

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

(Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

Alnylam Pharmaceuticals, Inc.



(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- No fee required.**
- Fee paid previously with preliminary materials.**
- Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.**



2025 Proxy Statement

Notice of Annual Meeting of Stockholders

MAY 8, 2025

Letter from our CEO

March 24, 2025

To our Stockholders:

We invite you to attend the 2025 Annual Meeting of Stockholders of Alnylam Pharmaceuticals, Inc., which will be held online on Thursday, May 8, 2025, beginning at 8:30 a.m., Eastern Time. You may attend the meeting virtually via the Internet at www.virtualshareholdermeeting.com/ALNY2025, where you will be able to vote electronically and submit questions. You will need the 16-digit control number included with these proxy materials to attend the annual meeting.

The following notice of our annual meeting of stockholders contains details of the business to be conducted at the meeting. Only stockholders of record at the close of business on March 10, 2025 will be entitled to notice of, and to vote at, the annual meeting.

On behalf of our Board of Directors, thank you for your continued support of Alnylam.

Very truly yours,



YVONNE L. GREENSTREET, M.D.

Chief Executive Officer and Director

On behalf of the Board of Directors of Alnylam Pharmaceuticals, Inc.



Notice of 2025 Annual Meeting of Stockholders

Items of Business

- 1** To elect four (4) members to our board of directors, as nominated by our board of directors, each to serve as a Class III director for a term ending in 2028, or until a successor has been duly elected and qualified;
- 2** To approve an amendment to our Restated Certificate of Incorporation allowing for officer exculpation;
- 3** To approve our Second Amended and Restated 2018 Stock Incentive Plan, to, among other things, increase the number of shares authorized for issuance thereunder by 7,000,000 shares;
- 4** To approve, on a non-binding advisory basis, the compensation of our named executive officers, as described in the "Compensation Discussion and Analysis," executive compensation tables and accompanying narrative disclosures in this proxy statement;
- 5** To ratify the appointment of PricewaterhouseCoopers LLP, an independent registered public accounting firm, as our independent auditors for the fiscal year ending December 31, 2025; and
- 6** To transact any other business that may properly come before the annual meeting or any adjournment or postponement thereof.

Date and Time

Thursday, May 8, 2025 | 8:30 a.m., Eastern Time

Location

Online at www.virtualshareholdermeeting.com/ALNY2025

To participate in the annual meeting virtually via the Internet, please visit www.virtualshareholdermeeting.com/ALNY2025. You will need the 16-digit control number included on your proxy card or the instructions that accompanied your proxy materials. Stockholders will be able to vote and submit questions during the annual meeting.

Record Date

March 10, 2025. Only Alnylam stockholders of record at the close of business on the record date for the annual meeting are entitled to notice of, and to vote at, the annual meeting or any adjournment or postponement thereof.

You will not be able to attend the annual meeting in person.

Voting

Proposal 1 relates solely to the election of four (4) Class III directors nominated by our board of directors and does not include any other matters relating to the election of directors, including without limitation, the election of directors nominated by any stockholder of the company.

Your vote is important regardless of the number of shares you own. Whether or not you plan to participate in the annual meeting online, we hope you will take the time to vote your shares. To ensure your representation at the annual meeting, if you are a stockholder of record, please vote in one of these three ways:



Vote Over the Internet

by going to www.proxyvote.com and entering the 16-digit control number provided on your proxy card or voting instruction form.



Vote by Telephone

by calling 1-800-690-6903 or the number on your proxy card or voting instruction form. You will need the 16-digit control number provided on your proxy card or voting instruction form.



Vote by Mail

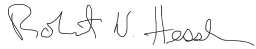
if you received printed proxy materials, by completing, signing and dating the proxy card or voting instruction form and mailing it in the accompanying pre-addressed envelope. If you vote over the Internet or by telephone, please do not mail your proxy.

If you choose to vote your shares by mail or by telephone or Internet in advance of the meeting, your vote must be received by 11:59 p.m., Eastern Time on May 7, 2025 to be counted.

If you vote via the Internet or by telephone in advance of the meeting or if you mail your proxy in, you will not limit your right to vote online at the annual meeting. If your shares are held in "street name," that is, held for your account by a broker or other nominee, you will receive instructions from the holder of record that you must follow for your shares to be voted.



By Order of the Board of Directors,



Robert W. Hesslein

Executive Vice President, Chief Legal
Officer and Secretary
Cambridge, Massachusetts
March 24, 2025

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY OF PROXY
MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON MAY 8, 2025**

This Notice of 2025 Annual Meeting, Proxy Statement, 2024 Annual Report
on Form 10-K and Annual Report to Stockholders are available for viewing,
printing and downloading at www.proxyvote.com.








Cautionary Note Regarding Forward-Looking Statements

This proxy statement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements other than historical statements of fact regarding Alnylam's expectations, beliefs, goals, plans or prospects including, without limitation, statements regarding Alnylam's expectations with respect to its "*Alnylam P⁵x25*" goals; the company's projected commercial and financial performance; the anticipated timelines and progress with respect to the company's environmental sustainability, corporate responsibility and environmental, social and governance initiatives; the company's commitments and progress pursuant to its Patient Access Philosophy; and the company's plans with respect to stockholder engagement, should be considered forward-looking statements. Actual results and future plans may differ materially from those indicated by these forward-looking statements as a result of various important risks, uncertainties and other factors, including, without limitation, risks and uncertainties relating to: Alnylam's ability to successfully execute on its "*Alnylam P⁵x25*" strategy; Alnylam's ability to discover and develop novel drug candidates and delivery approaches and successfully demonstrate the efficacy and safety of its product candidates; the pre-clinical and clinical results for Alnylam's product candidates, including vutrisiran, zilebesiran, nucresiran and mivelsiran; actions or advice of regulatory agencies and Alnylam's ability to obtain and maintain regulatory approval for its product candidates, as well as favorable pricing and reimbursement; successfully launching, marketing and selling Alnylam's approved products globally; delays, interruptions or failures in the manufacture and supply of Alnylam's product candidates or its marketed products; obtaining, maintaining and protecting intellectual property; Alnylam's ability to successfully expand the approved indications for AMVUTTRA in the future; Alnylam's ability to manage its growth and operating expenses through disciplined investment in operations and its ability to achieve a self-sustainable financial profile; Alnylam's ability to maintain strategic business collaborations; Alnylam's dependence on third parties for the development and commercialization of certain products; the outcome of litigation; the risk of government investigations; and unexpected expenditures; as well as those risks and uncertainties more fully discussed in the "Risk Factors" filed with Alnylam's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on February 13, 2025, as may be updated from time to time in other filings that Alnylam makes with the SEC. In addition, any forward-looking statements represent Alnylam's views only as of the date of this proxy statement and should not be relied upon as representing its views as of any subsequent date. Alnylam explicitly disclaims any obligation, except to the extent required by law, to update any forward-looking statements.



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Proxy Statement Summary

This summary highlights important information you will find in this proxy statement. As it is only a summary, please review the complete proxy statement before you vote.

Virtual Annual Meeting Information

Date: Thursday, May 8, 2025

Time: 8:30 a.m., Eastern Time

Location: Online at www.virtualshareholdermeeting.com/ALNY2025
You will not be able to attend the annual meeting in person.

Record Date: March 10, 2025

Voting Items and Board Recommendations

PROPOSAL 1	PROPOSAL 2	PROPOSAL 3	PROPOSAL 4	PROPOSAL 5
Election of Four (4) Class III Directors	Approval of Charter Amendment Allowing for Officer Exculpation	Approval of Second Amended and Restated 2018 Stock Incentive Plan	Say-on-Pay—Advisory Vote on Approval of Executive Compensation	Ratification of Independent Auditors
✓ FOR ALL NOMINEES	✓ FOR	✓ FOR	✓ FOR	✓ FOR

All proxies will be voted in accordance with the instructions contained in those proxies. If no choice is specified, the proxies will be voted in favor of the matters set forth in the accompanying Notice of Meeting. On any other matters properly brought before the annual meeting, the named proxies may vote in accordance with their best judgment.

How to Vote

Vote Right Away Through Advance Voting Methods



Vote by Internet Using Your Computer

Go to www.proxyvote.com and enter the 16-digit control number provided on your proxy card or voting instruction form.



Vote by Telephone

Call 1-800-690-6903 or the number on your proxy card or voting instruction form. You will need the 16-digit control number provided on your proxy card or voting instruction form.



Vote by Mail

If you received printed proxy materials, complete, sign and date the proxy card or voting instruction form and mail it in the accompanying pre-addressed envelope.

Vote During Meeting



Vote During the Meeting

See “Important Information About the Annual Meeting and Voting – Voting” for details on how to vote during the Annual Meeting.



Important Notice Regarding the Internet Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 8, 2025

We are furnishing proxy materials to our stockholders primarily via the Internet. On or about March 26, 2025, we will mail to our stockholders a Notice of Internet Availability containing instructions on how to access our proxy materials, including this proxy statement, our 2024 Annual Report on Form 10-K and our Annual Report to Stockholders. The Notice of Internet Availability also instructs you on how to submit your proxy or voting instructions through the Internet or to request a paper copy of our proxy materials, including a proxy card or voting instruction form that includes instructions on how to submit your proxy or voting instructions by mail or telephone. Other stockholders, in accordance with their prior requests, have received email access to our proxy materials and instructions to submit their vote via the Internet, or have been mailed paper copies of our proxy materials and a proxy card or voting instruction form.

This proxy statement, our 2024 Annual Report on Form 10-K and our Annual Report to Stockholders are available for viewing, printing and downloading at www.proxyvote.com.

A copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as filed with the SEC on February 13, 2025, will be furnished without charge to any stockholder upon written request to Alnylam Pharmaceuticals, Inc., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142, Attention: Investor Relations and Corporate Communications.

This proxy statement and our Annual Report on Form 10-K for the fiscal year ended December 31, 2024 are also available on the SEC's website at www.sec.gov.



Corporate Governance

General

We believe that good corporate governance is important to ensure that Alnylam is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted.

Corporate Governance Strengths

We are committed to exercising good corporate governance practices. We believe that good governance promotes the long-term interests of our stockholders and strengthens the accountability of our board of directors, or our board, and management. Our corporate governance practices are primarily designed to:



Enhance Independent Oversight

- ✓ 10 of 12 directors (83%) are independent
- ✓ All board committees are 100% independent
- ✓ Independent directors hold regular executive sessions



Increase Accountability to Stockholders

- ✓ Majority vote standard for uncontested director elections, with a director resignation policy
- ✓ Regular engagement with stockholders
- ✓ Annual advisory approval of executive compensation



Ensure a Fit-for-Purpose Board Align Interests with Long-Term Stockholders

- ✓ Commitment to ensuring the board represents diversity of tenure, experience and skills
- ✓ Regular evaluation of board and committee composition
- ✓ Regular assessment of external commitments, potential conflicts of interest and time commitments of directors



- ✓ One vote per share
- ✓ Strong stock ownership guidelines for directors and executives
- ✓ Clawback policy applies to both cash and equity incentives
- ✓ No margin accounts, pledging or hedging of company shares

Corporate Governance Materials

Our board has adopted corporate governance guidelines to assist in the exercise of its duties and responsibilities and to serve the best interests of Alnylam and our stockholders. These guidelines provide a framework for the conduct of business of our board.

The board has also adopted a code of business conduct and ethics, which applies to all of our officers, directors and employees, and has adopted charters for our audit committee, our people, culture and compensation committee (sometimes referred to in this proxy statement as our PC&C committee), our nominating and corporate governance committee, and our science and technology committee.

We have posted copies of these documents on the Corporate Governance page of the Investors section of our website, www.alnylam.com. We intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics required to be disclosed by law or Nasdaq Global Select Market listing standards. Information appearing on our website is not a part of and is not incorporated into this proxy statement.

Policy Prohibiting Insider Trading and Related Procedures

We maintain an insider trading policy governing the purchase, sale and other dispositions of our securities that applies to all employees, directors, officers and other covered persons, as well as the company. We believe that our insider trading policy is reasonably designed to promote compliance with insider trading laws, rules and regulations, as well as applicable listing standards. A copy of our insider trading policy was filed as an exhibit to our Annual Report on Form 10-K for the fiscal year ended December 31, 2024.

