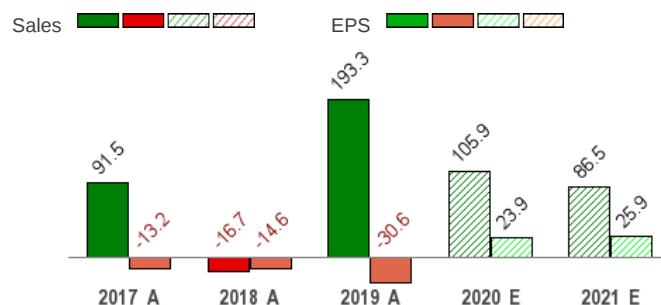
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$167.33 - \$69.11
20 Day Average Volume (sh)	620,992
Market Cap	\$17.4 B
YTD Price Change	30.7%
Beta	1.86
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Top 39% (99 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	14.3%
Last Sales Surprise	9.1%
EPS F1 Est- 4 week change	-0.1%
Expected Report Date	08/06/2020
Earnings ESP	-49.5%
P/E TTM	NA
P/E F1	NA
PEG F1	NA
P/S TTM	60.7

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	146 E	164 E	181 E	203 E	845 E
2020	99 A	182 E	115 E	142 E	453 E
2019	33 A	45 A	70 A	72 A	220 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	-\$1.76 E	-\$1.75 E	-\$1.64 E	-\$1.61 E	-\$4.57 E
2020	-\$1.62 A	-\$1.15 E	-\$1.77 E	-\$1.65 E	-\$6.17 E
2019	-\$1.42 A	-\$1.83 A	-\$1.92 A	-\$2.47 A	-\$8.11 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 07/30/2020. The reports text is as of 07/31/2020.

Overview

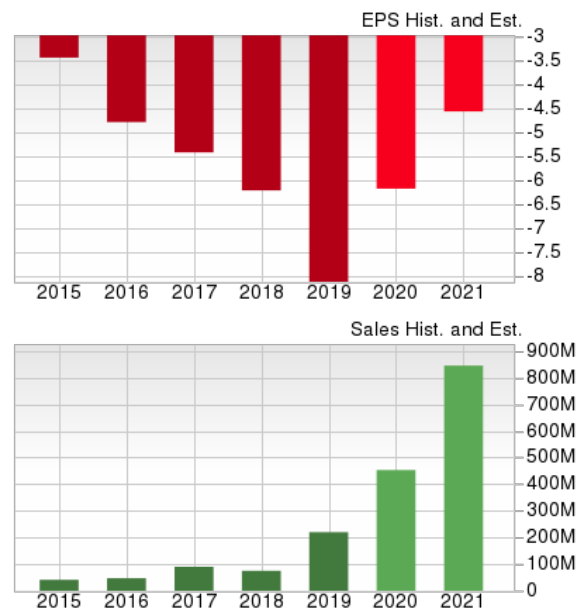
Cambridge, MA-based Alnylam Pharmaceuticals Inc. is a development-stage biopharmaceutical company focused on the development of novel therapeutics based on RNA interference (RNAi). The company's pipeline of experimental RNAi therapeutics is focused across three strategic therapeutic areas (STArS) – genetic medicines, cardio-metabolic disease and hepatic infectious disease.

In August 2018, the company's lead drug-Onpattro (patisiran) received regulatory approvals in the United States and Europe for the treatment of hereditary transthyretin-mediated (hATTR) amyloidosis in adults. Onpattro is the first and only FDA-approved treatment for this indication. In November 2019, the FDA approved Givlaari (givosiran) for acute hepatic porphyria (AHP).

Moreover, the company is evaluating inclisiran for hypercholesterolemia in partnership with The Medicines Company acquired by Novartis in January 2020. Alnylam also submitted an NDA and an MAA for inclisiran to the FDA and the EMA, respectively in 2019.

Alnylam's expertise in RNAi therapeutics and broad intellectual property estate has allowed the company to enter into collaborations with leading pharmaceutical and life sciences companies including Ionis Pharmaceuticals, Novartis, Roche, Takeda, Merck, Monsanto, The Medicines Company and Sanofi's specialty care global business unit, Genzyme among others.

