ACCEPTING CHALLENGES
TO IMPROVE
THE HEALTH
OF HUMANITY

2020

Corporate Responsibility at Alnylam





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ON THE COVER

Three of Natalie and Jarred's children including Lucy, who is pictured on the cover, have been diagnosed with primary hyperoxaluria type 1 (PH1). PH1 is an ultra-rare genetic liver disorder that causes the toxic buildup of excess oxalate in the body, leading to recurrent kidney stones, damage to other organs and often results in end-stage kidney disease. PH1 occurs in both children and adults and typically leads to the need for a dual kidney/liver transplant. These people then face a lifetime of immunosuppressant medicines to prevent rejection of the transplanted organs.





CEO LETTER

Accepting bold challenges is core to who we are at Alnylam. Every day we focus on transforming the lives of patients with devastating rare or common diseases. With their needs at the forefront, we strive to give patients the opportunity to live healthier lives. Guided by our core values, our commitment to advancing breakthrough science and making our medicines available to patients in an equitable way are central to how we operate and are foundational to our approach to Corporate Responsibility (CR).

Beyond our commitment to patients, we recognize and embrace a range of other responsibilities, including advancing science; hiring, supporting, and developing a diverse group of employees; serving our local communities; protecting our planet; and operating our business in an ethical, compliant and accountable manner.

Needless to say, 2020 was an unprecedented year. Influenced by the COVID-19 pandemic and an outpouring of outrage over racial and social injustice, we responded to our world and worked in new ways. This included an imperative to support our employees and keep them safe, while continuing to deliver medicine to our patients. Undeterred, we were successful in bringing two new RNAi therapeutics, OXLUMO[™] and, with our partners at Novartis, Legvio[®], to patients in need.

Diversity, equity and inclusion (DE&I) played an increasingly important role across our business and in all of our lives this year. Influenced by external events, including the murder of George Floyd, and the subsequent national conversation in the United States on systemic racism, we embraced the opportunity to reflect on our personal and business actions. Senior leaders participated in unconsciousbias training and racial awareness initiatives that will continue to be rolled out across the company in 2021. We appointed our first Chief Diversity, Equity & Inclusion (DE&I) Officer to build on, lead, and develop new strategies to further align DE&I to business goals, leadership programs, hiring practices, clinical trials, and other core areas.

We cannot overstate the vital connection between the health of our planet and the health of humanity. As our business grows, we recognize the importance of understanding, mitigating, and reporting on Alnylam's environmental footprint across the world.



We are guided every day by our Core Values: Commitment to People, Innovation & Discovery, Sense of Urgency, Open Culture, and Passion for Excellence.





CEO LETTER

During 2020, our facilities and Environmental, Health and Safety (EH&S) teams initiated a process to start collecting new baseline data on our energy consumption, greenhouse gas emissions and other areas of environmental impact.

Adding to these accomplishments, we seek to be even more deliberate in how we understand. manage, and communicate our company's impact. In 2020, we took an integrated and intentional approach to Corporate Responsibility, launching a new strategic framework to formalize and structure Alnylam's activities. Our CR theme, "Accepting Challenges to Improve the Health of Humanity," is aligned with our corporate values and mission, and is intended to inspire us to work toward this noble pursuit each day.

This document is our first communication of what will become an annual reporting on our efforts and progress in CR. It covers a growing and evolving set of business practices across our organization, from how we develop and manufacture our medicines and ensure they are safe and accessible, to nurturing a diverse, equitable and inclusive culture for

our employees, while also supporting our communities and preserving the environment.

We have an exciting CR journey ahead, beginning with more clearly defining our path and setting goals and targets to propel progress. We realize this is a first step and we have considerable work ahead of us. Moving forward, we are committed to increased transparency by continuously sharing more data, initiatives, and progress.

I am encouraged by our initial progress and am confident that we are ready to take on the many challenges ahead with the heart and passion that is core to Alnylam. We have a decade long history of creating and meeting ambitious goals, and in the areas of Corporate Responsibility, Lam committed to no less.

John Maraganore, PhD., Chief Executive Officer, **Alnylam Pharmaceuticals**

Our Corporate Responsibility theme, "Accepting Challenges to Improve the Health of **Humanity,"** is aligned with our corporate values and mission, and is intended to inspire us to work toward this noble pursuit each day.





ALNYLAM SNAPSHOT

Alnylam is the world's leading RNAi therapeutics company and has been pioneering this innovative new class of medicines since our founding in 2002.

We are focused on translating the Nobel Prize-winning discovery of RNA interference (RNAi) into therapies for diseases with high-unmet needs – those for which there are no or inadequate treatment options.

Alnylam is built upon breakthrough science and we are dedicated to demonstrating that science, perseverance, and passion can come together to improve patients' lives.

We are a global organization, working closely with government officials, health care systems, medical providers, patient advocacy organizations, industry peers, and other stakeholders to enable access to our approved RNAi therapeutics and to advance our pipeline.

2020 by the Numbers

- Serving patients as Alnylam in more than 20 countries
- 1,453 employees globally at the end of 2020
- 4 approved products (3 wholly owned, and Legvio® (inclisiran) in Europe in partnership with Novartis)
- 12 therapeutics in clinical development pipeline, including 6 in late-stage development
- Approximately \$500 million revenue achieved in 2020

- Nearly \$1,250 million invested in R&D and SG&A in 2020
- Headquartered in Cambridge, Mass. (U.S.)
- Regional offices in Maidenhead, U.K.; Zug, Switzerland; Amsterdam, Netherlands; Tokyo, Japan; and Sao Paolo, Brazil and other global locations
- 83 patient advocacy organization partnerships across 23 countries
- Top 5 on Science Magazine's Best Place to Work list in 2019 and 2020

WHAT ARE **RNAi THERAPEUTICS?**

RNA interference (RNAi) therapeutics are an innovative new class of medicines based on RNAi – a breakthrough discovery in the understanding of how genes are regulated in cells. They also represent a completely new approach to drug discovery and development. The 1998 discovery of RNAi earned researchers Craig Mello and Andrew Fire the 2006 Nobel Prize in Physiology or Medicine. Medicines based on RNAi work by "silencing" or disabling the production ("expression") of genes that cause specific diseases. In doing so, RNAi therapeutics work "upstream" of other traditional classes of medicines such as small molecules and monoclonal antibodies, targeting the "root" genetic cause of a disease by preventing the formation of the disease-causing protein at the source. You can learn more about how our science and medicines work on our website.





HOW WE THINK ABOUT CORPORATE RESPONSIBILITY

Accepting Challenges to Improve the Health of Humanity.

Stemming from the core values of Alnylam, our Corporate Responsibility (CR) mission embodies our "Challenge Accepted" philosophy and helps articulate how we approach our work each day. It describes our commitment to tackling unprecedented and complex challenges, taking courageous action, and using our business as a force for good.

Four core beliefs guide our ongoing CR work

- We believe in the noble pursuit of working to improve the health of humanity.
- We believe science has the power to solve many complex social, health and environmental challenges.
- We believe diverse, inclusive, and equitable environments are essential for achieving breakthroughs.
- We believe all communities deserve access to health solutions and social support.



We take on bold challenges that improve the health of humanity, acting every day as relentless advocates for science, patients, employees, communities, and our planet.

> John Maraganore, Ph.D., CEO, Alnylam





ABOUT CORPORATE RESPONSIBILITY

Our CR actions are organized across five interconnected, stakeholder-related focus areas - patients, science, employees, communities, and planet - each with a guiding imperative, leadership team and accountabilities to track and manage our impact.



Patients: We strive to improve patients' lives and enable access to potentially life-changing treatments

Science: We advocate for science and innovation to address critical health and social issues

Employees: We foster an open, diverse culture where employees feel included, supported, and heard

Communities: We actively engage people in tackling the world's most pressing community and health equity challenges

Planet: We seek to improve the health and sustainability of our planet



A COMPANY OF "CHANGE THE WORLD" KIND OF PEOPLE >1.450 employees languages 2 Alnylam

We strive to improve patients' lives and enable access to potentially life-changing treatments.

Put simply, patients come first. They are and have always been our North Star. At Alnylam, we live by a shared philosophy: our innovative therapies must get to those who may benefit from them. By actively listening to patients, their families, and caregivers, as well as healthcare providers and payers, we work to create achievable and sustainable solutions.