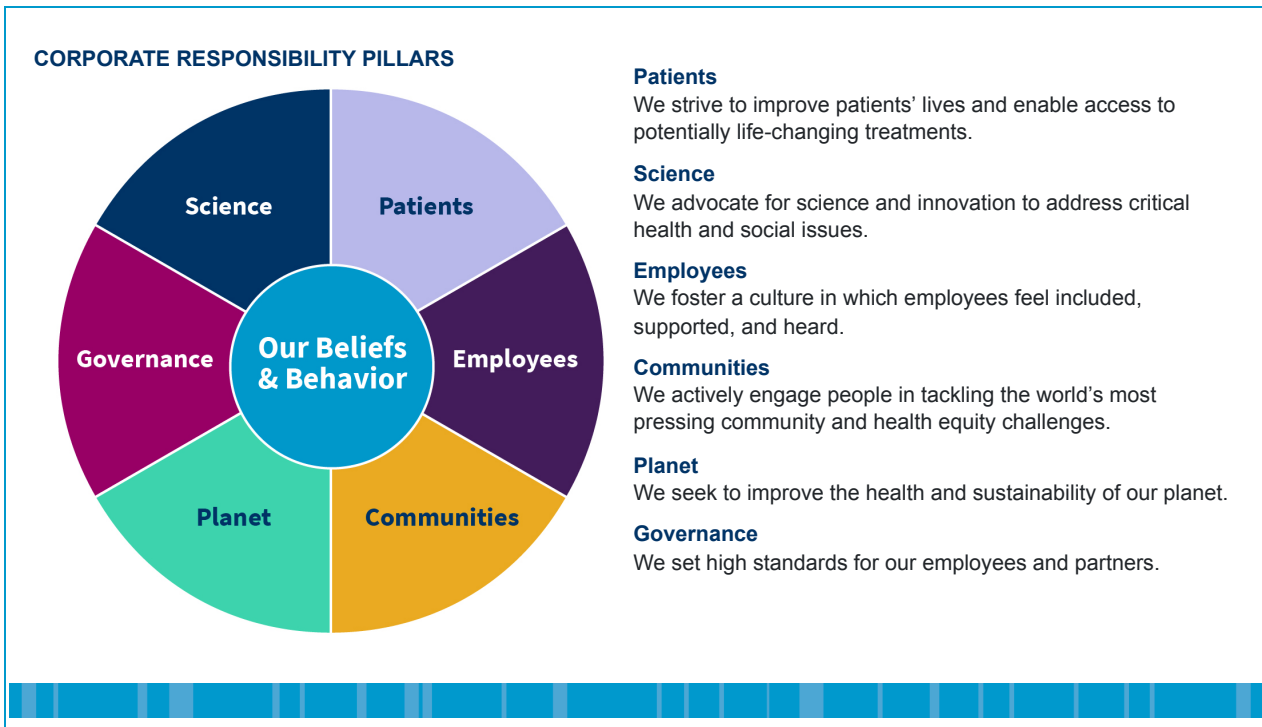




Corporate Responsibility

Our culture is not one that accepts the status quo. Instead, we thrive on the potential of what can be. Alnylam employees seize the moment, cultivating opportunities to drive innovation forward in ways that shape the future. So too, our approach to Corporate Responsibility, or CR, is driven by our passion for taking courageous action to Improve the Health of Humanity.

This “Challenge Accepted” approach is rooted in our responsibility to be an ethical, values-based corporate citizen. It informs our business strategy and guides our ongoing work of tackling complex challenges and using our business as a force for good. Alnylam operates across six interrelated pillars that are key to our everyday operations and external impact: Patients, Science, Employees, Communities, Planet, and Governance.



Governance

Our board sets the tone for governance across our company. Our nominating and corporate governance committee provides direct oversight of, and engagement with, our CR and environmental, social and governance, or ESG, related matters. Our executive leadership team is also directly involved in CR through focus-area-specific teams that advance our work on a regular basis.

We have a CR Steering Committee structure that aligns key working groups for each of our CR pillars. Each pillar's working group is led by a chair or chairs who are also members of the CR Steering Committee and key leaders from various company areas whose responsibilities align with each pillar. These individuals oversee, develop strategy for, and review reporting and key performance indicators surrounding, their individual pillars. By utilizing a cross-functional, team-based approach to CR, we continuously seek to integrate these strategies into our existing business initiatives.

Our work in CR aligns directly with our *Alnylam P⁵x25* strategy. As we aim to become a top-tier biotech by the end of 2025, our expectations in CR and sustainability grow simultaneously. During 2024, we continued to invest in programs that meet the expectations of our stakeholders, the demands of the global regulatory environment, and the high threshold of integrity expected from our industry globally.



CONTINUED INVESTMENT IN ESG AND CORPORATE RESPONSIBILITY

- Annually, we publish a CR report that includes information regarding both ESG and CR at Alnylam. Our reporting is **aligned with the most applicable global CR and ESG reporting frameworks, including the Sustainability Accounting Standards Board's Biotechnology & Pharmaceuticals Standard and the Global Reporting Initiative Standard: Core Option Framework.**
- In 2025, we will share for the first time in our CR Report a **complete greenhouse gas emissions footprint that includes Scope 1, 2, and 3 data**, verified by an external third party. We continue to share data related to water and waste across our footprint. Transparency with this important environmental data drives our teams internally to pursue advancements in data management and appropriate target-setting measures globally, with a goal to align in 2026 with the requirements of compliance reporting under the Corporate Sustainability Reporting Directive, or CSRD, in the European Union.
- In preparation for ongoing compliance and regulatory requirements in CR and ESG topics globally, in 2024 we **launched an ESG Regulatory Working Group**. Comprised of members of Alnylam's legal, compliance, finance and ESG teams, the group will monitor global compliance-related requirements and ensure our reporting, materiality assessments and business initiatives align with global expectations from stakeholders. We anticipate the release of our first CSRD-compliant report in 2026.
- **We continue to evolve and expand our Alnylam Challengers Signature Social Impact Program** and align community programming to our health equity principles globally.

Patient Access

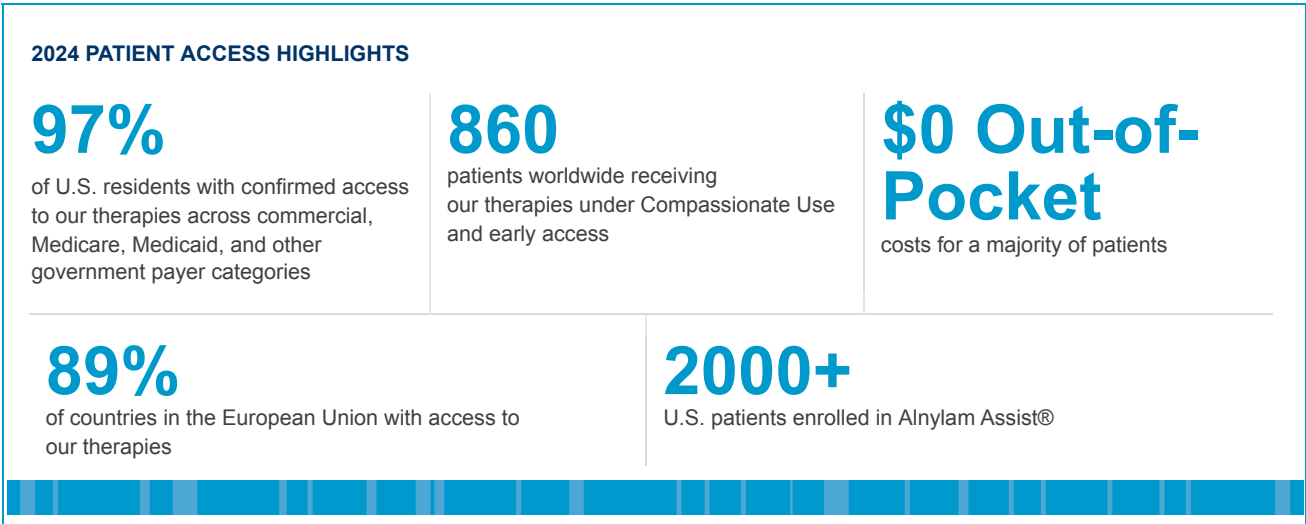
Our Patient Access Philosophy was established in 2017 before we had launched our first commercial medicine. Our original philosophy was rooted in a belief that remains foundational to this day: for patients and society to benefit from our scientific breakthroughs, our therapeutics must reach the people who need them. The original philosophy had three sections: help patients, deliver value to payors and physicians, and be proactive and accountable. These tenets continue to underpin our drive to deliver sustainable value, significant impact, and better outcomes.

In 2024, we revisited the promises of our Patient Access Philosophy during a year in which we took significant steps toward transforming the lives of patients worldwide with the strong results of the HELIOS-B phase 3 clinical trial of vutrisiran for the treatment of ATTR amyloidosis with cardiomyopathy. Our goals in this process were to ensure an up-to-date perspective on our approach to patient access and to support affordability, expand the scope to serve our rapidly growing footprint, and reflect our proactive, collaborative approach to integrated access alongside all stakeholders in the patient journey. Alnylam Assist® provides personalized services to help patients understand insurance coverage, inform patients of options and eligibility for financial support, provide materials to start conversations with physicians and family members, and share information on patient advocacy organizations and other resources.

In 2024, we re-launched our Patient Access Philosophy to assert our belief in the value a global, independent biotechnology company can bring to the face of medicine and to model behavior for the good of science, patients, and society. Our Patient Access Philosophy includes the following commitments:

- It is our responsibility to push the boundaries of discovery, development, and delivery to fuel significant, sustainable patient impact.
- Together with partners in the healthcare ecosystem, we can reduce barriers to improve outcomes for all, and most importantly for the patient.
- Our Patient Access Philosophy defines our role in a patient's journey to innovative therapeutic options and holds us accountable to progress.





Employee Talent

We are proud of our workforce and strive to create a culture in which everyone feels they belong and are empowered to achieve their full potential. As a leading biotechnology company, it is imperative that our R&D processes, clinical trials and patient advocacy efforts include representation from diverse populations who need access to our medicines. Our team members understand that the tenets of diversity and inclusion are a key part of our success as a company. It is essential that our team members feel a strong sense of community and belonging, and that they feel empowered by their work at Alnylam in meeting their personal and professional goals. We plan to continue to share highlights of employee accomplishments in our Annual Corporate Responsibility Report.

In 2024:

- We continued positive results in our 2024 Culture Survey. Notably, 95% of employees are considered highly or moderately engaged, 93% of employees believe Alnylam is dedicated to the service of patients in need.
- We joined the Veterans in Business Network to increase our spending with Veteran and Service-Disabled Veteran-Owned Enterprises.
- We were named to Boston Globe’s “Top Places to Work” for the 10th year in a row.
- We were named to Newsweek’s “Most Responsible Companies” for the 3rd year in a row.

Global Employee Snapshot as of December 31, 2024

ALNYLAM EMPLOYEES

2,230

Total employees

1,758

Total U.S. employees



Environmental Sustainability

We recognize that the health of the global population is inextricably linked to the health of our planet. We believe it is essential to minimize our impact on the environment, and we work to address the growing threat of climate change globally, and our knowledge related to our environmental footprint continues to expand. We consistently work to enhance our data collection and monitoring processes, and seek out opportunities to reduce our environmental footprint, further integrating our commitment to environmental excellence into our global focus on transforming lives and improving the health of humanity.

In 2021, we began to monitor and report on Scopes 1 and 2 and select Scope 3 greenhouse gas emissions. In 2024, we added additional Scope 3 emissions categories to broaden the picture of our environmental footprint in preparation for developing pragmatic targets and meeting the requirements of CSRD and other regulatory requirements and reporting frameworks.

In 2024, we also continued to refine these processes and to decrease our environmental impact by:

- Continuing to complete annual emissions and waste inventories and report on them in our annual CR Report, including third-party verification of emissions data.
- Successful completion of a comprehensive water risk assessment for our global sites.
- Investments in new green power purchase plans, with both our Norton and Alewife manufacturing facilities now powered by renewable energy.

Cybersecurity and Data Privacy

Our nominating and corporate governance committee assists our board in fulfilling its oversight responsibilities with respect to the management of risks associated with cybersecurity and data privacy. We have in place a cross-functional, enterprise-wide cybersecurity program that is integrated into our overall risk management process and strategy. As part of this program, we conduct continuous monitoring for anomalous behavior using a third-party security operations center. In addition, we engage a third party to conduct an annual independent cybersecurity program assessment to enhance our information security in alignment with leading practices, the constantly evolving cyber-risk landscape and applicable business considerations. By continuously assessing the cybersecurity landscape, we develop targeted strategies that identify and address the risks most likely to impact our company. We apply a global approach and seek to comply with the strictest data privacy standards in every country in which we operate to ensure we handle our patients' personal data with integrity.

Guided by our nominating and corporate governance committee, we continue to invest in cybersecurity and data privacy resources. In 2024, we:

- Maintained a dedicated data governance committee, or DGC, comprised of leaders from our information security, technology and intellectual property groups. The DGC has established policies and procedures regarding data collection, retention, storage, and destruction that will be implemented across all of our business units in 2025;
- The DGC recognized the growth of generative artificial intelligence, or AI, and large language models, or LLMs, as business tools, and created a set of global guidelines to understand and evaluate AI and LLM technologies and explore their use across our organization. These guidelines encourage employees to consider confidentiality, personal data, intellectual property, and other considerations in using these technologies; and
- Continued to implement our "Privacy By Design" process globally, embedding our commitment to privacy into business processes and ensuring our technology enables privacy and data protection for employees, patients and partners.

For additional information please view our Corporate Responsibility website and our Annual Corporate Responsibility Report, published in May each year.

PROPOSAL 1

Information Concerning Director Nominees – Election of Class III Directors

Alnylam has led the translation of RNA interference, or RNAi, into a whole new class of innovative medicines for people afflicted with rare and prevalent diseases with unmet need. Based on Nobel Prize-winning science, RNAi therapeutics represent a powerful, clinically validated approach that has yielded transformative medicines. Since our founding in 2002, Alnylam has led the RNAi revolution and continues to deliver on a bold vision to turn scientific possibility into reality. Our commercial RNAi therapeutic products are ONPATTRO® (patisiran), AMVUTTRA® (vutrisiran), GIVLAARI® (givosiran), OXLUMO® (lumasiran), and Leqvio® (inclisiran), which is being developed and commercialized by our partner, Novartis. We also have a deep pipeline of investigational medicines, including multiple product candidates that are in late-stage development.