Alnylam generates revenues from research collaborations, grants, and licensing of the RNAi technology outside its core focus area. In 2019, Alnylam recorded sales of \$219.8 million, up 193.4% year over year



Reasons To Buy:

▲ **Onpattro (patisiran) Approval A Significant Boost:** In August 2018, the FDA approved Onpattro (patisiran) lipid complex injection- a first-of-its-kind RNA interference (RNAi) therapeutic, for the treatment of the polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis in adults. Onpattro is the first and only FDA-approved treatment for this indication. The uptake of the drug has been strong with more than 950 patients worldwide on commercial Onpattro treatment since its launch as of Mar 31, 2020. The drug should drive revenues for the company as it will be an important treatment option for people suffering from this often fatal disease.

Anylam expects to bring three products to the market by 2020, including the already approved drugs — Givlaari and Onpattro.

Pending regulatory approvals, Anylam will commercialize Onpattro in Western Europe, with Sanofi Genzyme commercializing the product in the rest of the world.

In addition, Anylam is also planning to expand the label of Onpattro. In this regard, the company continued enrollment in the APOLLO-B phase 3 study in ATTR amyloidosis patients with cardiomyopathy. In February 2020, the company received approval for Onpattro for treating hATTR patients in Brazil. Label expansion of the drug should further boost sales for the company.

▲ **Givosiran Approval Encouraging, Inclisiran Filed:** In November 2019, the FDA approved givosiran injection for subcutaneous use for the treatment of adults with acute hepatic porphyria (AHP). Givosiran injection will be marketed by the trade name of Givlaari. This is the second RNAi therapeutic from Anylam approved by the FDA in the last sixteen months. This approval should further boost sales for the company. In March 2020, the company received approval for Givlaari for the treatment of AHP in adolescents and adults in the EU. The company filed a marketing authorization application for Givlaari with the Brazilian Health Regulatory Agency (ANVISA).

Moreover, the company is evaluating inclisiran phase III ORION studies for hypercholesterolemia in partnership with The Medicines Company acquired by Novartis in January 2020. The companies reported positive complete results from the ORION-9 and -10 phase III studies of inclisiran in patients with heterozygous familial hypercholesterolemia (HeFH) and atherosclerotic cardiovascular disease (ASCVD). Anylam also submitted an NDA and an MAA for inclisiran to the FDA and the EMA, respectively.

▲ **RNAi Technology Holds Promise:** Anylam makes use of a potentially radical RNAi technology. This technology is a naturally occurring biological pathway within cells for selectively silencing and regulating the expression of specific genes. Since many diseases are caused by the inappropriate activity of specific genes, the ability to make the genes silent selectively through RNAi hold the potential to change the way diseases are treated.

Anylam's pipeline of experimental RNAi therapeutics is focused across three STArS: genetic medicines – for the treatment of rare diseases; cardio-metabolic disease – cardiovascular and metabolic diseases such as dyslipidemia, non-alcoholic steatohepatitis, type II diabetes, hypertension and other major diseases; as well as hepatic infectious disease – hepatic infectious diseases, beginning with hepatitis B and hepatitis D viral infections.

▲ **Broad & Promising Pipeline:** The company is also evaluating several other candidates. Interesting ones include ALN-CC5 (phase I/II; complement-mediated diseases), cemdisiran (phase II, complement-mediated diseases) and lumasiran (regulatory application filed for Primary Hyperoxaluria Type 1 (PH1)), vutrisiran (ALN-TTRsc02) a once-quarterly, subcutaneously administered investigational RNAi therapeutic in development for the treatment of ATTR amyloidosis.

ALN-AAT02 is the first investigational RNA interference (RNAi) therapeutic targeting AAT with Anylam's enhanced stabilization chemistry plus (ESC+) GalNAc-conjugate technology. In the fourth quarter of 2019, the company announced initial positive clinical results with ALN-AAT02, providing initial human proof of concept for "Enhanced Stabilization Chemistry Plus" (ESC+) GalNAc conjugate delivery technology.

In February 2020, Anylam completed enrollment in the HELIOS-A phase III study on vutrisiran (ALN-TTRsc02) for the treatment of hATTR amyloidosis with polyneuropathy. Top-line data from the study is expected in early 2021. The company also initiated the HELIOS-B phase III study in patients with hereditary and wild-type ATTR amyloidosis with cardiomyopathy in November 2019.

In June 2018, the company received orphan drug designation for ALN-TTRsc02 by the FDA.

Anylam advanced lumasiran, an investigational RNAi therapeutic in development for the treatment of primary hyperoxaluria type I (PH1). The company reported positive top-line results from ILLUMINATE-A in December 2019 and it met its primary efficacy endpoint and all tested secondary endpoints. Based on these results, the company filed an NDA with the FDA in April 2020. The NDA was granted priority review by the FDA in May and a decision is expected by Dec 3, 2020. The company completed enrollment in the ILLUMINATE-B phase III study of lumasiran in PH1 patients less than six years of age with preserved renal function, and remains on track to report top line results in mid-2020. It initiated the ILLUMINATE-C phase III study of lumasiran for the treatment of advanced PH1 in patients of all ages with advanced renal disease. The company received a pediatric rare disease designation from the FDA for lumasiran for the treatment of PH1.