Our Patient Access and Patient Services teams throughout the world address issues related to disease education, diagnosis, treatment access, affordability, and equity, with a heightened awareness that the patient experiences may be different across race and ethnicity. As we expand the breadth of our therapeutics to larger populations, we are cognizant of issues related to health equity and the underlying social determinants of health that serve as obstacles for people to improve the quality of their lives.

Listening to Patient Voices and Insights

Treatment and disease management is a personal and emotional experience, with patients and their caregivers often feeling scared and uncertain about their prognosis, financial burdens, continuity of care, and where to find resources when living with their disease. Through opt-in patient satisfaction and engagement surveys, standing patient panels, a cadre of patient advisors, and thousands of direct interactions, we continuously learn from patients' and caregivers' experiences. We actively listen and apply their insights to develop more effective solutions.



KEY PRIORITIES IN 2021

- Continue to integrate patients first in decisions and actions
- Host a second Global Rare Disease Patient **Advocacy Collaborative Summit**
- Create new approaches to further address the mental and emotional health of patients and caregivers
- Develop strategies to increase participation of minority populations in our clinical trials
- Expand genetic testing offerings into the Canada, Europe, Middle East and Africa (CEMEA) regions
- Release second U.S. Rare Disease report



Patient-Focus Working Group

Formalized in 2020, our **Patient-Focus Working Group** is a cross-functional effort committed to representing patient and caregiver voice throughout our business operations, elevating the patient perspective throughout our R&D and clinical development process, and to improve the overall experience of patients working with Alnylam. Insights from this working group were especially useful in helping us respond quickly to patient needs as a result of the pandemic. In the year to come, we intend to implement new processes and communications vehicles to ensure we are even more mindful and attuned to the needs of patients.

Patient Advocacy Summit

Our first bi-annual Global Rare Disease Patient Advocacy Collaborative Summit was held in 2019, as a mechanism for us to further engage with and listen to patient advocacy leaders and advocacy groups. Through this effort, we enhanced the advocacy skills of participants and further recognized the power of harnessing our collective energies on behalf of patients. The next Summit is being planned for 2021.

Improving Access and Affordability to Essential Medicines

Our Patient Access Philosophy was issued in 2017, a year before our first medicine was even approved. In preparing to become a commercial-stage biopharmaceutical company, we put forth a set of principles to guide how we intended to behave and make decisions. Namely, how we planned to help patients, deliver value to payers, be proactive and hold ourselves accountable to these commitments. Our 2020 Patient Access Philosophy Report provides details on how we help patients gain access to our medicines – both before and during the COVID-19 pandemic – and provides updates on our provider initiatives.





Genetic Testing and Diagnosis

Genetic testing and counseling can be critically important in accurately diagnosing and treating patients with rare diseases because symptoms can often be enigmatic. Alnylam Act® provides no-charge, third-party, confidential genetic testing, and counseling for patients with a family history or suspected diagnosis of certain rare diseases. Since 2014, the Alnylam Act program, which is now available to patients living in the U.S., Canada and Brazil through their doctors, has returned nearly 2,000 positive test results for mutations of three rare diseases Alnylam's approved medicines treat. Alnylam Act often enables patients to decrease the time to an accurate diagnosis and make more informed healthcare decisions with their doctors and caregivers. Physicians who order Alnylam Act testing are under no obligation to prescribe Alnylam medicines.

Alnylam's Global Diagnostics team is working to expand genetic testing and counseling programs globally along with other diagnostic initiatives to help patients and their families shorten the time to diagnosis and treatment. In 2021, Alnylam will be expanding genetic testing offerings in Europe.

Clinical Trials

Clinical trials are conducted to address specific questions about potential new treatments. These studies allow researchers to evaluate whether experimental treatments are safe and effective for patients. Recognizing the historic under-representation of black, indigenous and people of color [BIPOC], we are in the process of developing strategies and approaches to increase the inclusion of these groups as we conduct new clinical trials in 2021 and beyond.

In an effort to further scientific discovery and advance public health, we are increasing timely disclosure and accessibility of our clinical trial information to patients, health care providers, researchers and the general public. We are in the process of developing a portfolio of Alnylam Plain Language Summaries (PLS), and in 2020, we released such materials for our ILLUMINATE-A, ILLUMINATE-B and ENVISION studies.



2020 ACCESS HIGHLIGHTS



>3,000 people receiving Alnylam's innovative approved and investigational RNAi therapeutics



>450 patients worldwide receiving Alnylam approved medicines under compassionate use



Zero price increases beyond Consumer Price Index for All Urban Consumers (CPI-U) on all three approved medicines.



>30 signed Value-Based Agreements (VBAs) with U.S. payers in aggregate for all three approved medicines.



>700 U.S. Patients Enrolled in Alnylam Assist



4.85 on a 5.0 scale – Overall Customer Satisfaction (Patient) for both products (ONPATTRO and GIVLAARI) as of 12/31/2020



Affordability

We recognize that affordability of medicines and access to treatment is a concern for patients and for the overall health care ecosystem. As part of our Patient Access Philosophy, we are committed to responsible pricing for all our products that reflects the value delivered to patients, caregivers, and society. We also aim to maintain consistent pricing approaches that enable sustainable innovation for rare and ultra-rare diseases. This philosophy includes our pledge against arbitrary price increases beyond the cost of inflation and our advocacy work for coverage of home administration, where possible. We have taken zero price increases on any of our marketed products since launch.

Our dedication to value-based pricing guarantees that insurers and patients pay for a drug only when it has been shown to work. Since becoming a commercial company, we have have forged over 30 value-based arrangements (VBAs) with public and private U.S. insurers since 2018. For example, OXLUMO™ is indicated for both pediatric and adult patients and is dosed by weight; related costs can vary relative to each patient and use over time. As such, Alnylam has structured a new VBA component called Patient Needs Adjustment (PNA) for OXLUMO™ that specifically addresses concerns for budget predictability and value.

In many European countries, our first RNAi therapeutic for the treatment of hATTR amyloidosis achieved reimbursement faster than any other drug granted orphan status by the European Medicines Agency (EMA). In Italy, for example, the average time from EMA approval to reimbursement is 37 months for orphan drugs. Alnylam cut that time to reimbursement in half, allowing us to make the medicine available to eligible patients far earlier.



CO-PAY ASSISTANCE

In the U.S., we provide support for commercially insured patients to afford medicine through the **Commercial Copay Program**. A majority of patients pay \$0 out-of-pocket costs for Alnylam therapies. Alnylam copay investments in aggregate include \$562,000 for ONPATTRO® since mid-2018 and \$54,000 for GIVLAARI® since late-2019. For uninsured patients, the Patient **Assistance Program** strives to provide Alnylam therapies at no cost. Additionally, the Alnylam Assist team® facilitates scheduling treatment and delivery of medication so that patients can receive their treatment successfully.



Expanded Access

Our expanded access programs provide a pathway for patients to gain access to investigational drugs for treatment outside of clinical trials when no comparable or satisfactory alternative therapy options are available. Within Alnylam, Expanded Access consists of both groups of patients in Early Access Programs as well as individual Compassionate Use access. By the end of 2020, 483 patients worldwide had received ONPATTRO®, GIVLAARI® or OXLUMO™ through our Expanded Access programs.

Extending access to our medicines for patients living in countries where we do not have operations and where our drugs are not approved is a significant challenge, as the required administration of our therapeutics must include knowledgeable and trained providers, a consistent supply chain, regular monitoring, and ongoing patient services. In certain geographies we have built a network of trusted distribution partners which enables us to extend access to our innovative treatments to eligible patients. Over the next 3-5 years we will continue to explore additional access pathways, including potential humanitarian approaches, as we simultaneously expand our manufacturing capabilities and global partnerships.

Payer and Provider Perspectives

Understanding the perspectives and priorities of health care payers and providers is essential to removing access barriers for patients. Our first annual <u>U.S. Rare Disease Trend Report</u>, released in 2020, is based on interviews with payer and plan decision-makers. It outlines barriers faced by rare disease patients over a five-year period and provides insights into disease management. This inaugural report is a first step in creating an open dialogue on the challenges insurers face in a resource-constrained healthcare environment.

Assisting Patients Throughout Their Treatment Journey

Patients often share how complex and overwhelming their treatment journey can be. We offer a broad range of assistance throughout the world and partner patients on our therapies with a dedicated Case Manager to navigate their treatment.