We have three classes of directors: Class I, Class II and Class III. At each annual meeting, directors are elected for a term of three years to succeed those whose terms are expiring. The directors are divided as equally as possible among the three classes, and the terms of the three classes are staggered so that only one class is elected by stockholders annually. There are currently four members in each of Class I, II and III.

In March 2025, Dr. Phillip A. Sharp announced his intention to retire from our board of directors, effective as of May 8, 2025. Dr. Sharp is a scientific founder of Alnylam and Nobel Prize recipient, and was most recently elected to our board of directors in June 2023 and serves as a Class I director.

At the annual meeting, we are proposing the election of four (4) Class III directors to hold office until the annual meeting of stockholders to be held in 2028, or until their respective successors have been duly elected and qualified. Upon the recommendation of our nominating and corporate governance committee, our board has nominated Carolyn R. Bertozzi, Ph.D., Margaret A. Hamburg, M.D., Colleen F. Reitan and Amy W. Schulman for election to the board of directors as Class III directors. Each of Drs. Bertozzi and Hamburg and Mses. Reitan and Schulman is currently serving as a Class III director. Dr. Bertozzi has served as a director since January 2023, Dr. Hamburg has served as a director since January 2019, Ms. Reitan has served as a director since June 2018 and Ms. Schulman has served as a director since July 2014. The persons named in the enclosed proxy will vote to elect each nominee as a Class III director unless the proxy is marked otherwise. Drs. Bertozzi and Hamburg and Mses. Reitan and Schulman have indicated their willingness to serve on our board, but if any nominee should be unwilling or unable to serve, the person acting under the proxy may vote the proxy for a substitute nominee designated by our board, unless the board reduces the number of directors accordingly.

Each nominee for Class III director will be elected to serve on our board if the number of shares voted “For” that nominee exceeds the number of shares voted “Against” that nominee. As described more fully below under the heading “Majority Voting Policy,” we have adopted a resignation policy in the event a director nominee does not receive a majority of such votes. Abstentions and broker non-votes, if any, are not counted for purposes of this proposal.

BOARD RECOMMENDATION

Our board of directors unanimously recommends a vote **FOR** the election of each of Drs. Bertozzi and Hamburg and Mses. Reitan and Schulman as a Class III director.



Set forth below for each continuing director, including the Class III director nominees, is information as of March 1, 2025 with respect to his or her (a) name and age, (b) positions and offices at Alnylam, if any, (c) principal occupation and business experience during at least the past five years, (d) directorships, if any, of other publicly-held companies, held currently or during the past five years, and (e) the year such person became a member of our board of directors. We have also included information below regarding each continuing director’s specific experience, qualifications, attributes, and skills that led the nominating and corporate governance committee and our board of directors to the conclusion that he or she should serve as a director in light of our business and structure. Our board has determined that each director



servicing on our board of directors, with the exception of our chief executive officer, or CEO, Dr. Greenstreet, and our former executive chair, Mr. Bonney, are independent within the meaning of the director independence standards of the Nasdaq Global Select Market and the Securities Exchange Act of 1934, as amended, or the Exchange Act. There are no family relationships among any of our directors or executive officers.

Class III—Directors/Nominees to be elected at the 2025 annual meeting (terms expiring in 2028)



**Carolyn R.
Bertozzi, Ph.D.**

**INDEPENDENT
DIRECTOR**

Director since: 2023

Age: 58

Committees:

- Nominating and Corporate Governance Committee
- Science and Technology Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Bertozzi has served as the Anne T. and Robert M. Bass Professor of Chemistry at Stanford University since 2015 and as the Baker Family Director of Stanford's Sarafan ChEM-H Institute since 2021. Since 2000, Dr. Bertozzi has also served as an Investigator at the Howard Hughes Medical Institute. From 1996 to 2015, she was a professor of Chemistry and Molecular and Cell Biology at the University of California, Berkeley. Dr. Bertozzi was jointly awarded the 2022 Nobel Prize in Chemistry and the 2022 Wolf Prize in Chemistry. She is a member of the National Academy of Sciences, the National Academy of Medicine and National Academy of Inventors, as well as the Royal Society (UK), Accademia Nazionale dei Lincei and the German Academy of Sciences Leopoldina.

Dr. Bertozzi also serves as a director of OmniAb, Inc. and previously served as a director of Eli Lilly and Company.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Bertozzi is a pioneer for emerging technology and has founded several biopharmaceutical companies and guided more than a dozen academic and professional organizations and life sciences companies in leadership and board positions. Her deep technical and leadership expertise, as well as her corporate governance experience in the biopharmaceutical industry, enables her to make significant contributions to our board, and nominating and corporate governance and science and technology committees, on which she serves, as we expand our early stage clinical pipeline, advance our late stage clinical programs towards commercialization, and further strengthen our global commercial operations.





Margaret A. Hamburg, M.D.

INDEPENDENT DIRECTOR

Director since: 2019

Age: 69

Committees:

- Nominating and Corporate Governance Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Hamburg currently serves as Co-President (volunteer) of the InterAcademy Partnership. From May 2009 to April 2015, Dr. Hamburg served as the Commissioner of the U.S. Food and Drug Administration (FDA). Most recently, Dr. Hamburg was Interim Vice President, Global Biological Policy and Programs at the Nuclear Threat Initiative. Dr. Hamburg completed a five-year term as Foreign Secretary of the National Academy of Medicine, serving from April 2015 to July 2020, and completed her service as President/Chair of the Board of the American Association for the Advancement of Science (AAAS) in February 2020. From January 2001 to May 2009, Dr. Hamburg worked for the Nuclear Threat Initiative, first as Vice President for biological programs, then as Senior Scientist. From November 1997 to January 2001, Dr. Hamburg served as the Assistant Secretary for Planning and Evaluation in the Department of Health and Human Services. Prior to that, she was New York City’s health commissioner.

Dr. Hamburg currently serves on a number of non-profit boards and advisory committees. She is also a Commissioner on the Bipartisan Commission on Biodefense and the Harvard Medical School Board of Fellows. She currently chairs the Boards of The Commonwealth Fund, Ending Pandemics and the Advisory Board for the Center on Regulatory Excellence, Duke-NUS School of Medicine in Singapore. Dr. Hamburg recently stepped down from positions as the Vice Chair of President Biden’s Intelligence Advisory Board and as a member of the Foreign Affairs Policy Board to the Secretary of State.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Hamburg has an extensive background in matters of science, medicine, public health and regulatory issues, having held policy positions in the Biden, Obama, Clinton and Reagan administrations, including serving as the Commissioner of the FDA. She has performed basic and clinical research at the National Institutes of Health and Rockefeller University. Dr. Hamburg’s distinguished career and expertise in the field brings a unique regulatory and policy perspective, as well as valuable scientific and operational expertise, to our board and our nominating and corporate governance committee as we initiate additional clinical trials, expand our portfolio of marketed products, advance our robust clinical pipeline towards commercialization, and further strengthen our global commercial infrastructure.





Colleen F. Reitan

INDEPENDENT DIRECTOR

Director since: 2018

Age: 65

Committees:

- Audit Committee
- People, Culture and Compensation Committee (Chair)

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Ms. Reitan served as President of Plan Operations of Health Care Service Corporation, or HCSC, the largest customer-owned health insurer in the United States and an independent licensee of Blue Cross and Blue Shield Association, from October 2015 to April 2018. She also served as the Chief Operating Officer of HCSC from January 2009 to January 2015. Previously, Ms. Reitan served as President and Chief Operating Officer of Blue Cross Blue Shield of Minnesota from 2006 to 2008.

Ms. Reitan also serves as a director of Myriad Genetics, Inc.

KEY CONTRIBUTIONS TO THE BOARD

Ms. Reitan brings to our board over 30 years of experience in the healthcare payor and reimbursement market, including most recently as President of Plan Operations of HCSC. Ms. Reitan's experience with provider network management, strategic planning and business development provide valuable insight to our board and management as we continue to navigate the increasingly complex healthcare payor and reimbursement market and to advance our ongoing commitment to provide innovative value-based agreements and deliver fair value to payors and providers. Ms. Reitan's extensive background in business management also makes her an asset to our audit committee and our PC&C committee, which she chairs.





Amy W. Schulman

CHAIR OF THE BOARD

Director since: 2014

Age: 64

Committees:

- Nominating and Corporate Governance Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Ms. Schulman has served as a member of our board of directors since July 2014 and has served as chair of our board since January 2023. Prior to that, she served as our lead independent director from August 2021 to January 2023. Ms. Schulman joined Polaris Partners, a venture capital firm, in August 2014 where she is currently a managing partner. Ms. Schulman also serves as Executive Chair of Lyndra Therapeutics, Inc., a biotechnology company, where she was co-founder and served as the company's initial Chief Executive Officer from 2015 to 2019. She also manages the LS Polaris Innovation Fund, which was formed in 2017. Ms. Schulman served as a senior lecturer at Harvard Business School from July 2014 to July 2021, and resumed this role in January 2025. Ms. Schulman was previously the Executive Vice President and General Counsel of Pfizer Inc., or Pfizer, a global pharmaceutical company, from May 2008 to July 2014, where she also served as the Business Unit Lead for Pfizer's Consumer Healthcare business from 2012 to 2013. Before joining Pfizer, she was a partner at DLA Piper, a global law firm.

Ms. Schulman also serves as a director of Fractyl Health, Inc. and previously served as a director of SQZ Biotech, Cyclerion Therapeutics, Inc., Hudson Executive Investment Corp. and Hudson Executive Investment Corp. II.

KEY CONTRIBUTIONS TO THE BOARD

Ms. Schulman's extensive industry and leadership experience enable her to make significant contributions as chair of our board. Her unique qualifications in a number of critical areas, including commercial strategy and capability building, as well as legal, regulatory, and transactional considerations, bring to our board a diverse background. In addition, her experience at Pfizer as Executive Sponsor of Pfizer's Global Women's Council, where she helped shape efforts to increase diversity and expand opportunities for both women and men across the company, has been an important resource as we continue to grow our workforce to support the expansion of our portfolio of marketed products, advance our robust clinical pipeline towards commercialization, and further strengthen our global commercial infrastructure. This experience also provides a unique and critical perspective for Ms. Schulman in her role as a member of our nominating and corporate governance committee.



Class I—Directors Whose Terms Expire in 2026



**Michael W.
Bonney**

**NON-INDEPENDENT
DIRECTOR**

Director since: 2014
Age: 66

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Mr. Bonney served as chair of our board from December 2015 to August 2021 and as executive chair of our board from August 2021 to January 2023. Mr. Bonney previously served as the chair of the board of directors of Kaleido Biosciences, Inc., a biotechnology company, from June 2017 until August 2021. Between August 2018 and October 2020, he served as Kaleido's Executive Chair, and served as Kaleido's Chief Executive Officer from June 2017 until August 2018. Mr. Bonney was a Partner at Third Rock Ventures, a healthcare venture firm, from January to July 2016. Mr. Bonney previously served as the Chief Executive Officer and a member of the board of directors of Cubist Pharmaceuticals, Inc., or Cubist, a biopharmaceutical company (now a wholly-owned subsidiary of Merck & Co., Inc.), from June 2003 until his retirement in December 2014. From January 2002 to June 2003, he served as Cubist's President and Chief Operating Officer.

Mr. Bonney currently serves as the chair of the board of directors of Autolus Therapeutics plc, a biopharmaceutical company, and previously served as the chair of the board of directors of Magenta Therapeutics, Inc. and as a director of Bristol-Myers Squibb Company, Syros Pharmaceuticals, Inc. and Sarepta Therapeutics, Inc.

KEY CONTRIBUTIONS TO THE BOARD

Mr. Bonney possesses over 30 years of operational, commercial and senior management experience in the biopharmaceutical industry, including his long tenure as the Chief Executive Officer and a director of Cubist. Mr. Bonney also has a keen understanding of the interplay between management and the board and is well-versed in the current best practices in corporate governance and ethics and compliance matters. His breadth of experience and deep commercial background enable him to make significant contributions to our board as we continue to enhance our ethics and compliance function, expand our portfolio of marketed products, advance our robust clinical pipeline towards commercialization, and further strengthen our global commercial infrastructure.





Yvonne L. Greenstreet M.D.

**CHIEF EXECUTIVE
OFFICER AND NON-
INDEPENDENT
DIRECTOR**

Director since: 2021
Age: 62

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Greenstreet has served as our Chief Executive Officer since January 2022 and as a member of our board of directors since October 2021. Dr. Greenstreet previously served as our President and Chief Operating Officer since October 2020 and was our Chief Operating Officer from September 2016 to October 2020. Prior to joining Alnylam, Dr. Greenstreet served as the founder and Managing Director of Highgate LLC, from January 2014 to August 2016. Prior to that time, Dr. Greenstreet served as the Senior Vice President and Head of Medicines Development at Pfizer from December 2010 to November 2013. Prior to joining Pfizer, Dr. Greenstreet worked for 18 years at GlaxoSmithKline plc, a multinational pharmaceutical, biologics, vaccines and consumer healthcare company, where she served in various positions, most recently as Senior Vice President and Chief of Strategy for Research and Development and as a member of the Product Management Board.