In July 2020, United Kingdom's Medicines and Healthcare Products Regulatory Agency (MHRA) granted lumasiran a positive scientific opinion through the Early Access to Medicines Scheme (EAMS). With this decision, eligible PH1 patients in the United Kingdom, many of whom are children, can gain access to lumasiran before the drug is granted marketing authorization by the European Commission (EC). The MHRA's decision is based on the evaluation of the effects of lumasiran in PH1 patients and its safety profile, including data from the ILLUMINATE-A phase III study.

Lumasiran has been granted Breakthrough Therapy designation (BTD) by the FDA, representing the third BTD received by the company to date. In March 2018, the European Medicines Agency (EMA) granted access to its Priority Medicines (PRIME) scheme for lumasiran.

A phase II study of cemdisiran, an investigational RNAi therapeutic targeting complement C5 for the treatment of complement-mediated diseases in IgA nephropathy is ongoing.

ALN-HBV02 (also known as VIR-2218), partnered with Vir and in development for the treatment of chronic hepatitis B virus (HBV) infection, which is currently in a Phase I/II study. In the fourth quarter of 2019, the company announced initial positive clinical results with ALN-HBV02 providing initial human proof of concept for "Enhanced Stabilization Chemistry Plus" (ESC+) GalNAc conjugate delivery technology.

The company reported strong progress in CNS and ocular delivery of RNAi therapeutics with seven initial programs selected as part of Regeneron collaboration, including ALN-APP, in development for the treatment of cerebral amyloid angiopathy and potentially other neurodegenerative diseases, and ALN-HTT, in development for the treatment of Huntington's disease.

ALN-AGT, an investigational RNAi therapeutic targeting angiotensinogen (AGT) for the treatment of hypertension in high unmet need populations, including patients with resistant or refractory hypertension, chronic kidney disease or heart failure is currently in a phase I study.

Alnylam submitted a Clinical Trial Authorization (CTA) application for ALN-AAT02, an investigational RNAi therapeutic for the treatment of alpha-1 antitrypsin deficiency-associated liver disease (alpha-1 liver disease). It is currently in a phase I/II study.

Alnylam selected its first CNS-targeted development candidate, ALN-APP, an investigational RNAi therapeutic targeting amyloid precursor protein (APP) for the treatment of cerebral amyloid angiopathy (CAA).

Successful development and subsequent approval of these candidates will be a huge boost for the company.

- ▲ **Encouraging Collaborations:** Alnylam has entered into several collaborations for the development and commercialization of its broad pipeline of RNAi therapeutic candidates across three STArS. Particularly, with respect to Alnylam's genetic medicine pipeline, the company formed a broad strategic alliance with Sanofi's Genzyme in 2014, following which Sanofi became a major Alnylam shareholder with an investment of \$700 million. In January 2018, Alnylam and Sanofi announced a strategic restructuring of their RNAi therapeutics rare genetic diseases alliance. The companies entered into the agreement to optimize the development and commercialization of certain products for the treatment of rare genetic diseases. Per the agreement, Alnylam will fund all the development and commercialization costs for — Onpattro and its investigational RNAi therapeutics candidate ALN-TTRsc02 — that are being evaluated for the treatment of ATTR amyloidosis.

In April 2018, Alnylam and Sanofi agreed to close the research and option phase of the companies' 2014 RNAi therapeutics alliance in rare genetic diseases. The material collaboration terms for Onpattro, vutrisiran and fitusiran will remain unchanged. Per the agreement, Alnylam will advance a selected investigational asset in an undisclosed rare genetic disease through the end of the IND-enabling studies. Sanofi will be responsible for any potential further development or commercialization of the asset. If this product is approved, Alnylam will be eligible to receive tiered double-digit royalties on its global net sales.

Following the restructuring initiative, Sanofi will undertake full responsibility for the development and commercialization of fitusiran, including costs. Sanofi will retain the right to opt for other Alnylam rare genetic disease programs for development and commercialization in territories outside the United States, Canada, and Western Europe as well as right to a global license. Sanofi continues enrollment in the fitusiran phase III ATLAS program in patients with hemophilia A or B with and without inhibitors.