Alnylam **ASSIST**

Through Alnylam Assist®, we help patients and caregivers in the U.S and Brazil understand their insurance coverage and options for financial assistance, provide materials to start conversations with physicians and family members, and offer information on patient advocacy organizations. We serve an estimated 80% of the treated patient population in the U.S. as an average across products. The Alnylam Assist® team also facilitates scheduling treatments and the delivery of medication for patients. This team helped patients navigate the obstacles presented by the pandemic and saw a significant rise in the use of these personalized services.



Patient Education Liaisons

Referred by Alnylam Assist Case Managers in the U.S., Alnylam Patient Education Liaisons are key to the patient and caregiver experience. As professionals with backgrounds in nursing and genetic counseling, they assist with disease education, provide connections to additional resources, and guide patients through their decision-making process. In 2021, we will create strategies to further address the mental and emotional health of patients and caregivers.

In September 2020, this team launched a new series of virtual programs with longtime partner Black Health Matters (BHM) titled "hATTR Amyloidosis: Know Your Genetic Health History." The main objective of these programs is to increase disease awareness in the Black community, including those who may be at risk for the V122I mutation in the transthyretin (TTR) gene. Ten programs were held in 2020, reaching over 330 community members.

Customized Websites for Patients and Caregivers

Disease and treatment information can be challenging to decipher and understand. We provide tools and resources that help patients facilitate conversations with healthcare professionals and family members. Our disease education programs and patient websites - The Bridge US and EU (hATTR Amyloidosis), Pinpoint AHP (US) and Living with Porphyria (EU) (Acute Hepatic Porphyria), and Take on PH1 - are aimed at raising awareness, use patient-friendly language, and are available in multiple countries and languages.

International Patient Assistance

Alnylam has expanded its education and patient support in Europe and our other geographies including Brazil and Asia through digital resources, capacity building, and genetic testing. This includes the Patient Empowerment Group for Access and Sustainability (PEGASUS) helping patient advocacy leaders advocate for increased access, regional disease and education websites which drive earlier and more accurate diagnosis, and programs to build disease awareness and support genetic testing, such as our GENILAM™ program in Italy.





PATIENT ADVOCACY **AROUND THE WORD**

Working with more than **60** patient advocacy groups (PAGs) in more than 20 countries



Advocating for Patients

We are committed to collaborating with industry and patient advocacy groups to increase awareness, enable earlier diagnosis, advance the development of potential new therapies, and design initiatives that address the unique challenges of patient communities. Our Patient Advocacy team builds partnerships to serve the larger rare disease community and we are currently engaging with 83 unique patient advocacy organizations in 23 countries. These advocacy partnerships advance and guide our research and development focus, inform patient service models, influence regulator and payer policy, and help advocacy organizations reach and educate patients.

A CHALLENGE ACCEPTED CASE STUDY: **UNINTERRUPTED TREATMENT**

While conducting a check-in call with a U.S. ONPATTRO® patient in the days immediately following the global COVID-19 lock-down, an Alnylam Assist® Case Manager learned their patient had missed their most recent scheduled treatment appointment. A recipient of both a liver and heart transplant, the patient feared getting sick if they entered an infusion center. The Alnylam team facilitated home-based infusions, ensuring the patient did not miss a dose.

In Germany, we undertook similar efforts and while 90% of rare disease patients overall experienced interruptions in care at the height of the pandemic, according to a EURORDIS-Rare Diseases Europe study (May 2020), none of the patients on Alnylam therapies needed to postpone their treatment. The rapid work to aid patients during the pandemic continues to be our top priority.





We advocate for science and innovation to address critical health and social issues.

Alnylam's origins are rooted in scientific discovery and the belief that laboratory breakthroughs can be transformed into life-changing medicines for patients. We embrace our commitment to continuously innovate, advance the science of RNAi and our pipeline, invest in R&D, collaborate, and advocate for science across the biopharmaceutical industry. Together, these actions support sustained innovation that benefits the health of all.

Advancing Our Product Pipeline and R&D

Our RNAi therapeutics represent a pioneering and clinically validated approach for the treatment of a wide range of debilitating diseases. Because of the way RNAi therapeutics can be genetically targeted, we believe they have the potential to silence nearly any gene in the genome. Given this broad applicability, we are focused on creating a sustainable pipeline of RNAi-based medicines across several strategic therapeutic areas covering both rare and larger population disease. Alnylam is a multi-product, commercial stage business with a robust and sustainable pipeline of investigational medicines.

Approved RNAi Therapeutics

Our pioneering work has delivered the world's first and only approved RNAi therapeutics. Over the past two years, four RNAi therapeutics discovered by Alnylam have now received marketing approval.



KEY PRIORITIES IN 2021

- Launch one new RNAi therapeutic, Vutrisiran, by the end of 2022
- Achieve 6+ marketed products in rare and prevalent diseases through 2025
- Advance over 20 clinical programs, with 10+ in late stages and an average of 2-4 Investigational New Drug (IND) candidates per year through 2025
- Continue to expand from rare to prevalent diseases



ONPATTRO® (patisiran) is approved to treat the polyneuropathy, or damage to nerves that affects sensation, movement, strength, and bodily functions specifically caused by an illness called hereditary ATTR amyloidosis (hATTR amyloidosis). hATTR amyloidosis is a rare, inherited condition that can progress rapidly and affects an estimated 50,000 people worldwide. ONPATTRO was approved in the U.S and Europe in 2018 and is the world's first-ever approved RNAi therapeutic.

GIVLAARI® (givosiran) is approved to treat acute hepatic porphyria (AHP) in adults. AHP is a family of rare, genetic diseases that can cause severe and potentially life-threatening attacks, including seizures, psychosis, severe abdominal and back pain, and damage of peripheral nerves. Some people with AHP also have chronic, debilitating symptoms when they are not having an attack. GIVLAARI was approved in the U.S. and Europe in 2019 and is the world's 2nd approved RNAi therapeutic.

OXLUMO™ (lumasiran) is the first and only FDA and EMA-approved medicine for the treatment of primary hyperoxaluria type 1 (PH1) to lower urinary oxalate levels in both adults and children. PH1 is an ultra-rare and progressive genetic disease that causes recurrent kidney stones as well as progressive damage to the kidneys and other organs, typically leading to end-stage renal failure, kidney and liver transplant, and a lifetime of immunosuppressant therapy. OXLUMO was approved in the US and Europe in 2020 and is the first RNAi therapeutic to receive a pediatric indication. Children as young as a few months old have been treated with OXLUMO.

Leqvio[®] (inclisiran) is approved to treat hypercholesterolemia (high cholesterol) in Europe. Discovered by Alnylam and being marketed globally by Novartis, Legvio requires only two doses per year and could improve outcomes for people with atherosclerotic cardiovascular disease (ASCVD), a disease that accounts for over 85% of all cardiovascular disease deaths. According to the World Health Organization, cardiovascular disease causes 17.9 million deaths per year globally, and 80% of high-risk patients do not reach LDL-cholesterol recommended guidelines. Leqvio was approved in the EU in 2020.

This is a great place to be a scientist, both because of the focus upon which we were founded but also because of the culture of scientific excellence we've worked hard to nurture and sustain. From associate scientists to leadership, everyone in our R&D organization (and our broader company) plays an incredibly important role in advancing the science of RNAi, both internally and in the broader scientific community.

> Akshay Viashnaw, MD, PhD, President of R&D, Alnylam





Robust Product Pipeline

Alnylam's approach to the discovery, development and the delivery of medicines has also resulted in a clinical pipeline of 12 product candidates, with an additional 6 in late-stage development. Our pipeline is focused in four **Strategic Therapeutic Areas (STArs)**: Genetic Medicines, Cardio-Metabolic Disease, Infectious Disease, and CNS and Ocular Diseases. We plan to file an average 2-4 Investigational New Drug (IND) applications per year through 2025. By 2025 we anticipate having over 20 clinical programs, with over 10 in late stages of development and 4+ IND applications per year. In addition to Legvio[®], we are also expanding our research into larger population diseases including hypertension, Hepatitis B Virus infection, nonalcoholic steatohepatitis (NASH), and Alzheimer's disease, among others.