Dr. Greenstreet currently serves as a director of The American Funds and as a member of the Biotechnology Industry Organization Health Section Governing Board. Dr. Greenstreet previously served on the board of directors of argenx SE and Pacira BioSciences, Inc.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Greenstreet has over 25 years of experience in the biopharmaceutical industry, driving strategy and innovation, bringing transformative medicines to patients, and building successful businesses in the U.S., Europe and globally. Dr. Greenstreet's significant experience in senior management roles at large pharmaceutical companies and her extensive expertise in drug development and commercialization bring a valuable perspective to our board. In addition, Dr. Greenstreet's in-depth knowledge of our company, gained during her various senior management roles within the company, uniquely enable her to lead our *Alnylam P⁵x25* strategy, which focuses on our planned transition to a top-tier biotech company by the end of 2025.



Elliott Sigal, M.D., Ph.D.

**INDEPENDENT
DIRECTOR**

Director since: 2022
Age: 73

Committees:

- People, Culture and Compensation Committee
- Science and Technology Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Sigal served as Chief Scientific Officer of Bristol-Myers Squibb, or BMS, a global biopharmaceutical company, from October 2004 to June 2013 and as a member of the BMS board of directors from March 2011 to June 2013. Dr. Sigal joined BMS in 1997 and held positions of increasing responsibility in drug discovery and development and was a member of the executive committee from September 2001 through June 2013. Prior to BMS, Dr. Sigal was Vice President of R&D and Chief Executive Officer for the genomics firm Mercator Genetics Inc. He served as a senior advisor to the healthcare team of New Enterprise Associates, a venture capital firm, from 2014 to 2023. Dr. Sigal currently serves as co-chair of the Scientific Advisory Board for Amgen, Inc. Dr. Sigal also serves as director of Vir Biotechnology, Inc. and formerly served as a director of Adaptimmune Therapeutics plc and Surface Oncology Inc.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Sigal possesses extensive experience in the biopharmaceutical industry, including decades of senior leadership and board experience at biopharmaceutical companies. Dr. Sigal's experience bringing numerous medicines to market in multiple therapeutic areas, including cardiometabolic disease, infectious disease, inflammatory disease, neuroscience and oncology, brings valuable experience to our board and our science and technology and PC&C committees, on which he serves, as we accelerate growth in our early stage pipeline, advance our late stage clinical development pipeline towards commercialization, and further strengthen our global commercial infrastructure.



Class II—Directors Whose Terms Expire in 2027



Dennis A. Ausiello, M.D.

INDEPENDENT DIRECTOR

Director since: 2012

Age: 79

Committees:

- Nominating and Corporate Governance Committee
- Science and Technology Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Ausiello serves as the Director of the Center for Assessment Technology and Continuous Health (CATCH), Jackson Distinguished Professor of Clinical Medicine at Harvard Medical School and Physician-in-Chief Emeritus at Massachusetts General Hospital, and served as the Chief of Medicine at Massachusetts General Hospital from 1996 to April 2013. Dr. Ausiello was the President of the Association of American Physicians in 2006. He is a member of the National Academy of Medicine and the American Academy of Arts and Sciences.

He also serves as a director of Seres Therapeutics, Inc., Rani Therapeutics Holdings, Inc. and Spexis AG.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Ausiello's experience as a practicing physician, a scientist and a nationally recognized leader in academic medicine enables him to bring valuable insights to our board, particularly as we initiate additional clinical trials, accelerate growth in our early stage pipeline, advance our late stage clinical development pipeline towards commercialization, and further strengthen our global commercial infrastructure. In addition, Dr. Ausiello oversaw a large research portfolio and an extensive research and education budget at Massachusetts General Hospital for nearly 20 years, providing him with a valuable perspective on drug discovery and development. Through his previous work as the Chief of Medicine at Massachusetts General Hospital, Dr. Ausiello also brings significant leadership, oversight and finance experience to our board.



Olivier Brandicourt, M.D.

INDEPENDENT DIRECTOR

Director since: 2020

Age: 69

Committees:

- People, Culture and Compensation Committee
- Audit Committee

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Dr. Brandicourt has served as a Senior Advisor at Blackstone, a leading global investment firm, since December 2019. From April 2015 to August 2019, Dr. Brandicourt served as Chief Executive Officer and a member of the board of directors of Sanofi, a global biopharmaceutical company. Prior to Sanofi, he was Chief Executive Officer and Chair of Bayer HealthCare AG, a global life sciences company, from November 2013 to March 2015. Between 2000 and 2013, Dr. Brandicourt served in various operational and managerial positions at Pfizer, including as a member of the Executive Leadership Team and President and General Manager of the Emerging Markets and Established Products business units, among other roles.

Dr. Brandicourt also serves as a director of BeiGene, Ltd. and previously served as a director of BenevolentAI.

KEY CONTRIBUTIONS TO THE BOARD

Dr. Brandicourt has over 30 years of global commercial experience in the biopharmaceutical industry, including as a senior leader of three large pharmaceutical companies. Dr. Brandicourt's operational, global commercial and senior management experience provides a valuable perspective to our board as we expand our portfolio of marketed products, advance our robust clinical pipeline towards commercialization, and further strengthen our global commercial infrastructure. Dr. Brandicourt's extensive background in business management and global commercial operations also makes him an asset to our audit and PC&C committees, on which he serves.





David E.I. Pyott

INDEPENDENT DIRECTOR

Director since: 2015

Age: 71

Committees:

- Nominating and Corporate Governance Committee (Chair)

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Mr. Pyott served as the Chief Executive Officer of Allergan, Inc., or Allergan, a global specialty pharmaceutical and medical device company, from January 1998 to March 2015 and as the Chair of Allergan's board of directors from March 2001 until March 2015. Prior to Allergan, Mr. Pyott served as the Head of the Nutrition Division at Novartis AG, a global healthcare company, and as a member of the Executive Committee of Switzerland-based Novartis AG. Mr. Pyott also serves as a director of BioMarin Pharmaceutical Inc. and Pliant Therapeutics, Inc. and as a member of the Supervisory Board of Royal Philips in the Netherlands.

KEY CONTRIBUTIONS TO THE BOARD

Mr. Pyott possesses over 30 years of operational, commercial and senior management experience, including his successful tenure as the Chief Executive Officer and Chair of the board of directors at Allergan, where he transformed the company from a small eye care business to a global specialty pharmaceutical and medical device company. His in-depth knowledge of pharmaceutical growth and commercial expansion, combined with his entrepreneurial leadership experience in the healthcare industry, position him well to serve as a member of our board and to make significant contributions as we expand our portfolio of marketed products, advance our robust clinical pipeline towards commercialization, and further strengthen our global commercial infrastructure. Mr. Pyott's substantial public company governance experience from serving on the boards of several large public companies also makes him an asset to our board and to our nominating and corporate governance committee, which he chairs.



Peter N. Kellogg

INDEPENDENT DIRECTOR

Director since: 2023

Age: 68

Committees:

- Audit Committee (Chair)

EXPERIENCE, EXPERTISE AND QUALIFICATIONS

Mr. Kellogg served as Executive Vice President and Chief Corporate Strategy Officer of Celgene Corporation, or Celgene, a global biopharmaceutical company, from 2018 to 2019, and previously served as Executive Vice President and Chief Financial Officer of Celgene from 2014 to 2018. Prior to that, Mr. Kellogg was Chief Financial Officer and Executive Vice President of Merck & Co. Inc., a global biopharmaceutical company, from 2007 to 2014. From 2000 to 2007, Mr. Kellogg served as Executive Vice President, Finance and Chief Financial Officer at Biogen, Inc., a biotechnology company. Before that, he served as Senior Vice President, PepsiCo E-Commerce at PepsiCo Inc., a global food and beverage company, from March to July 2000 and as Senior Vice President and Chief Financial Officer, Frito-Lay International, a snack food manufacturer, from 1998 to 2000.

Mr. Kellogg previously served as a director of Idorsia Ltd.

KEY CONTRIBUTIONS TO THE BOARD

Mr. Kellogg is a proven business, strategic and financial leader who brings to our board over 20 years of experience leading and scaling biotechnology companies and driving strategic transactions. Mr. Kellogg's background includes executive management roles with responsibility for core financial functions, including investor relations, corporate strategy, business development and alliance management. Mr. Kellogg oversaw Biogen's mergers with IDEC (Rituxan share) and Fumapharm (Tecfidera), Merck's acquisition of Schering-Plough (Keytruda), and Celgene's sale to Bristol-Myers Squibb. Mr. Kellogg's financial expertise and experience in strategic transactions and organizational scaling will help advance our leading scientific capabilities and commercial performance as we advance our late stage clinical development pipeline and further strengthen our global commercial infrastructure, and position him well to serve as a member of our board and our audit committee, which he chairs.



The Board of Directors and Its Committees

Board of Directors Meetings and Attendance

Our board met six times during 2024 either in person or by teleconference. During 2024, each of our directors attended at least 75% of the aggregate number of board meetings and meetings of the committees on which he or she then served.

Our directors are expected to participate in the virtual annual meeting of stockholders, unless they have a conflict that cannot be resolved. All of our then-current directors attended the 2024 annual meeting of stockholders.

Board Determination of Independence

Under the Nasdaq listing standards, a director will qualify as an “independent director” if, in the opinion of our board, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Our board has determined that none of Mses. Reitan and Schulman, Drs. Ausiello, Bertozzi, Brandicourt, Hamburg, Sharp and Sigal, and Messrs. Pyott and Kellogg have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is an “independent director” as defined under Nasdaq Rule 5605(a)(2). Mr. Bonney, who served as executive chair of our board from August 2021 to January 2023, and Dr. Greenstreet, our chief executive officer, are not considered “independent” directors. Our board of directors has determined that each member of our audit committee, PC&C committee and nominating and corporate governance committee is independent within the meaning of the applicable Nasdaq and SEC rules and regulations regarding “independence”. In making such determination, our board considered relationships, if any, that each non-employee director or family member of such director has with Alnylam, and other facts and circumstances our board deemed relevant in determining their independence.

Role of the Board

Our business is managed under the direction of the board of directors. Management has primary responsibility for the day-to-day operations and affairs of our company, and the role of our board is to provide independent oversight of management. In its oversight role, our board, as a whole and through its committees, is responsible for establishing broad corporate policies and reviewing our overall performance. Our board selects and provides for the succession of executive officers and, subject to stockholder election, directors. Our board also evaluates the performance of our chief executive officer, and approves the compensation of our chief executive officer after considering the recommendations of our PC&C committee. Our board reviews and approves corporate objectives, strategies and annual investment plans, and evaluates significant policies and proposed major commitments of corporate resources. Our board also participates in decisions that have a potential major economic impact on our company. Management keeps our directors informed of company activity through regular communication, including written reports and presentations at board and committee meetings, as well as through regular informal updates between meetings with all or a subset of board members.

Board Leadership Structure

Our board has determined that the roles of chief executive officer and chair of our board of directors should be separated at the current time. Ms. Schulman, an independent director, has served as our chair since January 2023. Dr. Greenstreet has served as our chief executive officer and as a director since January 2022 and October 2021, respectively. Separating these positions allows our chief executive officer to focus on our day-to-day business operations, while allowing the chair to lead the board in its fundamental roles of providing both advice to and independent oversight of management. The board recognizes the time, effort and energy that is required of the chief executive officer to operate and manage the company, as well as the commitment required to serve as our chair, particularly as the board’s oversight responsibilities continue to grow. While our bylaws and corporate governance guidelines do not require that our chair and chief executive officer positions be separate, our board believes that our current leadership structure is appropriate because it provides an effective balance between strategy development and independent leadership and management oversight.



Rationale for Classified Board Structure

The time horizon required for successful development of therapeutics makes it vital that we have a board that understands the implications of this process and has the ability to develop and implement long-term strategies while benefiting from an in-depth knowledge of our business and operations. We believe that our classified board structure aligns with this long-term orientation and has enabled our board, which includes Nobel prize winners and members of the National Academy of Sciences, to provide educated and sophisticated oversight of management, which has enabled a track record of setting and exceeding five-year goals, and driven the creation of long-term stockholder value. In 2024, our nominating and corporate governance committee discussed the feedback received from stockholders on this topic and reviewed and discussed a detailed analysis of the costs and benefits of our classified board structure to facilitate the committee's continued consideration of this feature of our governance. Following this review, at present, our board and nominating and corporate governance committee continue to believe that the classified board structure aligns with the company's long-term orientation and enables the board to provide appropriate and expert oversight of management over the course of the multi-year life cycles of our clinical development programs, which our board believes ultimately drives the creation of sustainable stockholder value. In addition, the board believes three-year terms enhance the independence of our non-employee directors by providing continuity of service and protecting them against potential pressures from special interest groups or others who might have agendas contrary to the long-term interests of our stockholders. Our board and/or the nominating and corporate governance committee will periodically review and continue to consider whether our classified board structure aligns with the company's long-term strategic objectives.

The Board's Role in Risk Oversight

We face a number of risks in our business, including risks related to: launching, marketing and selling our approved products globally; preclinical and clinical research and development; manufacturing and clinical and commercial drug supply; regulatory reviews; our ability to obtain approval for new commercial products or additional indications for our existing products; policies and oversight; global growth and capability expansion; preparations for and execution of commercial operations; our ability to obtain reimbursement for approved products and the product candidates we are developing if, and when, they gain regulatory approval; intellectual property filings, prosecution, maintenance and challenges; the establishment and maintenance of strategic alliances; competition; cybersecurity; litigation and government investigations; and the ability to manage our expenses, access additional funding for our business and advance towards financial self-sustainability; as well as other risks. Our management is responsible for the day-to-day management of the risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management.