In April 2019, Alnylam and Regeneron Pharmaceuticals extended their collaboration agreement. Both the companies will work together to discover, develop and commercialize new 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 companies plan to advance programs directed to 30 targets. Other candidates also might be introduced into clinical development during the initial five-year discovery period, which may extend.

In April 2020, Alnylam and The Blackstone Group entered into a broad strategic collaboration which will support Alnylam's advancement of innovative RNAi medicines with up to \$2 billion investment from Blackstone. Alnylam believes that the deal with Blackstone will make the company self-sustainable. The Blackstone investment will also likely accelerate the commercial potential of Alnylam's rapidly advancing product portfolio and support the development and delivery of promising medicines.

- ▲ In July 2020, Alnylam and taiba Middle East, a leading rare disease company based in the United Arab Emirates and covering the Middle East region, announced that they have formed a Distribution Agreement for both Onpattro and Givlaari. The Agreement between Alnylam and taiba will initially cover the Gulf states, including the Kingdom of Saudi Arabia, Kuwait, Bahrain, Qatar, Oman and the United Arab Emirates. It includes Onpattro, approved in the European Union (EU) for the treatment of hATTR amyloidosis in adults with stage 1 or stage 2 polyneuropathy; Givlaari, approved in the EU for the treatment of acute hepatic porphyria (AHP); and lumasiran, a late-stage investigational RNAi therapeutic for the treatment of PH1.
- ▲ **Favorable Debt Profile:** Alnylam has a favorable debt profile. As of Mar 31, 2020, the company's debt-to-total capital ratio was 0.184, which compared favorably with the industry's 0.509. A lower ratio indicates lower financial risk. Also, the company's total debt (current and long-term debt) was approximately \$305 million as of March end. The company's cash, cash equivalents, and marketable securities totaling approximately \$1.34 billion, at the end of March 2020, should be sufficient to pay the debt in case of insolvency.

Reasons To Sell:

▼ **Pipeline Setbacks:** Although we are pleased with Alnylam's broad and promising pipeline, we note that most candidates are in their early or mid stages of development. These candidates still have a long way to go before hitting the market. Currently, Alnylam depends heavily on Onpattro for growth. We also note that gaining approval for pipeline candidates has become more difficult now. With several data read-outs expected over the next few quarters, an unfavorable outcome will be a huge setback for the company and hamper its prospects.

We note that Alnylam is no stranger to pipeline setbacks. In October 2016, Alnylam discontinued the phase III ENDEAVOUR study on revusiran for the treatment of hereditary ATTR amyloidosis with cardiomyopathy (hATTR-CM). The decision followed the recommendation of a Data Monitoring Committee which suggested that the benefit-risk profile of the candidate did not support continued dosing in patients.

During the third quarter of 2018, the company announced that due to recruitment challenges, it has discontinued a phase II study of cemdisiran in atypical hemolytic uremic syndrome (aHUS). Alnylam will now focus its cemdisiran clinical efforts on a phase II study in IgA nephropathy.

▼ **High Reliance on Partnerships & High Competition:** Alnylam derives a substantial amount of revenues from strategic partnerships with companies like Sanofi, Takeda, Monsanto and Novartis. Therefore, Alnylam is heavily dependent on its partnerships for supporting operations and pipeline development activities. The company expects to continue deriving revenues from the existing and new strategic alliances, which may include license and other fees, funded R&D and milestone payments over the next several years. If any of the company's partners fails to fund a program or terminate collaboration agreement, Alnylam's prospects would be hampered.

Moreover, Alnylam is not the only company working on the development of RNAi-based therapeutics. Companies like Ionis, Sarepta Therapeutics and Roche Innovation Center are involved in the development of RNA-based drugs. Some of the companies including Takeda, Wave Life Sciences and Dicerna Pharmaceuticals are even looking to develop chemically synthesized siRNAs as drugs. While Alnylam's candidates that are currently under development target lucrative markets, they will face intense competition too, if approved. The hemophilia and bleeding disorders market has several players like Bayer, Pfizer, Biogen, CSL Behring and Shire. Meanwhile, the market for complement-mediated diseases has players like Alexion Pharmaceuticals. The cholesterol management market represents huge commercial potential and with companies like Ionis operating in it. Competition in this space intensified with the introduction of PCSK9 inhibitors – Amgen's Repatha and Regeneron/Sanofi's Praluent. Also, Ionis is developing IONIS-TTRRx, to treat all forms of ATTR amyloidosis, FAP, FAC, and wild-type TTR amyloidosis.