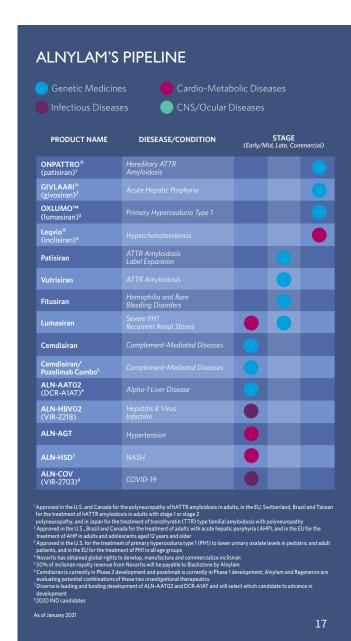
R&D Approach

Alnylam Research and Development (R&D) teams are structured to ensure that our research and early product development experts function seamlessly and act as catalysts for innovation. Our reproducible and modular R&D platform for drug discovery and development is high yielding, delivering outsized success rates compared with industry norms. When we look at the cumulative probability of success for Alnylam development efforts, our track record exceeds 60% from Investigational New Drug applications to positive Phase 3 trial results and approval, compared with industry metrics of below 10%. This achievement is propelling our R&D efforts as we continue to reinvest a significant portion of revenue back into research efforts and, in turn, accelerate the commercial potential of our product portfolio.

R&D Day

Our annual R&D Day event for investors showcases Alnylam's late-stage clinical efforts, next wave programs, and platform advances. During our December 2020 virtual event, we discussed our perspective on our transition toward achieving a self-sustainable financial profile and how we anticipate this milestone will propel our powerful R&D efforts forward.





Scientific Advisory Board

Founded in 2010, our Scientific Advisory Board (SAB) is comprised of world leaders in RNAi research as well as broad aspects of medical research and translational medicine. Chaired by Nobel-Laureate and Alnylam co-founder Phil Sharp, Ph.D., our SAB works with our scientific team to advance our RNAi technology and address medical challenges. All Alnylam staff are invited to participate in our quarterly SAB meetings.

Publishing Our Findings

We believe truthful, ethical, and transparent knowledge sharing is key to advance innovation and is vital to our collective progress. Alnylam scientists and collaborators have published research on RNAi therapeutics in over 300 peer-reviewed papers, including many in the world's top scientific journals such as Nature, Nature Medicine, Nature Biotechnology, Cell, and The Lancet. Additionally, Alnylam clinical research has been featured in the New England Journal of Medicine nearly 10 times, including two articles that were highlighted as Key Manuscripts of the Year in 2020. Capella, the Online Voice of Progress in RNAi, is our destination for our published papers and updates on our work.

Evolving Our Science Through Partnerships

By collaborating with other industry-leading companies and scientific partners, we can accelerate our efforts to bring forward therapies with the utmost potential to transform the lives of patients with serious and more common conditions.

We have partnered with Novartis on Legvio® (inclisiran), the first and only siRNA cholesterollowering treatment (currently approved in the EU), under our license and collaboration agreement.

We are working with **Regeneron** 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.



Alnylam is a founding member of the **UK Biobank Exome Sequencing Consortium** (UKB-ESC) which is leveraging groundbreaking datasets inclusive of medical records, genomic data, imaging, and measurements donated by 500,000 UK citizens that has been combined with the latest technology to uncover genetic and metabolic drivers of disease. The Consortium is making whole-exome sequencing data available to researchers around the world for free to aid discovery of new treatments.





We entered into an agreement with **Vir Biotechnology** to advance a handful of infectious disease drugs made with our RNAi technology. This agreement included an investigational RNAi therapeutic program for Hepatitis B as well as discovery collaboration on additional development candidates for treatment of infectious diseases. In 2020 we expanded our partnership to develop investigational RNAi therapeutics against COVID-19.

We partner with **Sanofi** on fitusiran in hemophilia, bringing innovation to people living with this bleeding disorder.

Promoting Science Through Industry Participation

We are deeply concerned about trends and policies that diminish trust in fundamental scientific knowledge or hamper society's ability to bring together the world's best minds to take on big challenges. The discounting or obstruction of the scientific process is risky and detrimental to human health, our environment, and our company. On behalf of patients and future generations, we have an obligation to stand up for scientific integrity, investment, and transparency. Critical to our commitment to science is our participation in organizations that promote collaboration and convene diverse perspectives to further educate, advocate and advance our industry.

Biotechnology Industry Organization (BIO)

We are proud of our longstanding membership and participation with the Biotechnology Industry Organization (BIO) and how they speak up for the millions of families around the globe who depend on the biotechnology industry's success. Alnylam CEO John Maraganore is a member of the Executive Committee of the Biotechnology Industry Organization (BIO) Board and former BIO Chair from 2017-2019. In addition, several of Alnylam's senior team members are active within BIO, including involvement with their Workforce Development, Diversity, and Inclusion initiative.





European Biotech Social Pact

We joined almost 70 leaders of European and U.S. life science and biotech companies, along with investors and other stakeholders, to sign a "New European Biotech Social Pact with Europe and Patients." The European Pact encourages biotech companies to be a force for good in partnering with European authorities, citizens and patients in creating a system where scientific investment ultimately yields effective, affordable and accessible therapeutics for future generations.

Massachusetts Biotechnology Council

As longstanding members of the Massachusetts Biotechnology Council (MassBio) and MassBioEd community, our employees have had the opportunity to take on leadership positions, engage in workforce development efforts, and participate in their community-based Science, Technology, Engineering and Math (STEM) events. Laurie Keating, Alnylam's Chief Legal Officer, has served on MassBio's Board of Directors for more than a decade.

United for Science

With so many science-based challenges facing our world today, we have a moral obligation to inform and influence policy. In 2017, Alnylam CEO John Maraganore joined 150 biotech leaders in signing a letter against the Presidential Executive Order barring refugees and citizens of Muslim-majority nations from entering the United States. Biotech companies, including Alnylam, commonly use immigration programs such as H-1B visas to get the best people in the world to execute on our scientific goals. Three years later, we remain steadfast in our belief that diversity in biotech is crucial to successfully move our science forward.

Additionally, in 2020 we signed a letter alongside other biotechnology company CEOs in support of Anthony Fauci, the U.S.' infectious disease expert, and critical regulatory authorities. The letter voiced concern that those working to solve the COVID crisis, including the CDC and FDA, had come under politically motivated attacks. Through this letter, we committed to uphold the scientific, ethical, and medical principles that will allow us to overcome COVID-19.



RECOGNIZED AS A TOP SCIENCE EMPLOYER







COVID Therapeutics

In the wake of COVID-19, we knew we had to act swiftly. Together with our industry partners, we sought to identify and accelerate promising solutions to overcome the virus. We began by expanding our existing relationship with Vir Biotechnology to develop investigational RNAi therapeutics against COVID-19 and potential future coronavirus diseases. During 2020, we identified our first development candidate.

We also joined the COVID R&D Alliance, a group of more than 20 top life sciences companies to accelerate the development of new therapeutics to combat COVID-19. Additionally, we continue to participate in the COVID-19 Testing Industry Consortium formed by Bristol Myers Squibb, working with 18 other healthcare organizations to inform, improve, innovate, and accelerate COVID-19 testing. We believe that collaboration within the industry is key to overcoming COVID-19.





We foster an open, diverse culture where employees feel included, supported, and heard.

Alnylam employees are the driving force behind our progress. Our culture is defined by passion, tenacity, collaboration, and openness. We work hard to foster an equitable and inclusive environment that gives each employee the opportunity to thrive. We embrace diversity in all its facets including gender, ethnic heritage, sexual orientation or identity, religion, culture, age, disability and varied backgrounds, beliefs, skills and life experiences. Together, we are propelled by a shared passion for innovation and desire to improve the lives of patients.

Maintaining Our Connectivity Throughout COVID-19

The COVID-19 pandemic underpinned the importance of keeping the safety and wellbeing of our employees a top priority. We took a range of steps to protect our employees and their families, enabled them to work remotely and flexibly when possible, and launched many new benefits and wellbeing initiatives. During this period, we also increased the frequency of communications with employees by having more virtual all-company meetings as well as regular updates of COVID-related actions being taken.

COVID-19 Response Plan

For our lab-based, manufacturing and facilities employees that continue to come onsite, we have deployed a weekly COVID-19 asymptomatic surveillance program, to mitigate the risk of workplace virus transmission. In 2020, we ran over 7,000 COVID tests for our employees and their families. We also implemented a comprehensive COVID response strategy to keep these employees safe, including new technology solutions and modifications to the office layout to accommodate physical distancing.