Our board administers its risk oversight function directly and through its four committees.

Our chair meets regularly with our chief executive officer and other executive officers and members of senior management to discuss strategy and risks facing the company. Our chair and the chair of our nominating and corporate governance committee also meet with our global head of ethics and compliance individually and with our chief legal officer, to discuss the risks facing our business and our global compliance initiatives. Members of senior management attend the quarterly board meetings and are available to address any questions or concerns raised by our board on risk management-related and any other matters. Each quarter, our board of directors receives presentations from members of senior management, and may also receive reports from the committee chairs and outside consultants, among others. These presentations often include identification and assessment of risks our company currently faces or may face in the future. Annually, our board reviews and discusses with management an enterprise risk assessment focused on the key risks facing our business.

In addition, as part of its charter, the audit committee regularly discusses with management our risk exposures in the areas of financial reporting, internal controls and compliance with legal and regulatory requirements with potential impact on our financial statements, and the steps we take to manage them. Our audit committee also oversees our internal audit function. The primary purpose of the internal audit function is to provide independent, objective assurance to senior management and the audit committee regarding the adequacy, efficiency and effectiveness of internal controls, which are designed to add value and strengthen our business operations.

The PC&C committee assists our board in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs and succession planning for our executive officers, and evaluates potential risks associated with director compensation for consideration by the full board.

The nominating and corporate governance committee assists our board in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors, corporate governance, cybersecurity, technical operations and non-financial compliance programs, including with respect to commercial activities and quality assurance.

Our chair, individually and with our chief legal officer, our global head of ethics and compliance, our head of internal audit, our chief information officer, and our chief technical operations and quality officer each provide the committee with regular updates.

The science and technology committee reviews and advises our board regarding risks arising from our discovery and development strategy and programs.



Board Committees

Our board of directors has established four standing committees — audit, PC&C, nominating and corporate governance, and science and technology — each of which operates under a written charter that has been approved by our board. We have posted copies of each committee’s charter on the Corporate Governance page of the Investors section of our website, www.alnylam.com. The members of each committee are appointed by our board, upon the recommendation of our nominating and corporate governance committee.

Our board has determined that all of the members of each of the audit, PC&C, and nominating and corporate governance committees are independent as defined under the Nasdaq Marketplace Rules, and, in the case of all members of our audit committee, the independence requirements of Rule 10A-3(b)(1) under the Exchange Act. Committee memberships as of March 1, 2025 are shown below:

Audit Committee

- Peter N. Kellogg (**Chair**)
- Olivier Brandicourt, M.D.
- Colleen F. Reitan

Our audit committee met **five times** during 2024, either in person or by video teleconference.

As described more fully in its charter, the audit committee oversees our accounting and financial reporting processes, internal controls and audit functions. In fulfilling its role, our audit committee is responsible for, among other things:

- appointing, evaluating, retaining, approving the compensation of and, when necessary, terminating the engagement of our independent auditors;
- taking appropriate action, or recommending that our board of directors take appropriate action, to oversee the independence of our independent auditors;
- preapproving all audit services provided to the company and approving any compensation paid to the independent auditors;
- reviewing and discussing with management and the independent auditors our annual and quarterly financial statements and related disclosures, including earnings releases, financial guidance and disclosure of non-GAAP financial measures;
- monitoring our internal control over financial reporting, disclosure controls and procedures, and compliance with financial corporate securities, tax and similar regulatory or legal requirements relating to financial matters;
- overseeing the work of the independent auditor, including resolving any disagreements between management and the independent auditor regarding financial reporting;
- overseeing the performance of internal audit activities carried out by our internal audit function;
- reviewing and discussing our financial risk management policies, including but not limited to our investment policy;
- reviewing and approving matters related to tax planning;
- establishing policies regarding hiring employees from our independent auditors and procedures for the receipt and retention of accounting-related complaints and concerns;
- meeting independently with our independent auditors and management; and
- preparing the annual audit committee report required by SEC rules, which is included below under the heading “Report of the Audit Committee.”

In addition, our audit committee must approve or ratify any related person transaction as defined in our related person transaction policy. Our policies and procedures for the review and approval of related person transactions are summarized under the heading “Policies and Procedures for Related Person Transactions,” which appears below.

The current members of our audit committee are Mr. Kellogg (Chair), Ms. Reitan and Dr. Brandicourt. We believe that each member of our audit committee satisfies the requirements for membership, including independence, under the Nasdaq Marketplace Rules and Rule 10A-3(b)(1) under the Exchange Act. Our board has determined that each of Mr. Kellogg and Ms. Reitan is an “audit committee financial expert” as defined in Item 407(d)(5) of Regulation S-K. No member of our audit committee is the beneficial owner of more than 10% of our common stock.



People, Culture and Compensation Committee

- Colleen F. Reitan (**Chair**)
- Olivier Brandicourt, M.D.
- Elliott Sigal, M.D., Ph.D.

Our PC&C committee met **four times** during 2024, either in person or by video teleconference.

Our PC&C committee's responsibilities include, among other things:

- annually reviewing and making recommendations to our board with respect to corporate goals and objectives relevant to the compensation of our executive officers;
- reviewing and approving the compensation of our executive officers, other than our chief executive officer, and reviewing and making recommendations to our board with respect to the compensation of our chief executive officer;
- overseeing an evaluation of the performance of our senior executives;
- reviewing and making recommendations to our board with respect to management succession planning;
- assisting our board with the development, implementation and effectiveness of our talent management policies and strategies, including recruiting, retention, career development and progression, leadership development, diversity, inclusion and employment practices;
- overseeing and administering our stock-based compensation plans and performing the duties delegated to the PC&C committee by the terms of those plans;
- reviewing and making recommendations to our board with respect to non-employee director compensation, including compensation under any equity-based plans;
- reviewing, and amending as necessary, our compensation philosophy and objectives, and reviewing annually and updating our peer group for compensation purposes;
- reviewing and discussing our compensation policies and programs and assessing whether such policies and programs are reasonably likely to have a material adverse effect on the company;
- approving and overseeing our policy for clawback, or recoupment, of incentive compensation;
- establishing, amending and overseeing compliance with our stock ownership guidelines for our executive officers and non-employee directors;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," which is included beginning on page 42 of this proxy statement;
- preparing the annual PC&C committee report required by SEC rules, which is included immediately following the "Compensation Discussion and Analysis" section appearing below;
- reviewing the results of any say-on-pay votes and considering whether to make or recommend adjustments to the executive compensation policies as a result of such votes;
- overseeing engagement with stockholders and proxy advisory firms on executive compensation matters; and
- performing an annual evaluation of the committee's performance.

The processes and procedures followed by our PC&C committee in considering and determining executive compensation are described below under the heading "Compensation Discussion and Analysis."

The current members of our PC&C committee are Ms. Reitan (Chair) and Drs. Brandicourt and Sigal. We believe that each member of our PC&C committee is an independent director within the meaning of the director independence standards of the Nasdaq Marketplace Rules, a non-employee director as defined in Rule 16b-3 of the Exchange Act, and an outside director pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended, also referred to as the Code.



PC&C Committee Interlocks and Insider Participation

During fiscal year 2024, none of the members of our PC&C committee was a current or former officer or employee of Alnylam and none had any related person transaction involving Alnylam.

During fiscal year 2024, no executive officer of our company served as: (i) a member of the PC&C committee (or other committee of the board of directors performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served on our PC&C committee; (ii) a director of another entity, one of whose executive officers served on our PC&C committee; or (iii) a member of the PC&C committee (or other committee of the board of directors performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served as a director of our company.

Risk Considerations in Compensation

Our PC&C committee has discussed the concept of risk as it relates to our compensation program and, after considering an assessment prepared by its independent compensation consultant, the PC&C committee does not believe our compensation program encourages excessive or inappropriate risk-taking. As described more fully below in “Compensation Discussion and Analysis,” we structure our pay to consist of both fixed and variable compensation to motivate our executives to produce superior short- and long-term results that are in the best interests of our company and stockholders in order to attain our ultimate objective of increasing stockholder value. We have established, and our PC&C committee endorses, controls to address and mitigate compensation-related risk.

The PC&C committee has engaged an independent compensation consultant, Pay Governance, to assist the committee in its evaluation of our company’s policies and practices to determine if such policies and practices create excessive risk in our compensation programs. In conducting its independent assessment, Pay Governance reviewed all of our incentive compensation and other programs and determined there were no compensation policies or practices that encourage excessive or inappropriate risk-taking. Pay Governance provided the results of the review to the PC&C committee in early 2024.



Nominating and Corporate Governance Committee

- David E.I. Pyott (**Chair**)
 - Dennis A. Ausiello, M.D.
 - Carolyn R. Bertozzi, Ph.D.
 - Margaret A. Hamburg, M.D.
 - Amy W. Schulman
- Our nominating and corporate governance committee met **three times** during 2025, either in person or by video teleconference.

Our nominating and corporate governance committee is responsible for, among other things:

- advising our board on board organization, structure and appropriate size;
- identifying individuals qualified to become members of our board and evaluating candidates recommended by stockholders for election to our board and stockholder proposals submitted for inclusion in our proxy materials;
- recommending to our board the persons to be nominated for election as directors and the persons to be appointed to each of our board committees;
- reviewing the external commitments of our directors and executive officers to evaluate potential conflicts of interest or time commitment concerns;
- developing and recommending to our board a set of corporate governance principles and making recommendations to our board regarding corporate governance matters;
- developing and recommending to our board, as appropriate, policies and programs with respect to environmental, health, safety, social responsibility and governance matters;
- overseeing the regular evaluation of our board and its committees;
- overseeing management's implementation of information technology policies;
- reviewing our corporate governance and board succession risks and steps taken to monitor and mitigate such risks, including succession planning for the board and key leadership roles on the board and its committees;
- overseeing the management of operational risk and contingency planning for business continuity;
- monitoring the risks associated with information systems, including reviewing and discussing with management the programs used to identify, assess, manage and monitor cybersecurity risks; and
- overseeing management's implementation of compliance programs with respect to non-financial matters and our quality programs.

As noted above, the nominating and corporate governance committee facilitates a regular board self-evaluation to determine whether our board of directors and its committees are functioning effectively. The nominating and corporate governance committee determines the nature of the evaluation, supervises the conduct of the evaluation, and prepares an assessment of our board performance, to be discussed with the full board of directors. The evaluation is aligned to board best practices and focuses on four key areas: board structure and composition; board process and focus; committee structure and performance; and culture and overall health.

The processes and procedures followed by our nominating and corporate governance committee in identifying and evaluating director candidates are described below under the heading "Director Nomination Process."

The current members of our nominating and corporate governance committee are Mr. Pyott (Chair), Drs. Ausiello, Bertozzi and Hamburg, and Ms. Schulman. We believe that each member of our nominating and corporate governance committee satisfies the requirements for membership, including independence, as established under the Nasdaq Marketplace Rules.



Science and Technology Committee

- Phillip A. Sharp, Ph.D. (**Chair**)
- Dennis A. Ausiello, M.D.
- Carolyn R. Bertozzi, Ph.D.
- Elliott Sigal, M.D., Ph.D.

Our science and technology committee met **three times** during 2024, by video teleconference.

Our science and technology committee is responsible for, among other things:

- overseeing our scientific advisory board;
- reviewing our overall scientific and research and development strategy;
- reviewing our research and development strategy and programs;
- reviewing cognate external scientific research, discoveries and commercial developments, as appropriate; and
- reviewing our overall intellectual property strategies.

The current members of our science and technology committee are Drs. Sharp (Chair), Ausiello, Bertozzi and Sigal. In March 2025, Dr. Sharp announced his intention to retire from our board and as a member of our science and technology committee, effective as of May 8, 2025.

Director Nomination Process

Our nominating and corporate governance committee is responsible for identifying individuals qualified to become directors, consistent with criteria approved by our board, and for recommending the persons to be nominated for election as directors.

The process followed by our nominating and corporate governance committee to identify and evaluate director candidates includes requests to board members and others for recommendations, engagement of third-party recruiting companies focused on identifying top-tier director candidates, meetings from time to time to evaluate biographical information and background material relating to potential candidates, and interviews of selected candidates by members of the committee and our board.

Criteria for Board Membership

Our corporate governance guidelines include a commitment to diversity, and specify that our board should represent a diverse mix of skills, regional or industry experience, backgrounds, ages and other unique characteristics, which should be considered by the nominating and corporate governance committee in the director identification and nomination process. In considering whether to recommend any particular candidate for inclusion in our board's slate of recommended director nominees, our nominating and corporate governance committee will apply the following criteria that it believes must be met by all directors:

- A reputation for integrity, honesty and adherence to high ethical standards;
- A demonstration of business acumen, experience and the ability to appreciate the operational challenges and complexities faced by public biopharmaceutical companies of a size and operational scope similar to our company and to exercise sound judgment in matters that relate to the current and long-term objectives of our company and a willingness and ability to contribute positively to the decision-making processes of our company;
- A commitment to understand our company and the industry and to regularly attend and participate in meetings of our board of directors and its committees;
- An interest in and ability to understand the sometimes conflicting interests of the various constituencies of our company, which include stockholders, employees, customers, governmental bodies and the general public, and to act in the interests of all stockholders;
- No actual or apparent conflict of interest (as determined by the nominating and corporate governance committee or the board) that would impair the director's ability to represent the interests of all of our company's stockholders and to fulfill the responsibilities of a director; and
- The ability to serve for at least five years before reaching the age of 75.