Alnylam relies highly on collaborators for funding. Any development/regulatory setback would be a negative for the company. Stiff competition remains a threat as well.

Last Earnings Report

Alnylam's Q1 Earnings & Sales Beat Estimates

Alnylam incurred a loss of \$1.62 per share in the first quarter of 2020, narrower than the Zacks Consensus Estimate of a loss of \$1.89 per share. The loss includes stock-based compensation expenses and unrealized gains on equity securities. Excluding these items, adjusted loss was \$1.52 per share, wider than adjusted loss of \$1.42 in the year-ago quarter.

The company recorded revenues of \$99.5 million, which beat the Zacks Consensus Estimate of \$91 million. In the year-ago quarter, revenues were \$33.3 million. Net product revenues were \$71.9 million, up 174% year over year driven by higher sales of Onpattro (patisiran) and U.S. commercial launch of Givlaari (givosiran). Net revenues from collaborators were \$27.5 million due to revenues recognized under collaborations with Regeneron Pharmaceuticals and Vir Biotechnology.

Quarter Ending **03/2020**

Report Date	May 06, 2020
Sales Surprise	9.05%
EPS Surprise	14.29%
Quarterly EPS	-1.62
Annual EPS (TTM)	-7.84

Quarter in Detail

Onpattro recorded sales of \$66.7 million in the first quarter, up 153.6% year over year driven by patient growth and expansion in new markets. Onpattro revenues rose 20% sequentially as slower growth in the U.S. market was offset by strong growth in international markets.

Givlaari recorded sales of \$5.2 million in the first quarter of 2020, its first full quarter post launch. Alnylam said it is witnessing early impressive demand for Givlaari in the United States and expects contribution from international markets in the second quarter as it will launch the product in Germany.

Adjusted operating costs increased 40% year over year to \$261.7 million as a result of increased investment to advance its late-stage pipeline and support ongoing launches of Onpattro and Givlaari.

2020 Guidance

Alnylam lowered its product revenue expectations for Onpattro by 5% from \$285-\$315 million to \$270-\$300 million due to the potential impact of the coronavirus pandemic. Alnylam expects the most significant impact of the pandemic in the second quarter. It expects sales of Onpattro to decline about 10% sequentially in the second quarter as patient adherence to the regimen will decrease with patients skipping or delaying doses amid coronavirus-related lockdown. However, Alnylam expects improvement in growth in the second half of the year. Net revenues from collaborations are expected in the range of \$100 million-\$150 million (maintained).

The company also lowered its operating cost guidance for the year. The company expects adjusted operating costs to be in the range of \$1 billion-\$1.08 billion versus the prior expectation of \$1.03 billion-\$1.13 billion.

Recent News

United Kingdom's MHRA Grants Early Access to Lumasiran-July 13

Alnylam announced that the UK's Medicines and Healthcare Products Regulatory Agency (MHRA) has granted lumasiran, an investigational RNAi therapeutic in development for the treatment of primary hyperoxaluria type 1 (PH1), a positive scientific opinion through the Early Access to Medicines Scheme (EAMS). With this decision, eligible PH1 patients in the United Kingdom, many of whom are children, can gain access to lumasiran before the drug is granted marketing authorization by the European Commission (EC).

The MHRA's decision is based on the evaluation of the effects of lumasiran in PH1 patients and its safety profile, including data from the ILLUMINATE-A phase III study.

A marketing authorization application (MAA) for lumasiran has been submitted to the European Medicines Agency (EMA) in April 2020 and was granted Accelerated Assessment. Lumasiran previously received Priority Medicines (PRIME) designation. The EC decision, which will apply to the UK, is expected in late 2020. In addition, Alnylam filed a new drug application (NDA) with the FDA. The FDA has granted a Priority Review for the NDA and has set an action date of Dec 3, 2020.

Inks Deal with Taiba Group to Commercialize RNAi Therapeutics in the Gulf States-July 8

Alnylam and taiba Middle East, a leading rare disease company based in the United Arab Emirates and covering the Middle East region, announced that they have formed a Distribution Agreement for both Onpatro and Givlaari, the first-ever commercialized RNAi therapeutics, as well as another late-stage therapy in development for Primary Hyperoxaluria Type 1 (PH1).

The Agreement between Alnylam and taiba will initially cover the Gulf states, including the Kingdom of Saudi Arabia, Kuwait, Bahrain, Qatar, Oman and the United Arab Emirates. It includes Onpatro, approved in the European Union (EU) in August 2018 for the treatment of hATTR amyloidosis in adults with stage 1 or stage 2 polyneuropathy; Givlaari, approved in the EU in March 2020 for the treatment of acute hepatic porphyria (AHP); and lumasiran, a late-stage investigational RNAi therapeutic for the treatment of PH1.