KEY PRIORITIES IN 2021

- Increase by 20% the overall number of Black and Latinx individuals that make up our U.S. employee base at all levels
- Integrate Unconscious Bias training for people managers into the company's core training curriculum
- Roll out Understanding Race & Ethnicity in the Workplace trainings across all levels globally
- Launch the Athena Project female leadership accelerator program



Additionally, we provide no-cost at home testing for our field-based employees, and we reimburse all employees for COVID-19 testing not covered by insurance, while also guaranteeing the same opportunity for their immediate family members. In the E.U., we have a testing partner available at no-cost for all employees if needed.

"No fault, no judgment, no penalty"

Working remotely, taking care of family and neighbors, home schooling children, quarantining, and recovering from illness poses considerable challenges to traditional work norms. At the start of COVID-19 we instituted a "no fault, no judgment, no penalty" approach to offering flexibility. Employees do not have to take sick or vacation time when handling a COVID-related situation. Plus, we added enhanced back up care, virtual babysitting, tutoring, children's entertainment, and health and fitness programming to further assist our employees as they balance of work and home life.

Global Wellness Month

We dedicated November 2020 as "Alnylam Global Wellness Month." Employees across the globe curated and created over eighty-five live and on-demand virtual sessions on health and fitness, financial and professional management, and mental and social wellbeing.

Valuing Employee Perspectives

Listening to and learning from Alnylam employees is key to keeping our people connected and motivated. From company-wide and group meetings to one-on-one conversations and surveys, employee voices matter. Our Annual Culture Survey provides global information and data on how we are meeting expectations and where we must work harder. In 2020, we had our highest participation rate to date with 96% of our employees voluntarily completing the survey. The data further showed that 94% of employees stated that they felt proud to work at Alnylam. 93% felt inspired by the work, and 90% felt accepted and respected by colleagues. In addition,



RECOGNITION AS A TOP EMPLOYER

The Boston Blobe

TOP **PLACES** TO WORK 2015-2020









89% of employees indicated that Alnylam supports an inclusive work culture and 90% expressed the company supports a diverse workplace. We continuously strive to ensure employees feel safe to share their opinions and perspectives with their colleagues and leaders.

Cultivating a Diverse, Equitable and Inclusive Workplace

We recognize that discrimination and inequities exist in our societies and communities, and that we at Alnylam have a responsibility to create meaningful change through broad, actionable, and measurable initiatives. Fostering a diverse, equitable, and inclusive culture, an environment where all employees feel that they belong, and are able and motivated to achieve their full potential is an imperative. We are committed to increasing representation of BIPOC groups internally, with a specific 2021 goal of increasing by 20% the overall number of Black and Latinx individuals that make up our U.S. employee base.

In 2020, we made strides to better understand the unique experiences of our co-workers, collect more data, increase training, and evolve many business practices. We have developed an overall strategy and action plan to further guide our work and hold ourselves more accountable. The plan aims to increase representation, retention and mobility of women and under-represented minorities at all levels of the organization.

Industry Commitments

During the summer of 2020, Alnylam joined industry leaders in adopting the MassBio CEO Pledge for a More Equitable and Inclusive Life Sciences Industry. By signing this pledge, we have committed to address injustice globally through comprehensive equity, diversity, and inclusion initiatives within six areas - leadership and executive culture, inclusive company culture, recruitment, retention and development, accountability and sustainability, and supplier diversity. We appointed our Chief DE&I Officer in 2020, who will build on and help drive these initiatives.

Particularly during the pandemic, I think the company has risen to the challenge to take care of our staff and the patients we intend to treat. We've continued to do the right thing.

from Employee Culture survey



DE&I RECOGNITION







Dashboards and Tracking

As a part of our diversity strategy, we launched a data-collection campaign in the U.S. to aggregate employee self-identifying information, and created internal dashboards to better track hiring, promotions, attrition rates, and diverse representation. This information has guided new priorities, strategies, and goals, and will enable us to enhance future reporting and transparency. In 2021, we will expand our data set to gain a more complete picture across global employees, where permitted.

Accountability and Training

In 2020, we continued the delivery of our interactive Unconscious Bias training, launched in 2018, and introduced Understanding Race & Ethnicity in the Workplace training with 100% of Vice Presidents and above attending both sessions. We will launch a new people manager training curriculum, with Alnylam people managers at all levels expected to complete the Unconscious Bias component by the end of 2021. We will also continue the rollout of Understanding Race & Ethnicity in the Workplace training across all levels of Alnylam.

Employee Interest Groups

Having room to explore common experiences with fellow coworkers has been a core component of Alnylam's grassroots culture since our founding. Company-sponsored Employee Resource Networks (ERNs) are viewed as integral parts of the Alnylam experience and an important voice informing business decisions. Current ERNs include iTHRIVE (Women at Alnylam), SHADES (People of Color), and SAGA (Sexuality and Gender Alliance) with others in development including a parenting-focused ERN. In addition, employees have joined the ULearn with Alnylam (science education) and U.S. and E.U. Green Teams to collaboratively address issues important to them.

ERNs also play an instrumental role in forging relationships with external stakeholders including OutBio, Posse Foundation, Project OnRamp, Wheaton's Summit for Women in STEM, Healthcare Businesswomen's Association, WEST, the BIO Workforce Development and Diversity Initiative and other leading organizations.

GLOBAL EMPLOYEE SNAPSHOT

EMPLOYEE DATA	2020
Total employees	1,453
Proportion of females in global workforce	50%
Total U.S. employees	1,147
Proportion of females in U.S. leadership positions (VP or above)	36%
Proportion of US employees who self-report as members of diversity populations*	33%
Total Alnylam Board of Directors Members	
Number of females on Board of Directors	
Number of individuals on Board of Directors who are members of underrepresented populations**	
Total Alnylam Management Board Members	
Number of females on Management Board	
Number of individuals on Management Board who are members of underrepresented populations**	



Recruiting

DE&I is embedded within our recruitment philosophy. We have developed strategies to achieve objective, transparent hiring decisions to increase diversity, combat bias and capture candidate potential. As a part of this process, our team became licensed as AIRS Certified Diversity & Inclusion Recruiters (CDR) through ADP. This allows us to reach new applicants, close gaps, and keep diversity top of mind throughout recruitment. We have further committed to ensure that a diverse slate of candidates is put forward for each open role.

Ensuring Workplace Safety

The health and safety of our employees and visitors in our offices, labs and manufacturing facilities is a top priority. A committed, professional team lead by Alnylam's Chief Technical Operations and Quality Officer continuously evaluates and mitigates safety risks across the company. For the past five years, our global injury rates have been approximately 50% lower than the normalized industry standard of a 1.35 per 100 full time employees (FTE). In 2019, our comparable injury rate was 0.54, decreasing to 0.08 in 2020 during the pandemic.

In Our Labs, Offices and Manufacturing Facilities

Our in-house **EQUINOX** hybrid management framework is a critical system for providing a safe, healthy, and environmentally responsive workplace, and guides engagement with employees as key stakeholders in Environmental Health & Safety (EHS) practices. This system manages our EHS risks, allowing us to balance growth, science and productivity targets with excellent performance, risk management and legal compliance obligations.

Comprehensive Occupational Health Services

With a strong focus on employee education and injury prevention, we provide comprehensive occupational health services. This includes everything from employee wellness checks, workplace medical screenings, ergonomics, vaccinations, display screen equipment eye exams, work-related illness and injury evaluations and treatment, reproductive health screening, and other activities.





A CHALLENGE ACCEPTED CASE STUDY: INVOKING THE SPIRIT OF KAINOTOMÍA

καινοτομία (kainotomía) – this Greek word translates to "innovation" in English and the "spirit of kaniotomia" is a favorite phrase of our CEO John Maraganore, who says it's "in our RNA as an organization." This spirit inspires our policy of allowing employees to set aside up to 20% of their time to explore their professional passions and take on new challenges – even those that may be outside of their given role. And it was as a result of this 20% time that a small, cross-functional team set out solve how to deliver siRNAs to the central nervous system (CNS) – something that had never been done before. This work created a new research track for the company, expanded our research focus to include the CNS and ocular tissues, which ultimately yielded a nearly \$1 billion research collaboration with Regeneron.

Supporting Total Wellbeing

We offer employees a broad range of health and wellness benefits so they can take care of themselves and their loved ones. The **Total Rewards Program** offers a highly competitive package that attracts, retains, and motivates quality talent using incentives aligned to key business goals, company culture and values.