While our nominating and corporate governance committee does not have a formal policy with respect to diversity, the nominating and corporate governance committee is committed to recruitment protocols to actively seek out highly qualified candidates to include in the pool from which board nominees are chosen. Our board and nominating and corporate governance committee believe that it is essential that our board members represent diverse viewpoints with broad experience in areas important to the operation of our company such as business, science, medicine, and finance and accounting. The committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our board to promote our strategic objectives and fulfill its responsibilities to our stockholders. In this context, the nominating and corporate governance committee, in addition to the qualifications set forth above, also considers a variety of attributes in selecting nominees to our board, including, among other things:

- An understanding of, and experience in, the biotechnology and pharmaceutical industries, and the regulatory landscape in which such companies operate;
- An understanding of, and experience in, accounting oversight and governance, finance, sales and marketing, and complex business transactions;
- Leadership experience with public companies or other significant organizations;
- International experience; and
- Diversity of age, education, background, professional experience and differences in viewpoints and skills.

These factors and others are considered useful by our board and are reviewed in the context of an assessment of the perceived needs of our board at a particular point in time.

The director nominee biographies appearing above under the heading “Information Concerning Director Nominees – Election of Class III Directors (Proposal 1)” indicate each nominee’s experience, qualifications, attributes and skills that led our nominating and corporate governance committee and board to conclude that each nominee should continue to serve as a member of our board. Our nominating and corporate governance committee and board believe that each of the nominees has had substantial achievement in her professional and personal pursuits, and possesses the background, talents and experience that our board desires and that will contribute to the best interests of our company and to long-term stockholder value.

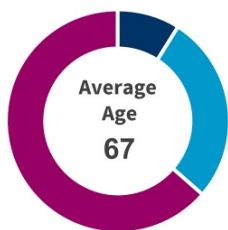
The table below provides information regarding the members of our board, including certain types of knowledge, skills, experiences and attributes possessed by one or more of our directors that our board believes are relevant to our business or industry. The table does not encompass all of the knowledge, skills, experiences or attributes of our directors, and the fact that a particular knowledge, skill, experience or attribute is not listed does not mean that a director does not possess it. In addition, the absence of a particular knowledge, skill, experience or attribute with respect to any of our directors does not mean the director in question is unable to contribute to the decision-making process in that area. The type and degree of knowledge, skill and experience listed below may vary among the members of the board.



	AUSIELLO	BONNEY	BERTOZZI	BRANDICOURT	GREENSTREET	HAMBURG	KELLOGG	PYOTT	REITAN	SCHULMAN	SHARP	SIGAL
Knowledge, Skills, Experience and Independence												
Biopharma Industry Experience	●	●	●	●	●	●	●	●	●	●	●	●
Executive/Leadership Experience	●	●	●	●	●	●	●	●	●	●	●	●
Financial Expertise	●	●		●	●		●	●	●	●		
Academic Experience or Technological Background	●		●	●	●	●					●	●
Business Strategy/Operations Experience	●	●		●	●	●	●	●	●	●	●	●
Public Company CEO Experience		●		●	●			●				
International Business Experience				●	●		●	●		●		
Independence	●		●	●		●	●	●	●	●	●	●

The tables below highlight the composition of our continuing directors and our director nominees*:

DIRECTOR AGE



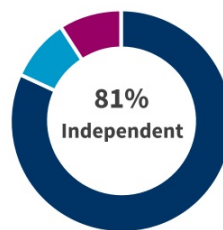
- 1 <60 years
- 3 60-65 years
- 7 >65 years

DIRECTOR TENURE



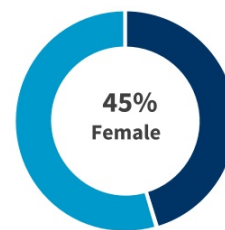
- 4 <5 years
- 6 5-12 years
- 1 >12 years

DIRECTOR INDEPENDENCE



- 9 Independent
- 1 Management
- 1 Non-Independent

DIRECTOR GENDER



- 5 Female
- 6 Male

* The tables above do not include Dr. Sharp, who has announced his intention to retire from our board directors, effective May 8, 2025.



Stockholder Nominations

Stockholders may recommend individuals to our nominating and corporate governance committee for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials and, if the stockholder is not a stockholder of record, a statement as to whether the stockholder or group of stockholders making the recommendation has beneficially owned more than 5% of our common stock for at least a year as of the date such recommendation is made, to the Nominating and Corporate Governance Committee, c/o Corporate Secretary, Alnylam Pharmaceuticals, Inc., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142. Assuming that appropriate biographical and background material has been provided on a timely basis, the committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others. Stockholders also have the right under our bylaws to nominate director candidates directly, without any action or recommendation on the part of the committee or our board of directors, by following the procedures set forth below under the heading “Stockholder Proposals.”

At the annual meeting, stockholders will be asked to consider the election of Drs. Bertozzi and Hamburg and Mses. Reitan and Schulman, each of whom currently serves on our board of directors. Drs. Bertozzi and Hamburg and Mses. Reitan and Schulman were proposed to our board for reelection by our nominating and corporate governance committee and our board determined to include them as its nominees.

Majority Voting Policy

Our bylaws provide that the vote required for the election of a director by the stockholders shall, except in a contested election, be the affirmative vote of a majority of the votes cast with respect to the election of such director nominee at a meeting of stockholders. In order to receive a majority of the votes cast, the number of shares voted “FOR” must exceed the number of votes “AGAINST.” In any non-contested election of directors, any incumbent director nominee who receives a greater number of votes cast against his or her election than in favor of his or her election shall, promptly following the certification of the stockholder vote, tender his or her resignation to the board. The board shall then decide, through a process managed by our nominating and corporate governance committee, whether to accept the resignation, or take other action. The board expects that a director whose resignation is under consideration shall abstain from participating in any decision regarding his or her resignation. In reaching its decision, the board may consider any factors deemed relevant, including the incumbent director nominee’s qualifications, the incumbent director nominee’s past and expected future contributions to the company, the overall composition of the board, and whether accepting the tendered resignation would cause us to fail to meet any applicable rule or regulation (including Nasdaq Global Select Market listing standards and federal securities laws). The board will publicly disclose its decision and rationale within 90 days following certification of the stockholder vote. If an incumbent director nominee’s resignation is not accepted, he or she will continue to hold office until the next annual meeting and until his or her successor shall be duly elected and qualified. In such circumstances, the director will remain in his or her existing class and the election held at the next such annual meeting shall be whether to elect him or her to serve the remainder of his or her three-year term.



Stockholder Engagement and Communications with the Independent Directors

We regularly engage with our stockholders through open dialogue and direct individual communication to solicit their feedback on our executive compensation, corporate governance and disclosure practices in order to gain a better understanding of the practices they most value. Stockholder feedback is important, and the information we glean from these engagements is highly valued. Our stockholder engagement team has consisted of certain independent directors and members of our legal, investor relations and human resources expertise areas. Stockholders also regularly meet with members of our senior management team to discuss our strategy and review our business, goals and performance. In 2024, we engaged with several stockholders who owned, in aggregate, a meaningful percentage of our outstanding shares. The feedback we received from those conversations was conveyed to the rest of the board and relevant board committees and served as valuable input to board and committee discussions and considerations.

In addition, our board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The chair of our board (if an independent director), the lead director (if one is appointed), or otherwise the chair of our nominating and corporate governance committee, is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he or she considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the chair of our board (if an independent director), or the lead director (if one is appointed), or otherwise the chair of our nominating and corporate governance committee, considers to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive communications.

Stockholders who wish to send communications on any topic to our board should address such communications to the Board of Directors, c/o Corporate Secretary, Alnylam Pharmaceuticals, Inc., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142.



Director Compensation

Compensation of Directors

We compensate our non-employee directors for their service as directors. We do not pay directors who are also our employees any additional compensation for their service as a director. Accordingly, Dr. Greenstreet did not receive any additional compensation for her service as a director during 2024.

Our PC&C committee periodically reviews the compensation we pay to our non-employee directors, with input from its independent compensation consultant, Pay Governance. Our PC&C committee compares our board compensation to the compensation paid to non-employee directors of our peer group companies. Our PC&C committee also considers the responsibilities we ask of our board members along with the amount of time required to perform those responsibilities. In February 2024, our PC&C committee, with the assistance of Pay Governance, performed a comprehensive review of director compensation. Following this review, the PC&C committee and our board of directors determined that our director compensation was competitive with that of our peer group and made no changes thereto.

The table below reflects our non-employee director compensation for 2024.

COMPENSATION TYPE	COMPENSATION AMOUNT
Annual Retainer	\$60,000
Independent Board Chair Fee	\$65,000
Lead Independent Director	\$40,000
Committee Chair Fees:	
Audit	\$25,000
People, Culture and Compensation	\$20,000
Nominating and Corporate Governance	\$20,000
Science and Technology	\$20,000
Committee Member Fees:	
Audit	\$12,500
People, Culture and Compensation	\$10,000
Nominating and Corporate Governance	\$10,000
Science and Technology	\$10,000
Initial Stock Option Award (vests ratably in three annual installments)	\$600,000 grant-date fair value**
Annual Stock Option Award (vests on one-year anniversary)*	\$400,000 grant-date fair value**

* Each non-employee director is generally eligible for an annual stock option award beginning in the sixth month following his or her election to our board.

** Actual number of non-qualified stock options awarded will be determined on the date of grant by dividing the value of the award by the closing price of our common stock on the Nasdaq Global Select Market on such date, further divided by the Black Scholes factor in use at such time. The exercise price of such stock option awards is equal to the closing price of our common stock on the Nasdaq Global Select Market on the date of grant.

Our board may, in its discretion, increase or decrease the size of the stock option award made to a non-employee director upon election or in connection with the annual stock option award or make other equity awards to our non-employee directors, subject to the limitations contained in our Amended and Restated 2018 Stock Incentive Plan, or the 2018 Plan.

Pursuant to the 2018 Plan, the maximum aggregate value for initial and annual non-employee director compensation, including the value of the shares of common stock that may be subject to initial or annual equity awards to non-employee directors, is equal to \$1.5 million and \$1.0 million, respectively. As indicated in the table above, our current practice is to deliver aggregate compensation to our non-employee directors in amounts well under these aggregate limits, and we do not expect to change our current practice.

We also reimburse our directors for reasonable travel and other related expenses incurred in connection with their service on our board.



The following table sets forth information concerning the compensation of our non-employee directors in 2024:

DIRECTOR COMPENSATION

NAME	FEES EARNED OR PAID IN CASH (\$)	OPTION AWARDS (\$) ⁽¹⁾⁽²⁾	ALL OTHER COMPENSATION (\$)	TOTAL (\$)
Dennis A. Ausiello, M.D.	80,000	398,790	—	478,790
Carolyn R. Bertozzi, Ph.D.	40,000	398,790	—	438,790
Michael W. Bonney	60,000	398,790	—	458,790
Olivier Brandicourt, M.D.	82,500	398,790	—	481,290
Margaret A. Hamburg, M.D.	70,000	398,790	—	468,790
Peter N. Kellogg	88,190	398,790	—	486,980
David E.I. Pyott	80,000	398,790	—	478,790
Colleen F. Reitan	92,500	398,790	—	491,290
Amy W. Schulman	135,000	398,790	—	533,790
Phillip A. Sharp, Ph.D.⁽⁴⁾	80,000	398,790	25,000 ⁽³⁾	503,790
Elliott Sigal, M.D., Ph.D.	80,000	398,790	—	478,790

⁽¹⁾ The amounts in this column reflect the aggregate grant date fair value of stock options granted for the fiscal year ended December 31, 2024, calculated in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. The assumptions we used to calculate these amounts are included in Note 11 to our audited consolidated financial statements for the fiscal year ended December 31, 2024 included in our Annual Report on Form 10-K, filed with the SEC on February 13, 2025. The amounts reported reflect our total accounting expense, excluding the effect of estimated forfeitures, and may not represent the amounts our directors will actually receive from the awards.

⁽²⁾ The following table summarizes the equity awards granted to our non-employee directors for their service on our board during 2024 and the grant date fair value of such equity awards:

DIRECTOR GRANTS

NAME	DATE OF GRANT	NUMBER OF SHARES UNDERLYING OPTION AWARD GRANTS (#)	GRANT DATE FAIR VALUE OF OPTION AWARD GRANTS (\$) ^(a)
Dennis A. Ausiello, M.D.	5/16/2024	5,228	398,790
Carolyn Bertozzi, Ph.D.	5/16/2024	5,228	398,790
Michael W. Bonney	5/16/2024	5,228	398,790
Olivier Brandicourt, M.D.	5/16/2024	5,228	398,790
Margaret A. Hamburg, M.D.	5/16/2024	5,228	398,790
Peter N. Kellogg	5/16/2024	5,228	398,790
David E.I. Pyott	5/16/2024	5,228	398,790
Colleen F. Reitan	5/16/2024	5,228	398,790
Amy W. Schulman	5/16/2024	5,228	398,790
Phillip A. Sharp, Ph.D.^(b)	5/16/2024	5,228	398,790
Elliott Sigal, M.D., Ph.D.	5/16/2024	5,228	398,790

^(a) The grant date fair value is calculated in accordance with FASB ASC Topic 718 and was \$76.28 for the options granted on May 16, 2024. These amounts represent the total accounting cost for the options. The exercise price for the stock options granted on May 16, 2024 was \$151.22. The amounts reported reflect our total accounting expense, excluding the effect of estimated forfeitures, and may not represent the amounts our directors will actually receive from the awards.