Reports New 12-Month Interim Data From the ENVISION Phase III Study of Givlaari

Alnylam announced the presentation of new data from the open-label extension (OLE) period of the ENVISION phase III study, reinforcing the long-term therapeutic benefit of Givlaari (givosiran) in patients with acute hepatic porphyria (AHP)—an orphan disease that can be life threatening. In an interim analysis of the OLE period, Givlaari demonstrated sustained efficacy and safety through 12 months of treatment, with evidence for potentially improved efficacy over time.

The ENVISION phase III study evaluated the efficacy and safety of Givlaari in patients with AHP. As previously reported and Givlaari met the primary endpoint in the 6-month double-blind (DB) period, with a 74% mean reduction in the annualized rate of composite porphyria attacks (AAR) that required hospitalization, urgent healthcare visit or intravenous hemin administration at home, and a median AAR of 1.0. Givlaari also demonstrated an acceptable safety and tolerability profile in this high unmet need indication.

Upon completion of dosing in the DB period, all eligible patients (enrolled in the OLE period of the trial to receive monthly Givlaari at either 2.5 mg/kg or 1.25 mg/kg. Results at 12 months showed that continued givosiran treatment led to sustained AAR reduction in the OLE period (6-12 months) with a median AAR of 0.0.

Announces Publication of ENVISION Phase III Study Results for Givosiran-June 10

Alnylam announced that pivotal results from the ENVISION phase III study of givosiran, an RNAi therapeutic targeting aminolevulinic acid synthase 1 (ALAS1) for the treatment of acute hepatic porphyria (AHP), were published online in the *New England Journal of Medicine (NEJM)*.

The data reported in the ENVISION phase III study publication demonstrated that RNAi-mediated targeting of liver ALAS1 by givosiran led to sustained reductions in aminolevulinic acid (ALA) and porphobilinogen (PBG)—the toxic heme synthesis intermediates believed to be causal for the disease manifestations of AHP. Relative to placebo, treatment with givosiran resulted in a significant and clinically meaningful reduction of 74% in the primary endpoint of the annualized rate of composite porphyria attacks (AAR), defined as those attacks requiring hospitalization, urgent healthcare visit, or intravenous hemin administration at home, in patients with acute intermittent porphyria (AIP), the most common form of AHP, over six months.

Alnylam Reports Positive Phase III Results on Lumasiran-June 7

Alnylam announced positive phase III results from the ILLUMINATE-A study on its RNAi candidate, lumasiran in development for the treatment of primary hyperoxaluria type 1 (PH1). Data from the study showed that PH1 patients treated with lumasiran met the primary efficacy endpoint of percent change from baseline, relative to placebo. The study also achieved statistically significant results for all six tested secondary endpoints, including the proportion of patients achieving a near-normalization or normalization of urinary oxalate.

Lumasiran achieved the ILLUMINATE-A primary endpoint with a 53.5% mean reduction in urinary oxalate relative to placebo and showed a 65.4% mean reduction in urinary oxalate relative to baseline. In the study, 84% of patients on lumasiran achieved normal or near-normal levels of urinary oxalate and more than half of patients reached normalization compared with zero percent in the placebo group.

The drug demonstrated an encouraging safety and tolerability profile with no serious or severe adverse events (AEs) and with mild injection site reactions as the most common drug-related AE.

The substantial and sustained reductions in urinary and plasma oxalate demonstrated that lumasiran addresses the underlying pathophysiology of PH1 by reducing the production of the toxic metabolite responsible for the clinical manifestations of this serious and progressive disease.

Based on these results, Alnylam has filed a new drug application (NDA) with the FDA. The FDA has granted a Priority Review to the NDA with an action date of Dec 3, 2020.

In addition, the marketing authorization application (MAA) for lumasiran has received an accelerated assessment from the European Medicines Agency (EMA).

Lumasiran NDA Gets Priority Review From FDA – May 26

Alnylam announced that the FDA has granted priority review to its NDA seeking approval for lumasiran, as a treatment for PH1. A decision from the FDA is expected by Dec 3, 2020.

Identifies Candidate for COVID-19 Program – May 4

Alnylam and partner Vir Biotechnology announced the identification of a development candidate, VIR-2703 (ALN-COV), targeting SARS-CoV-2 for the treatment of COVID-19. The companies plan to meet with the FDA to discuss a potential accelerated path for filing an investigational new drug to initiate a clinical study to evaluate the candidate at or around year-end 2020.