Benefits include medical and dental plans, disability coverage, and telehealth, mental health and substance abuse services. Through our **Employee Assistance Program** (EAP), employees and their families have 24/7 access to professional and confidential counseling. We also provide \$10,000 toward adoption, surrogacy, or other family planning costs. All active, regular employees working an average of 20 hours per week are eligible to participate in the Alnylam benefits program.

Encouraging Professional Development

As part of Alnylam's talent development strategy, we offer trainings and targeted programs geared toward appropriate career stages. This includes a series of leadership and internship programs for current and future employees. Our priority for 2021 is to link strong employee satisfaction and engagement more directly with how careers can grow at Alnylam.

Educational Opportunities

We provide support for individual growth and development including tuition reimbursement, career development workshops, and year-round elective learning classes through our comprehensive online repository of trainings and targeted programs. Additionally, we host an annual Employee **Development Week** with keynote speakers, Career Development Workshops, and curated eLearning tracks tailored to each employee.

Leadership Cultivation

The Antares Leadership Development Program targets a cross-functional group of high potential Senior Manager to Associate Director level employees, preparing them for future leadership roles at Alnylam. Participants, selected based on their performance and demonstrated potential, receive





one-on-one mentoring with an Operating Team (Vice President and above) mentor, regular assessments, and individual development plans. Together, they engage in workshops and group projects to broaden perspectives to other parts of the business.

The Athena Project, our new female leadership accelerator program, was developed in 2020 and will launch in 2021. With a blended approach of leadership style assessment, executive education, enterprise level business simulation, and executive mentoring, this program will holistically invest in the development of skills for the present and future leadership demands of women at the Director and Senior Director level.

Early Career Support

We foster aspiring scientists and biotech professionals through a range of employment-related learning opportunities. **Alnylam's Summer Intern & Co-Op Programs** provide talented undergraduate and graduate students with the chance to gain industry exposure, practical experience and mentoring by becoming part of the Alnylam team. These programs are designed to increase industry knowledge and advance soft skill development. Typically, we host an average of 65 Co-Ops per year.

Since 2015, Alnylam has partnered with Northeastern University to offer the **PharmD Fellowship** which equips postdoctoral students with the skills to develop advanced medicines of the future. Alnylam fellows are grounded in their core expertise area, with the flexibility to discover new opportunities throughout the company as well as having the chance to participate in teaching opportunities at Northeastern.





COMMUNITIES

We actively engage people in tackling the world's most pressing community and health equity challenges.

At Alnylam, we believe in the importance of fostering resilience in the communities where we work and live. From our early days as a company, we have been steadfast in promoting health equity including increasing access to new medicines and addressing some of the underlying social determinants of health that create systemic education, environmental and social obstacles for people trying to live healthier lives. Through our charitable donations, sponsorships, community partnerships, education grants, mentoring programs, and company-wide community service days, we take on challenges to help improve the health of humanity.

Investing in our Communities

Each year we provide charitable donations to public health, education, and humanitarian projects throughout the globe. In 2020, we focused resources on helping communities respond to COVID-19 and address racial injustice. We supported the Boston Resiliency Fund, NAACP Legal Defense Fund, and Campaign Zero, and we enabled our patient advocacy partners to expand their reach and services. In 2021, we plan to launch a new signature social impact program to address health equity issues in underrepresented communities across the globe.



KEY PRIORITIES IN 2021



COMMUNITIES

COVID-19 Response

The COVID-19 pandemic exposed and exacerbated a wide-range of health inequities in our communities. In addition to helping our patients, advocacy groups and employees during the pandemic, we donated \$250,000 to the Boston Resiliency Fund to provide food for children and seniors, technology to aid remote learning for students, and assistance to first responders and healthcare workers. We also contributed \$25,000 to the Life Sciences Cares COVID-19 Response Fund, as well as donated protective equipment (PPE) and lab supplies to MassBio's supply hub and the Biotechnology Innovation Organization's (BIO) emergency efforts, both of which championed Boston-area hospitals. Globally, donations included \$20,000 allocated among the Municipality of Amsterdam to fund laptops for remote learning, the FABIS Foundation in Huelva towards PPE related projects, and the IdISSC Research Institute in Madrid to fund research around COVID-19 patient care.

Public Community Space Creation

In recognition of Henri Termeer, former long-term Genzyme CEO and biotechnology visionary and pioneer, Alnylam and other local leaders in enhancing an existing public greenspace, "Henri A. Termeer Square," for the community and to honor his legacy. We have invested \$250,000, in addition to in-kind support toward renovations so that it can serve as a central gathering spot for local community residents and employees from the surrounding neighborhoods and companies.

Power of Silencing Auction

Alnylam's employees organize and fund a regular "Power of Silencing" silent auction supporting select patient advocacy groups dedicated to disease awareness, access to diagnosis, patient education, and improved care. Since 2014, we have raised and donated a total of \$275,000 from the last five auctions. Postponed in 2019 and 2020, we plan to hold the auction again in 2021.

Participating in Our Local Communities

We bring great energy and enthusiasm when it comes to taking action in our local communities. Since 2014, we have joined together during our company-wide <u>"Helping Hands" Community Service Day</u> to contribute thousands of volunteer hours to community-based organizations. In



Advocacy for Impact

People with rare diseases often face unique challenges due to the complexity of their conditions, and we recognize that these challenges call for creative solutions. **Advocacy for Impact** is a global competitive grants program that aims to inspire Patient Advocacy Groups to develop solutions addressing critical unmet needs in the rare disease communities they serve. In 2019 and 2020, we provided a total of \$520,000 to 14 patient advocacy groups across the globe and will continue the grant process in 2021. This includes a grant to the American Porphyria Foundation to develop an engaging educational tool to teach healthcare professionals about the disease and shine a spotlight on the patient experience, as well as a grant to the British Porphyria Association to hold a 20th anniversary festival event of expert workshops and interactive sessions for people living with porphyria and their families.



2019, over 75% of Alnylam's employees participated with nearly 40 nonprofit organizations in Greater Boston, Philadelphia, Europe and Brazil. While the challenges of a remote workplace put a pause on our 2020 Global Service Day and we were unable to fully track participation, hundreds of our employees were still able to support community organizations both virtually and in-person during this unprecedented time.

STEM and RNAi Education

With a passion for fostering enthusiasm and preparing young people for future bioscience careers, our ULearn With Alnylam team brings the science of RNAi to life in local schools and community organizations. Employees create and deliver experiments including a hands-on experience on how to extract DNA form a strawberry and another that teaches the concept of density by using sugar, water, and food coloring. In 2020 Ulearn volunteers created a hands-on, at-home RNAi Activity Book to engage students in the excitement of scientific discovery. In addition, we made a \$50,000 donation to Science from Scientists to inspire the next generation to solve real world problems through STEM literacy. The team has committed support to the Science Club for Girls as a part of its 2021 efforts.

Community Health Resources

With the leadership of Alnylam's former President, in the Spring of 2020 Alnylam led a team that raised \$1,600,000 for the American Heart Association (AHA) EmPOWERED to Serve initiative in Massachusetts, a program that engages multicultural communities and motivates community members to take steps toward creating a culture of health. This included a \$250,000 donation from Alnylam. These resources enabled the AHA to investigate the cardiovascular implications of Coronavirus, accelerate antiviral drugs to combat COVID-19, and teach hospitals and communities how to safely and effectively administer CPR during the pandemic.

Essential Supplies Care Packages

Since 2014, hundreds of employees have worked at the Cradles to Crayons Giving Factory to sort, organize and pack essential clothing and school supplies for vulnerable children from birth through age 12 experiencing homeless or low-income situations. Unable to volunteer

SELECT COMMUNITY RELATIONSHIPS



in-person, in 2020 employees across the company wrote messages of hope and inspiration to accompany care packages going to Boston families in crisis.

Basic Winter Essentials

During the pandemic, employees across 20 departments stepped up to help men and women experiencing homelessness and in addiction recovery. Through the "Give Homelessness the BOOT!" campaign, in partnership with The Cambridge And Somerville Programs for Addiction Recovery (CASPAR), employees personally donated essential clothing and protective gear valued at \$31,000 for the agency's clients. The realities of a socially distanced, remote workplace throughout 2020 brought new challenges for our employees dedicated to serving as community volunteers. However, when the first calls went out for help in educating and diagnosing patients in the United Kingdom, a team of Alnylam doctors sprung to action to conduct telehealth appointments with Britain's National Health Service.