^(b) In connection with Dr. Sharp's retirement from our board, effective as of May 8, 2025, Dr. Sharp's option award will accelerate in accordance with its terms. Dr. Sharp will have the lesser of five years and the remainder of the stock option term following the effective date of his resignation to exercise any vested stock options, after which time all of his outstanding stock options will be cancelled.

⁽³⁾ This amount reflects compensation paid to Dr. Sharp for service as the chair of our scientific advisory board during 2024.

⁽⁴⁾ In March 2025, Dr. Sharp announced his intention to retire from our board, effective as of May 8, 2025.



The following table summarizes the equity awards that were outstanding as of December 31, 2024 for each of our non-employee directors who served on our board during 2024:

DIRECTOR OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END FOR 2024

NAME	OPTION AWARDS ⁽¹⁾		STOCK AWARDS
	NUMBER OF SHARES UNDERLYING UNEXERCISED OPTIONS FOR BOARD SERVICE (#)	NUMBER OF SHARES UNDERLYING UNEXERCISED OPTIONS FOR NON-BOARD SERVICE (#)	NUMBER OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (#)
Dennis A. Ausiello, M.D.	31,448	—	—
Carolyn Bertozzi, Ph.D.	9,496	—	—
Michael W. Bonney	69,045	—	—
Olivier Brandicourt, M.D.	26,479	—	—
Margaret A Hamburg, M.D.	49,448	—	—
Peter N. Kellogg	10,176	—	—
David E.I. Pyott	55,498	—	—
Colleen F. Reitan	49,448	—	—
Amy W. Schulman	67,512	—	—
Phillip A. Sharp, Ph.D.⁽²⁾	74,198	—	—
Elliott Sigal, M.D., Ph.D.	13,138	—	—

⁽¹⁾ Unexercised option awards represent both exercisable and unexercisable awards.

⁽²⁾ Following Dr. Sharp's retirement from our board, effective as of May 8, 2025, Dr. Sharp will have the lesser of five years and the remainder of the stock option term following the effective date of his resignation to exercise any vested stock options, after which time all of his outstanding stock options will be cancelled.



Securities Ownership

Ownership of our Common Stock

The following table sets forth information regarding the beneficial ownership of our common stock, except as otherwise set forth in the footnotes below, by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of the outstanding shares of our common stock;
- each of our directors and director nominees;
- our principal executive officer, our principal financial officer, our three other most highly compensated executive officers who were serving as executive officers on December 31, 2024, whom, collectively, we refer to as our named executive officers, or NEOs; and
- all of our current directors and current executive officers as a group.

For our directors and officers, the information is as of January 31, 2025. For stockholders who beneficially own more than 5% of our outstanding shares of common stock, the shares owned are as of the date provided in the most recent filing made by each such stockholder with the SEC.

The number of shares of common stock beneficially owned by each person or entity is determined in accordance with the applicable rules of the SEC and includes voting or investment power with respect to shares of our common stock. The information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under community property laws. The inclusion herein of any shares as beneficially owned does not constitute an admission of beneficial ownership of those shares by the person listed in the table.



NAME AND ADDRESS OF BENEFICIAL OWNER ⁽¹⁾	NUMBER OF SHARES OWNED (#)	+	NUMBER OF SHARES ACQUIRABLE WITHIN 60 DAYS (#) ⁽²⁾	=	TOTAL BENEFICIAL OWNERSHIP (#)	PERCENTAGE OF COMMON STOCK BENEFICIALLY OWNED(%) ⁽³⁾
Holders of more than 5% of our common stock						
Capital World Investors ⁽⁴⁾	16,398,889		—		16,398,889	12.7
FMR LLC ⁽⁵⁾	14,755,604		—		14,755,604	11.4
The Vanguard Group ⁽⁶⁾	11,943,895		—		11,943,895	9.2
BlackRock, Inc. ⁽⁷⁾	8,546,557		—		8,546,557	6.6
Capital Research Global Investors ⁽⁸⁾	6,968,513		—		6,968,513	5.4
Directors and Named Executive Officers						
Dennis A. Ausiello, M.D.	3,636 ⁽⁹⁾		26,220		29,856	*
Carolyn R. Bertozzi, Ph.D.	—		2,846		2,846	*
Michael W. Bonney	20,029 ⁽¹⁰⁾		63,817		83,846	*
Olivier Brandicourt, M.D.	—		21,251		21,251	*
Margaret A. Hamburg, M.D.	136		44,220		44,356	*
Peter N. Kellogg	—		3,299		3,299	*
David E.I. Pyott	28,036 ⁽¹¹⁾		50,270		78,306	*
Colleen F. Reitan	—		44,220		44,220	*
Amy W. Schulman	8,436		62,284		70,720	*
Phillip A. Sharp, Ph.D.**	266,899 ⁽¹²⁾		57,720		324,619	*
Elliott Sigal, M.D., Ph.D.	2,000		6,425		8,425	*
Yvonne L. Greenstreet, M.D.	79,287 ⁽¹⁴⁾		226,378		305,665	*
Jeffrey V. Poulton	30,701 ⁽¹⁴⁾		203,866		234,567	*
Pushkal Garg, M.D.	12,670 ⁽¹³⁾⁽¹⁴⁾		151,085		163,755	*
Tolga Tanguler	13,191		81,020		94,211	*
Kevin J. Fitzgerald, Ph.D.	13,418 ⁽¹⁴⁾		78,599		92,017	*
All current directors and current executive officers as a group (17 persons)	485,684		1,123,520		1,609,204	1.2

* Less than 1% of our outstanding common stock.

** In March 2025, Dr. Sharp announced his intention to retire from our board, effective as of May 8, 2025.

⁽¹⁾ Unless otherwise indicated, the address of each stockholder is c/o Alnylam Pharmaceuticals, Inc., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, MA 02142.

⁽²⁾ Includes any shares that the holder has the right to acquire within 60 days after January 31, 2025, including through the exercise of any stock option or the vesting of any restricted stock units or performance stock units.

⁽³⁾ Percentage of beneficial ownership is based on 129,426,561 shares of our common stock outstanding as of January 31, 2025. Shares of common stock subject to options, restricted stock, restricted stock units and performance stock units that are exercisable or releasable on January 31, 2025 or are exercisable or releasable within 60 days after January 31, 2025, are deemed outstanding for computing the percentage of the common stock beneficially owned by the person holding such options, restricted stock, restricted stock units or performance stock units but are not deemed outstanding for computing the percentage ownership of any other person.

⁽⁴⁾ Based solely on Amendment No. 2 to a Schedule 13G filed by Capital World Investors with the SEC on February 9, 2024, Capital World Investors has the sole power to vote 16,350,708 of the shares owned, and sole dispositive power for 16,398,889 of the shares owned. The address of Capital World Investors is 333 South Hope Street, 55th Floor, Los Angeles, CA 90071.

⁽⁵⁾ Based solely on Amendment No. 21 to a Schedule 13G filed by FMR LLC (previously known as FMR Corp.) with the SEC on November 12, 2024, Fidelity Management & Research Company, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 14,755,604 shares of our common stock as a result of acting as an investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Abigail P. Johnson, Director, Chairman and Chief Executive Officer of FMR LLC, and FMR LLC, through its control of Fidelity Management & Research Company and the funds, each has sole power to dispose of the 14,755,604 shares of our common stock owned by such funds. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the funds' Boards of Trustees. Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of our common stock held by these funds. The address of FMR LLC is 245 Summer Street, Boston, MA 02210.

⁽⁶⁾ Based solely on Amendment No. 8 to a Schedule 13G filed by The Vanguard Group with the SEC on February 13, 2024, The Vanguard Group has shared power to vote 95,902 of the shares owned, sole dispositive power for 11,654,786 of the shares owned and shared dispositive power for 289,109 of the shares owned. The address of The Vanguard Group is 100 Vanguard Blvd., Malvern, PA 19355.

⁽⁷⁾ Based solely on Amendment No. 7 to a Schedule 13G filed by BlackRock, Inc. with the SEC on January 26, 2024, BlackRock, Inc. has the sole power to vote or direct the voting of 7,837,640 of the shares owned and sole power to dispose or to direct the disposition of 8,546,557 shares of our common stock. Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of our common stock held by BlackRock, Inc. The address of BlackRock, Inc. is 50 Hudson Yards, New York, NY 10001.

- ⁽⁸⁾ Based solely on a Schedule 13G filed by Capital Research Global Investors with the SEC on February 13, 2025, Capital Research Global Investors has the sole power to vote 6,959,366 of the shares owned, and sole dispositive power for 6,968,513 of the shares owned. The address of Capital Research Global Investors is 333 South Hope Street, 55th Floor, Los Angeles, CA 90071.
- ⁽⁹⁾ Includes shares of our common stock held in a trust, of which Dr. Ausiello's spouse is the trustee.
- ⁽¹⁰⁾ Includes shares of our common stock held in a trust, of which Mr. Bonney is the trustee and over which he has sole voting and investment power.
- ⁽¹¹⁾ Includes shares of our common stock held in a trust, of which Mr. Pyott is the trustee and over which he has sole voting and investment power.
- ⁽¹²⁾ Includes shares of our common stock held by the Phillip A. Sharp Revocable Trust, of which Dr. Sharp and his spouse are co-trustees. Also includes shares held in trusts for the benefit of Dr. Sharp's children, of which Dr. Sharp's spouse and children are the trustees.
- ⁽¹³⁾ Includes shares of our common stock held in a trust, of which Dr. Garg and his spouse are co-trustees.
- ⁽¹⁴⁾ Includes shares of our common stock contributed by Alyniam to our 401(k) plan for the benefit of our NEOs through December 31, 2024: Dr. Greenstreet, 407 shares; Mr. Poulton, 57 shares; Dr. Garg, 431 shares; and Dr. Fitzgerald, 537 shares. Prior to 2020, our matching 401(k) contributions were made in the form of shares of our common stock.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our directors, executive officers and the holders of more than 10% of our common stock to file with the SEC initial reports of ownership of our common stock and other equity securities on a Form 3 and reports of changes in such ownership on a Form 4 or Form 5. Officers, directors and 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on a review of our records and written representations by the persons required to file these reports, we believe that all such persons complied on a timely basis with the filing requirements of Section 16(a) during the fiscal year ended December 31, 2024.



Executive Officers

All executive officers of the company are appointed annually and serve at the pleasure of our board of directors. Set forth below with respect to each executive officer is information as of March 1, 2025 with respect to his or her (a) name and age, (b) positions and offices at Alnylam, (c) principal occupation and business experience during at least the past five years, and (d) directorships, if any, of other publicly-held companies, held currently or during the past five years. There are no family relationships between any of our directors and executive officers. None of the corporations or other organizations referred to below with which an executive officer has previously been employed or otherwise associated is a parent, subsidiary or affiliate of Alnylam.



**Yvonne L.
Greenstreet,
M.D.**

Age: 62

Dr. Greenstreet has served as our Chief Executive Officer since January 2022 and as a member of our board of directors since October 2021. Dr. Greenstreet previously served as our President and Chief Operating Officer since October 2020 and was our Chief Operating Officer from September 2016 to October 2020. Prior to joining Alnylam, Dr. Greenstreet served as the founder and Managing Director of Highgate LLC, from January 2014 to August 2016. Prior to that time, Dr. Greenstreet served as the Senior Vice President and Head of Medicines Development at Pfizer from December 2010 to November 2013. Prior to joining Pfizer, Dr. Greenstreet worked for 18 years at GlaxoSmithKline, where she served in various positions, most recently as Senior Vice President and Chief of Strategy for Research and Development and as a member of the Product Management Board. Dr. Greenstreet currently serves as a director of The American Funds and as a member of the Biotechnology Industry Organization Health Section Governing Board. Dr. Greenstreet previously served on the board of directors of argenx SE and Pacira BioSciences, Inc.



**Jeffrey V.
Poulton**

Age: 57

Mr. Poulton has served as our Executive Vice President and Chief Financial Officer since August 2019. Prior to joining Alnylam, Mr. Poulton served as Chief Financial Officer of Indigo Agriculture, a plant microbiome company, from January 2018 to April 2019, where he supported the initial commercial scale-up of the business, including expansion outside the U.S. Between 2003 and December 2017, Mr. Poulton held various roles of increasing responsibility at Shire Plc, most recently as Chief Financial Officer and a member of Shire's Executive Committee and Board of Directors from January 2015 to December 2017. During his tenure at Shire, Mr. Poulton also led Shire's rare disease U.S., LATAM, and Asia Pacific commercial operations, as well as Shire's global rare disease business unit. Prior to Shire, Mr. Poulton led corporate finance and business development initiatives in both the gas and electric utilities industry and the materials manufacturing sector, serving in financial leadership positions at Cinergy Corp and PPG Industries. Mr. Poulton also serves as a member of the board of directors of CervoMed Inc., and previously served on the board of Homology Medicines, Inc. Mr. Poulton served in the United States Navy as a Commissioned Officer.