Vutrisiran Gets Fast Track Tag – Apr 14

Alnylam announced that the FDA has granted a Fast Track designation to vutrisiran for the treatment of polyneuropathy of hATTR amyloidosis in adults. The Fast Track status will now help Alnylam submit a rolling new drug application (NDA) for vutrisiran.

Signs \$2 Billion Deal With Blackstone – Apr 13

Alnylam and The Blackstone Group entered into a broad strategic collaboration which will support Alnylam's advancement of innovative RNAi medicines with up to \$2 billion investment from Blackstone.

Per the terms of the deal, Blackstone will pay \$1 billion in committed payments to Alnylam in exchange of 50% of commercial milestones and royalties from sales related to inclisiran, following its potential approval. The deal will also provide Alnylam a term loan of up to \$750 million, a fund of up to \$150 million to support development of Alnylam's cardiometabolic programs vutrisiran and ALN-AGT, and \$100 million in equity investments.

Completes Rolling Submission of NDA for Lumasiran – Apr 7

Alnylam announced that it completed the rolling submission of the NDA seeking approval for lumasiran as a treatment for primary hyperoxaluria type 1 in the United States. The company also filed a marketing authorization application (MAA) seeking approval for the candidate in same indication in Europe.

Collaborates with Dicerna – Apr 6

Alnylam announced that the company and Dicerna Pharmaceuticals have formed a development and commercialization collaboration to develop RNAi therapeutics for the treatment of alpha-1 antitrypsin (A1AT) deficiency-associated liver disease. Additionally, the companies also completed a cross-license agreement related to development of Alnylam's lumasiran and Dicerna's nedosiran as treatment for primary hyperoxaluria.

Expands Collaboration with Vir – Apr 2

Alnylam announced an expansion of its collaboration with Vir Biotechnology to include up to three additional targets focused on host factors for SARS-CoV-2.

Signs Distribution Agreement for Onpattro in Turkey – Mar 25

Alnylam announced that it has signed an exclusive distribution agreement with Turkish pharma company, Gen, related commercialization of Onpattro in the country.

Collaborates to Develop RNAi Therapy for Coronavirus – Mar 4

Alnylam and Vir Biotechnology announced that both are collaborating to develop/commercialize RNAi therapeutics targeting SARS-CoV-2, the virus that causes the novel coronavirus (Covid-19).

Going by the agreement, the companies will leverage Alnylam's recent advances in lung delivery of novel conjugates of siRNA along with Vir's expertise in infectious disease and established capabilities to develop one or more siRNAs to treat SARS-CoV-2 and potentially other coronaviruses as well. siRNA is the molecule that mediates RNAi.

Per the press release, Vir will make all the development and commercialization efforts for any selected development candidate. At clinical proof of concept, Alnylam will have an option to equally share the profits/losses regarding the development and commercialization of the coronavirus program. If successful, Alnylam may also choose to earn milestones and royalties on net sales of products in amounts agreed upon for this coronavirus program.

Gets European Approval for Givlaari – Mar 3

Alnylam announced that the European Commission has approved Givlaari for the treatment of AHP in patients aged 12 years or older. The drug will be available as subcutaneous injection.

Gets Approval for Onpattro in Brazil – Feb 26

Alnylam announced that Onpattro received approval in Brazil as a treatment for hATTR amyloidosis. The drug is the first RNAi therapeutic to receive approval in Latin America.

Completes Enrollment of HELIOS-A Study – Feb 18

Alnylam announced that it has completed enrolment in the phase III HELIOS-A study evaluating vutrisiran. Top-line data from the study is expected in early 2021.

Valuation

Alnylam's shares are up 30.70% in the year-to-date period and 94% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 5.0% while the stocks in the Zacks sector are up 1.4%, in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are up 18.1% and up 8.3%, respectively.

The S&P 500 Index is up 1.3% in the year-to-date period and up 9.7% in the past year.

The stock is currently trading at 12.87X trailing 12-month book value, which compares to 2.92X for the Zacks sub-industry, 4.42X for the Zacks sector and 4.46X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 14.14X and as low as 2.65X, with a 5-year median of 5.88X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$158.00 price target reflects 13.50X trailing 12-month book value.