Providing Professional Education and Mentoring

We understand the importance of science education and professional mentorship and are committed to nurturing the next generation of life science professionals. We actively support leadership and skill development organizations for women, LGBTQ, veterans, first generation college students and underprivileged youth, as well as educational events and programs in our local communities. This includes opportunities with Women in the Enterprise of Science and Technology (WEST), as well as universities such as Harvard University, Wheaton College and Boston University, where Alnylam employees teach students about RNAi therapeutics, what we do at Alnylam, and about careers in science more generally. Additionally, our Summer Internship, Co-Op, and PharmD Fellowship programs are all rooted in providing practical experience, industry exposure, and mentoring, including through POSSE and Project Onramp programs.

We make annual Independent Medical Education (IME) grants to advance the medical and scientific understanding of our therapeutic areas of interest, and to enable healthcare professionals to close clinical, research and other practice gaps. In 2020, we supported organizations including Physicians' Education Resource and Advancing Knowledge in Healthcare (AKH).





We seek to improve the health and sustainability of our planet.

The wellbeing of our planet directly impacts the health of humanity. We recognize that energy, water, and materials use; greenhouse gas emissions; material and hazardous waste; and transportation are among the largest contributors to Alnylam's environmental footprint. In 2020, our facilities, EHS, operations, manufacturing, and procurement teams began a process of developing an integrated plan that first includes the collection of more base-line data across these impact areas. Our next steps will be to establish better tracking and measurement tools, refine strategies and determine targets to drive our environmental performance. The process will enable us to increase our internal and external transparency and report progress against specific goals.

Since RNAi therapeutics are a new class of medicines, there were few blueprints to follow on how they would be developed in the lab and manufactured. We had to think big while Alnylam was still small. Since it is unique for a company of Alnylam's size to have its own manufacturing facilities, we had to devise solutions for manufacturing, quality control and supply chain that were new to both Alnylam and the pharmaceutical industry, forging our own path with emphasis on quality, safety and best environmental practices.



KEY PRIORITIES IN 2021



Addressing Our Energy Use and Greenhouse Gas Emissions

We know that the impacts of greenhouse gas (GHG) emissions on climate change poses short- and long-term risks to human health, access to medicines, and supply chain reliability. As we continue to gain a better understanding of our office, lab, manufacturing facilities, and other direct and indirect GHG emissions sources, we will work to develop additional strategic reduction methods and lower energy-related costs.

Facility Upgrades

We are collaborating with our landlords to collect data on a more regular cadence and push forward positive practices. In 2020, we conducted our first Sustainability Survey for our leased office facilities outside of the U.S. to help us better understand and manage our footprint. In the U.S., we often partner with local utility companies and publicly owned treatment works (POTWs) to execute energy and waste reduction initiatives.

Within our headquarters at 675 West Kendall Street, in 2020 we began the process of installing an energy-efficient HVAC system designed to save 126,000 KWH per year and 2.65M lbs. of steam per year, providing a 3.5-year ROI on our energy efficiency investment. We also upgraded the penthouse and all stairwell lighting to intelligent LED lights, which are up to 80% more efficient then fluorescent technologies, and reduce output levels during unoccupied periods to minimize energy usage while maintaining a safe environment. Additionally, we installed an HVAC energy recovery system to recover the energy from our laboratory HVAC system for reuse and reduce the heating and cooling demands for the facility. Efficiency enhancements like this, and others were leveraged to reduce overall energy and water use.



water and waste across all of strategies to purposefully lessen our



Manufacturing Facilities

Our new Norton, MA facility began testing and commissioning manufacturing equipment during 2020 in anticipation of future increased production. The building was constructed with leading edge passive building and mechanical insulation systems to maximize energy efficiency and minimize heating and cooling losses. The boiler plant leverages state-of-the-art combustion technologies and heat recovery systems to achieve best in class thermal efficiency while minimizing emissions. The chiller plant incorporates a heat recovery design to simultaneous provide heating and cooling to the building HVAC systems maximizing electrical power usage while reducing water consumption in the cooling towers.

In 2021, we plan to implement various initiatives such as additional Electric Vehicle charging stations, compressed air system optimization, chiller / HVAC controls optimization improvements, and implement necessary data collection tools to collect and monitor critical data needed to quantify energy and water use efficiencies.

As Alnylam begins to implement new lab capability in Kendall Square in 2021 and production ramps up in Alewife and Norton, we plan to use 2022 as the year to create a baseline and study normal operations. This will help us better inform responsible future energy usage, track emissions, and set targets.

Sustainable Transportation

We encourage sustainable transportation through our commercial fleet management and alternative commuting programs. We have adopted EMKAY'S GoGreen vehicle program to begin in 2021. Our 150-car fleet is SmartWay certified, and we will have the ability to measure, benchmark, improve vehicle operations and enable our fleet to become 100% carbon neutral through the purchase of offsets.





Launched in 2004 by the U.S. Environmental **Protection Agency (EPA) Office of** Transportation and Air Quality, SmartWay



Our employee commuter benefits include participation in landlord shuttle programs, electric vehicle charging stations in some of our parking lots in the U.S. and access to educational resources. We provide employees who opt-in with a company-paid monthly Commuter Pass for roundtrip subway and rail transit. Additionally, if our employees bike or walk to work, they are provided with a monthly benefit of \$100 through our Employee Incentive Program. Internationally, we provide comparable commuter benefits to employees based on local public transportation availability and options.

Managing Water Use and Conservation

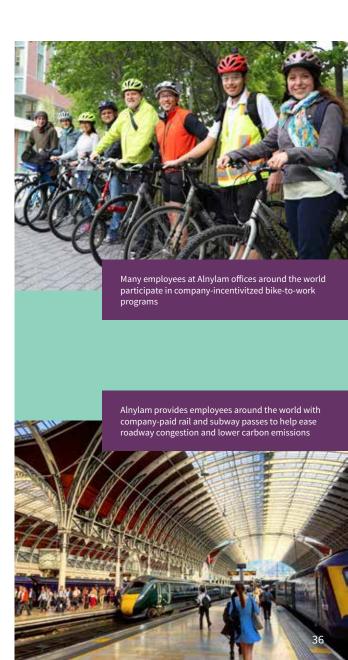
Creating life-saving therapeutics is a water-intensive and dependent process. We strive to use water resources in a sustainable manner, both as it enters and leaves our manufacturing facilities. We recognize the need to establish new baselines in 2021 and implement strategies to reduce the water footprint along our supply chain and prevent harmful discharge and runoff from reaching local watersheds.

Our Norton Facility storm water permit and pollution prevention plans outline procedures for collecting, storing, and inspecting water discharge to ensure it meets Federal, state and local requirements. This helps preserve the nearby Canoe River Aguifer, Snake River, Watson Pond, and Lake Sabbatia watersheds, areas designated as Massachusetts Areas of Critical Environmental Concern (ACEC). Our processes are verified by third-party audits. We purposefully built our Norton manufacturing facility with a 500,000-gallon infiltration/retention pond to ensure the protection of nearby wetlands and to safeguard local ecosystems and wildlife.

Controlling Waste

Safely controlling the hazardous materials used to create state-of-the-art medicines and the associated waste derived from manufacturing are among our highest priorities. Our facilities and EHS teams focus on managing these and other waste streams, conducting ongoing evaluations for alternative use, and conducting R&D to substitute out environmentally harmful chemistries for more viable and less hazardous options.





Municipal Solid Waste and Recycling

Solid waste is a byproduct of researching, developing, and manufacturing lifesaving medicines and from normal employee activities within the workplace. We aim to decrease solid waste wherever feasible and practical by eliminating, reducing, and recycling materials, and recovering, treating, and disposing of material if other options are not technically available. In 2020, we recycled solid waste across our offices, labs, and manufacturing facilities in the U.S. This includes mostly glass, aluminum, and plastic containers. Where it is not possible to recycle, we aim to convert our solid waste into energy via incineration, ultimately diverting material that otherwise would end up in landfills. We will continue to work with our vendor partners to track our waste generation, reduction, recycling, and disposal across our Massachusetts locations and globally, and plan to use this data in 2021 to develop baseline metrics and drive progress.

Hazardous Waste

Our R&D and manufacturing requires a chemically intensive process due to the nature of the therapeutics that we produce. For our sites that handle and dispose of hazardous content, we comply with all relevant waste management guidelines. In 2020, we safely managed and disposed of 992,000 pounds of hazardous materials via recycling, treatment, and incineration from 300 Third, 675 West Kendall, Alewife and Norton locations. Our third-party compliance audits of hazardous waste process facilities are conducted proactively to verify that we are responsibly and legally managing our hazardous waste from cradle to grave.

We increasingly collaborate with our vendors around innovative opportunities to decrease hazardous waste, applying more sustainable approaches to the way we treat, recycle, and transport our waste. Most recently, we worked to recycle 440 gallons of waste ethanol from our Alewife, MA site to use as a raw ingredient in the manufacturing of paint thinner. We plan to increase this effort as our manufacturing increases.

PRACTICES IN FRANCE **AND GERMANY**





GOVERNANCE AND BUSINESS INTEGRITY

We set high standards for our employees and partners.

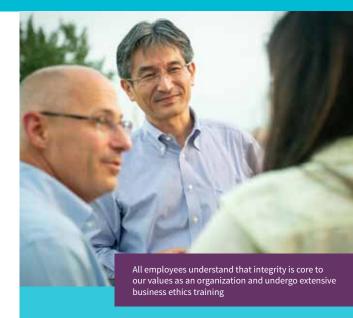
Foundational to our corporate responsibility (CR) and business activities is our commitment to adhere to the highest level of ethical, compliance and legal standards. As our company evolves and the world changes, so does our CR approach, governance structures, guiding policies, and initiatives. Detailed information on corporate governance and company filings are available on our global corporate website.

Leading through Corporate and CR Governance

Our Board of Directors is comprised of accomplished leaders from various science and non-science backgrounds who elevate our initiatives and strategies. The Board includes 4 women and 1 person of color. Of our ten independent directors, six bring both financial and industry expertise. Our Board is structured around four committees, with the Nominating and Corporate Governance Committee overseeing Corporate Responsibility and ESG-related matters.

- 1. Audit Committee
- 2. People, Culture and Compensation Committee
- Nominating and Corporate Governance Committee
- 4. Science and Technology Committee

The Board of Directors oversees our Management Board, which includes our most senior executives who are responsible for the everyday performance of our business. With oversight from our Board of Directors and guided by the Management Board, our cross-functional Corporate Responsibility (CR) Committee and CR focus-area specific teams assess and advance our policies, practices, and reporting.



KEY PRIORITIES IN 2021

- Release an updated Code of Business Conduct and Ethics in 2021
- Formalize a supplier diversity program with associated tracking tools for activation in 2022



GOVERNANCE AND BUSINESS INTEGRITY

We communicate with investors on a consistent basis around governance issues, hosting regular investor meetings and presentations. We also make available on our website the charters of our audit committee, compensation committee, nominating and corporate governance committee, and science and technology committee, as well as our corporate governance guidelines and our Code of Business Conduct and Ethics.

Instilling an Ethics and Compliance Driven Culture

Our conduct is directed and monitored through our Global Compliance Program a overseen by our Corporate Compliance Committee, co-chaired by our CEO and Chief Ethics & Compliance Officer and comprised of senior leaders in the company. This group meets at least once quarterly and reports regularly to the Nominating and Corporate Governance Committee of our Board of Directors.

Around the world, our compliance program and business-related actions are guided by our Code of Business Conduct and Ethics. This document outlines our responsibility to comply with all relevant laws and regulations in every country where we operate, ensure product quality and patient safety, protect patient privacy, perform ethical research, conduct ethical relationships with healthcare professionals, engage in scientific exchange, and take other actions to enhance our workplace and communities. An anonymous and confidential 24-hour Ethics and Compliance hotline, managed by a third-party, can be accessed by phone or online to report concerns. As we continue to grow, it is essential that our Code of Business Conduct and Ethics evolves alongside our business. Our Corporate Compliance Committee is in the process of reviewing our risks, policies and procedures and plans to update the Code by the end of 2021.

We also maintain written policies and procedures designed to ensure that our interactions with healthcare professionals are ethical and in line with evolving regulations and guidelines in the US and elsewhere in the world. We review our compliance policies and procedures regularly and revise them as necessary to address emerging risks and business changes.



BOARD OF DIRECTORS

We have a team of accomplished leaders from various backgrounds who elevate our initiatives and strategies.

Chair of the Board: Michael W. Bonney

Audit Committee

Michael W. Bonney Marsha H. Fanucci, Chair Colleen Reitan

People, Culture and Compensation Committee

Steven M. Paul, M.D. Olivier Brandicourt, M.D. Amy W. Schulman, Chair

Nominating and Corporate Governance Committee

Dennis A. Ausiello, M.D. Michael W. Bonney Marsha H. Fanucci David E.I. Pyott, Chair Amy W. Schulman

Science and Technology Committee

Dennis A. Ausiello, M.D. Steven M. Paul, M.D. Margaret A. Hamburg, M.D. Phillip A. Sharp, Ph.D., Chair

GOVERNANCE AND BUSINESS INTEGRITY

In 2020 we established an internal audit function, reporting to the Audit Committee of the Board of Directors. The internal audit function's mission is to enhance and protect organizational value by providing risked-based and objective assurance, advice, and insight.

We promote and market our products worldwide in adherence with our Code of Business Conduct and Ethics, marketing laws, regulations of countries where we do business, and industry codes of practice.

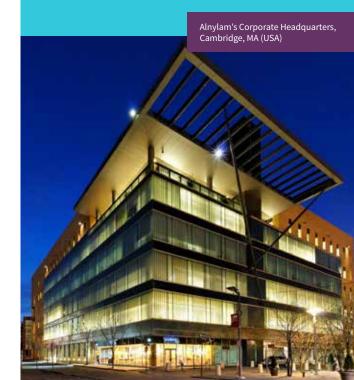
Enhancing Procurement Practices and Supplier Diversity

Our ability to source goods and services enterprise-wide that meet our requirements from an ethical and responsible perspective is important to how we conduct business. Our suppliers must comply with the ethics, safety, quality, anti-corruption, information security, and non-disclosure polices required in our vendor agreements. Employees are guided by our Global Procurement Policy, which was established as an operational control to ensure our purchases are conducted in an ethical and responsible manner, in compliance with applicable laws, industry standards, internal policies and controls, business rules, and regulatory compliance requirements across all of our operations globally. This policy aims to minimize risk and ensure business continuity when selecting and working with vendors.

Our CEO, John Maraganore, joined other industry leaders in adopting the MassBio CEO Pledge for a More Equitable and Inclusive Life Sciences Industry. By signing this pledge, we committed to address injustice through comprehensive equity, diversity, and inclusion initiatives within six areas, including supplier diversity. This commitment has become part of our overall diversity strategy. In 2021, we will review our current vendor relationships and work towards formalizing a supplier diversity program in 2022, ensuring small and diverse businesses are accounted for and supported within our sourcing activities.

COMMITED TO LEADERSHIP

We signed both the <u>U.S. New Commitment</u> to Patients and the European Biotech Social Pact, joining other US and European life science leaders pledging to be a force for good, act with the highest integrity and corporate responsibility, and ensure that patients are always put first.





CONTACT INFORMATION AND USEFUL LINKS

List of links to relevant CR-related information referenced in this report

PATIENTS

- Patient Access Philosophy
- 2020 Patient Access Philosophy Report
- Alnylam Act®
- Alnylam clinical trials and transparency
- 2020 U.S. Rare Disease Trend Report
- Educational patient websites
 - The Bridge US (hATTR Amyloidosis US website)
 - The Bridge EU (hATTR Amyloidosis EU website)
 - Pinpoint AHP (Acute Hepatic Porphyria US website)
 - Living with Porphyria (Acute Hepatic Porphyria EU website)
 - Take on PH1 (PH1 US website)

SCIENCE

- Alnylam products
- Product pipeline
- The science behind RNAi
- December 2020 R&D Day
- Alnylam Scientific Advisory Board (SAB)

EMPLOYEES

- Our culture
- MassBio CEO Pledge

COMMUNITIES

- Advocacy for Impact grants
- Independent Medical Education (IME) grants

PLANET

• EMKAY'S GoGreen vehicle program

GOVERNANCE

- Alnylam investor website
- Annual reports
- SEC filings
- 10-K, proxy statement, and additional financial information
- Leadership and Board of Directors
- Corporate Governance Guidelines
- Code of Conduct and Business Ethics
- Press Releases
- · Ownership profile

We welcome your feedback at

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