The table below shows summary valuation data for ALNY

Valuation Multiples - ALNY					
		Stock	Sub-Industry	Sector	S&P 500
P/B TTM	Current	12.87	2.92	4.42	4.46
	5-Year High	14.14	6.24	5.07	4.56
	5-Year Low	2.65	2.06	2.94	2.83
	5-Year Median	5.88	3.88	4.3	3.72
P/S TTM	Current	59.37	3.46	3.11	3.5
	5-Year High	224.15	5.18	4.07	3.67
	5-Year Low	41.09	2.24	2.29	2.43
	5-Year Median	105.03	3.21	3.19	3.21

As of 07/29/2020

Industry Analysis Zacks Industry Rank: Top 39% (99 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Bayer Aktiengesellschaft (BAYRY)	Outperform	1
Alexion Pharmaceuticals, Inc. (ALXN)	Neutral	3
Amgen Inc. (AMGN)	Neutral	3
Ionis Pharmaceuticals, Inc. (IONS)	Neutral	3
Regeneron Pharmaceuticals, Inc. (REGN)	Neutral	4
Roche Holding AG (RHHBY)	Neutral	2
Sanofi (SNY)	Neutral	3
WAVE Life Sciences Ltd. (WVE)	Neutral	3

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	ALNY	X Industry	S&P 500	ALXN	AMGN	REGN
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	4
VGM Score	F	-	-	A	B	B
Market Cap	17.37 B	245.18 M	22.69 B	23.10 B	146.39 B	69.55 B
# of Analysts	7	3	14	11	11	1
Dividend Yield	0.00%	0.00%	1.8%	0.00%	2.57%	0.00%
Value Score	F	-	-	A	B	B
Cash/Price	0.08	0.22	0.07	0.11	0.05	0.06
EV/EBITDA	-19.62	-3.66	13.11	8.83	13.66	24.82
PEG Ratio	NA	1.75	3.05	0.76	2.11	1.66
Price/Book (P/B)	12.61	4.08	3.15	1.98	13.73	5.73
Price/Cash Flow (P/CF)	NA	17.40	12.28	8.95	13.16	26.10
P/E (F1)	NA	26.76	22.27	9.66	15.91	22.41
Price/Sales (P/S)	60.74	16.04	2.46	4.36	6.02	8.72
Earnings Yield	-4.10%	-13.46%	4.25%	10.34%	6.28%	4.46%
Debt/Equity	0.20	0.02	0.75	0.21	3.20	0.06
Cash Flow (\$/share)	-7.46	-1.07	6.94	11.68	18.91	24.22
Growth Score	D	-	-	B	C	B
Hist. EPS Growth (3-5 yrs)	NA%	17.80%	10.85%	24.55%	10.16%	30.82%
Proj. EPS Growth (F1/F0)	23.87%	12.52%	-7.70%	2.79%	5.55%	14.33%
Curr. Cash Flow Growth	11.46%	15.05%	5.31%	28.27%	-2.47%	10.30%
Hist. Cash Flow Growth (3-5 yrs)	NA%	7.73%	8.55%	20.68%	5.06%	23.75%
Current Ratio	4.68	5.70	1.31	4.35	2.18	4.21
Debt/Capital	16.97%	4.23%	44.23%	17.58%	76.20%	5.57%
Net Margin	-310.01%	-203.29%	10.45%	44.83%	30.04%	28.56%
Return on Equity	-57.63%	-61.83%	14.99%	21.96%	91.98%	24.94%
Sales/Assets	0.12	0.19	0.53	0.33	0.40	0.55
Proj. Sales Growth (F1/F0)	106.15%	4.26%	-1.97%	7.87%	8.64%	-3.25%
Momentum Score	C	-	-	B	B	C
Daily Price Chg	-2.44%	-0.94%	1.52%	-0.58%	-2.52%	0.18%
1 Week Price Chg	-3.32%	-3.37%	0.37%	-7.09%	-4.05%	-5.45%
4 Week Price Chg	1.20%	-2.95%	5.44%	-6.93%	-2.46%	3.77%
12 Week Price Chg	3.64%	9.58%	15.38%	8.01%	5.18%	14.21%
52 Week Price Chg	94.05%	5.43%	-1.61%	-7.67%	33.37%	107.43%
20 Day Average Volume	620,992	318,096	1,846,377	1,544,868	2,084,698	726,511
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.29%	0.09%	0.00%
(F1) EPS Est 4 week change	-0.12%	0.00%	0.27%	0.21%	0.11%	0.00%
(F1) EPS Est 12 week change	14.68%	1.40%	-0.85%	0.51%	2.34%	22.87%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.13%	0.58%	-0.90%	0.00%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	D
Momentum Score	C
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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