**Pushkal Garg,
M.D.**

Age: 57

Dr. Garg has served as our Chief Medical Officer, Executive Vice President, Development and Medical Affairs since January 2022. Dr. Garg joined Alnylam in 2014 as Senior Vice President, Clinical Development, was appointed Chief Medical Officer in January 2017, and named Executive Vice President in March 2019. Prior to joining Alnylam in 2014, Dr. Garg served as Vice President, Global Clinical Research, Immunoscience at BMS where he was the strategic leader of the Immunoscience franchise, and oversaw the development of multiple clinical assets across the areas of rheumatology, gastroenterology, nephrology, and transplantation. Preceding this, Dr. Garg held various roles at Millennium Pharmaceuticals, Inc., overseeing the clinical development of multiple small molecule and biologic therapeutics for the treatment of inflammatory disorders. Before joining the biopharmaceutical industry, he was on the faculty at Harvard Medical School and the Brigham and Women's Hospital in Boston. Dr. Garg previously served as a director of SQZ Biotechnologies.



Tolga Tanguler

Age: 52

Mr. Tanguler has served as our Chief Commercial Officer since January 2021. Prior to joining Alnylam, Mr. Tanguler served as Senior Vice President and Head of U.S. at Alexion Pharmaceuticals, Inc., a biopharmaceutical company, from November 2018 to December 2020. Mr. Tanguler has over 25 years of experience in the global biopharmaceutical industry, including as the President of the North America rare disease unit at Pfizer from October 2014 to October 2018. Mr. Tanguler also serves as a director of Lexeo Therapeutics, Inc., a clinical stage genetic medicine company. Mr. Tanguler holds a B.S. in Finance and Economics from Istanbul University and an MBA from the Michigan State University.





Robert W. Hesslein

Age: 72

Mr. Hesslein has served as our Executive Vice President, Chief Legal Officer and Secretary since September 2024. Prior to joining Alnylam, Mr. Hesslein served as Senior Vice President and General Counsel of Voyager Therapeutics, Inc., a biotechnology company dedicated to advancing neurogenetic medicines, from April 2019 to April 2023. Between May 2012 and March 2019, Mr. Hesslein was the Senior Vice President, General Counsel, and Chief Compliance Officer at Foundation Medicine, Inc., a molecular information company focused on cancer genomics, which is now a subsidiary of Roche. Prior to Foundation Medicine, Mr. Hesslein was Senior Vice President and Deputy General Counsel at Genzyme Corporation, a biotechnology company, which is now a subsidiary of Sanofi, from July 1996 to May 2012. Before Genzyme, from September 1990 to June 1996, Mr. Hesslein was a Second Vice President and Counsel at The New England, a mutual life insurance company. Mr. Hesslein began his legal career at Csaplar & Bok, a Boston law firm, specializing as an associate and as a partner in the general corporate, securities and finance areas. Mr. Hesslein earned his B.A. from Yale University and his J.D. from Cornell Law School.



Kevin J. Fitzgerald, Ph.D.

Age: 57

Dr. Fitzgerald has served as our Executive Vice President, Chief Scientific Officer and Head of Early Research and Early Development since August 2023. Dr. Fitzgerald joined Alnylam in 2005 as Associate Director of Research and has served in roles of increasing responsibility and leadership since that time, serving most recently as Chief Scientific Officer of Alnylam since May of 2019. Prior to Alnylam, Dr. Fitzgerald worked for seven years at BMS, a global biopharmaceuticals company. Dr. Fitzgerald has 25 years of drug discovery experience, including leadership of our RNAi delivery efforts and the development of our RNAi therapeutic novel class of medicines. He is an inventor on over 50 patents, including the majority of our marketed and pipeline programs, and has authored over 50 papers. Dr. Fitzgerald also serves as a director of Ovid Therapeutics Inc.



Executive Compensation

Compensation Discussion and Analysis

Our PC&C committee is responsible for overseeing the compensation of our executive leadership team, which includes our NEOs and certain of our other senior leaders. The PC&C committee reviews and approves the compensation of our executive officers, other than our CEO, and reviews and recommends the compensation of our CEO to our board for approval. This Compensation Discussion and Analysis, or CD&A, describes our executive compensation philosophy, the design of our executive compensation programs, and the compensation decisions made by the PC&C committee and the board (as applicable) for each of our NEOs.

Our NEOs for 2024 consist of our Chief Executive Officer, our Executive Vice President, Chief Financial Officer, and our three other most highly compensated executive officers based on fiscal 2024 compensation.

YVONNE L. GREENSTREET, M.D.
Chief Executive Officer

JEFFREY V. POULTON
Executive Vice President,
Chief Financial Officer

PUSHKAL GARG, M.D.
Chief Medical Officer, Executive Vice President,
Development & Medical Affairs

TOLGA TANGULER
Executive Vice President,
Chief Commercial Officer

KEVIN J. FITZGERALD, Ph.D.
Executive Vice President,
Chief Scientific Officer

Executive Summary – Why You Should Vote FOR The 2025 Say-On-Pay Proposal

OUR EXECUTIVE COMPENSATION PHILOSOPHY DRIVES COMPENSATION STRUCTURE DESIGN

The key principles of our Executive Compensation Philosophy are:

- Align executive interests with the drivers of growth and stockholder returns
- Incentivize the execution of company strategy and primary business goals
- Attract and retain talented executives with diverse expertise, skills, and background with market competitive pay
- Drive growth of sustainable long-term stockholder value

Consequently, our program is designed to ensure that the *substantial majority of NEO compensation is performance-based and at-risk*.

OUR CEO COMPENSATION STRUCTURE REFLECTS OUR PAY-FOR-PERFORMANCE CULTURE

The compensation structure for 2024 for Dr. Greenstreet, our CEO, reinforces our commitment to performance-based incentives, as follows:

- 93% of Total Direct Compensation was variable and at-risk
- 75% of annual equity awards were tied to the achievement of specific long-term goals and/or the creation of stockholder value
- 100% of annual incentives were performance-based and contingent on corporate performance against preset goals

OUR COMPENSATION STRUCTURE CONTINUES TO EVOLVE IN LINE WITH STOCKHOLDER FEEDBACK

Our PC&C committee values input from stockholders, and stockholder feedback is an integral part of committee and board discussions and decisions.

- In 2024, we engaged with stockholders who collectively own a meaningful percentage of our outstanding shares
- Stockholders we spoke with affirmed strong support for our executive compensation philosophy and structure and appreciated the emphasis on performance-based equity

For more information, please see “Board Response to Stockholder Feedback” section in this CD&A.



OUR COMPENSATION ALIGNS WITH LONG-TERM STOCKHOLDER INTERESTS

Our PC&C committee has adopted incentive designs and governance policies that align the interests of our NEOs with those of our long-term stockholders. These include:

- Strong emphasis on performance-based equity awards
- Annual incentive bonus payout of 190% based on company performance against pre-established goals, with 84% of our CEO's total direct compensation and an average of 77% of our other NEOs' total direct compensation delivered in long-term equity awards.
- No guaranteed annual bonuses or salary increases
- Robust compensation risk-mitigation policies including clawback, prohibition on pledging and hedging of company stock and stock ownership guidelines

Board Response to Stockholder Feedback

We value stockholder feedback concerning our executive compensation program and have routinely received strong stockholder support for our say-on-pay proposals. At our 2024 annual meeting, our say-on-pay proposal received support from 95% of the votes cast by our stockholders on the matter. We currently intend to hold an advisory vote on the compensation of our NEOs every year until the next required advisory vote on the frequency of holding the advisory vote on NEO compensation. Annually, we reach out to stockholders collectively owning a meaningful percentage of our outstanding common stock. Based on the feedback received, our PC&C committee believes that our stockholders generally endorse our executive compensation philosophy and program design.

The board and PC&C committee remain committed to stockholder engagement. Feedback received during the engagement serves as a key input to board and PC&C committee discussions and decisions.

Executive Compensation Governance Practices

In addition to our pay-for-performance compensation structure, we have strong compensation governance practices. These practices are rooted in our executive compensation philosophy and are described below.



ALNYLAM'S POLICIES AND PRACTICES

Pay Outcomes Contingent on Performance	Our executive compensation program reinforces our performance driven culture. A significant percentage of NEO compensation is at-risk and may be realized only if performance goals are met.
No Single-Trigger Equity Acceleration	Change-in-control, or CIC, provisions under our equity awards do not provide for automatic acceleration upon the occurrence of a CIC.
Long-Term Alignment with Stockholders	Half of annual equity awards issued to NEOs are performance-based and vest contingent upon the achievement of pre-specified clinical development events, regulatory events and/or financial metrics.
Cash and Equity Incentive Clawback	Our clawback policy applies to both cash and equity incentives and covers all executive officers.
No Guaranteed Annual Bonus or Salary Increases	No executive officers are provided with guaranteed annual salary increases or annual or multi-year bonuses.
No Hedging and Pledging Permitted	Our insider trading policy expressly prohibits hedging transactions and margin accounts, short sales, and the pledge of company securities.
Good Standing Requirement	We require our executive officers to be in good standing to receive awards under our annual incentive program.
Stock Ownership Guidelines Enhance Alignment of Interests	Our stock ownership guidelines strengthen the alignment of the interests of our executive officers with those of our long-term stockholders.
Limited Perquisites Align with Pay-for-Performance Focus	Consistent with our pay-for-performance philosophy, we provide limited perquisites. We do not provide perquisites such as automobile leases, driver services or personal use of aircraft.
No excise tax and generally no other tax gross-ups	We do not provide excise tax gross-ups in our executive agreements, and we generally do not provide other tax gross-ups.

Select Business Highlights For 2024

We are a global commercial-stage biopharmaceutical company developing novel therapeutics based on RNAi. RNAi is a naturally occurring biological pathway within cells for sequence-specific silencing and regulation of gene expression. By harnessing the RNAi pathway, we have developed a new class of innovative medicines, known as RNAi therapeutics. RNAi therapeutics are comprised of small interfering RNA and function upstream of most other classes of medicines by silencing messenger RNA that encode for proteins implicated in causing disease, thus preventing these proteins from being made. We believe this is a revolutionary approach with the potential to transform the care of patients across a broad range of disease areas and indications. To date, our efforts to advance this revolutionary approach have yielded the approval of five first-in-class RNAi-based medicines, ONPATTRO® (patisiran), AMVUTTRA® (vutrisiran), GIVLAARI® (givosiran), OXLUMO® (lumasiran) and Leqvio® (inclisiran).

We believe 2024 was a year of exceptional performance for Alnylam, as we continued to make progress on our commercial, clinical development and other corporate goals. In 2021, we launched our *Alnylam P⁵x25* strategy which focuses on our planned transition to a top-tier biotech company by the end of 2025. With *Alnylam P⁵x25*, we aim to deliver transformative medicines in both rare and common diseases, benefiting patients around the world through sustainable innovation and exceptional financial performance, and resulting in a leading biotech profile. We ended 2024 having made considerable progress against these goals, and currently have five marketed products and more than 20 clinical programs, including several in late-stage development, across a broad range of disease areas and indications. Based on our performance in 2024, our board determined that we achieved 190% of our corporate goals for fiscal year 2024, including a majority of our commercial goals, and all of our culture and growth management, early- and mid-stage pipeline and strategic infrastructure goals.



Select Business Highlights for 2024



COMMERCIAL ACHIEVEMENTS

- ✓ Recognized global net product revenues for ONPATTRO (patisiran) and AMVUTTRA (vutrisiran) for the full year 2024 of \$253 million and \$970 million, respectively
- ✓ Recognized global net product revenue for GIVLAARI (givosiran) for the full year 2024 of \$256 million
- ✓ Recognized global net revenue for OXLUMO (lumasiran) for the full year 2024 of \$167 million



CLINICAL & REGULATORY ACHIEVEMENTS

- ✓ Advanced robust pipeline ending 2024 with more than ten active clinical-stage programs
- ✓ Reported positive results from the HELIOS-B Phase 3 clinical trial of vutrisiran for the treatment of ATTR amyloidosis with cardiomyopathy and submitted supplemental New Drug Application to the U.S. Food and Drug Administration, or FDA, using a priority review voucher and parallel filings for regulatory approval in all major regions, including Europe and Japan
- ✓ Received FDA orphan drug designation for nuresiran and announced positive interim Phase 1 data in patients with ATTR amyloidosis
- ✓ Announced positive initial results from the multiple dose portion of the Phase 1 clinical trial of mivelsiran in patients with Alzheimer's Disease
- ✓ Initiated Phase 1 clinical trial of ALN-HTT02 in adult patients with Huntington's disease, a Phase 1 clinical trial of ALN-6400 for a bleeding disorder and a Phase 2 clinical trial of ALN-4324 for type 2 diabetes mellitus



NOTABLE RECOGNITIONS

- ✓ Recognized as one of the *Boston Globe's* Top Places to Work
- ✓ Recognized by *Newsweek* as one of America's Most Responsible Companies
- ✓ Recognized by the *USA Today* as a Top Workplace
- ✓ Recognized by *Science Magazine* as a Top Employer for the sixth consecutive year



FINANCIAL RESULTS

- ✓ Ended 2024 with \$2.69 billion in cash, cash equivalents and marketable securities
- ✓ Grew global net product revenues by 33% during the twelve months ended December 31, 2024 compared to the same period in 2023



STOCKHOLDER RETURN

- ✓ Our three-year total stockholder return (TSR) for fiscal years 2022-2024 was 38.76% and our five-year TSR for fiscal years 2020-2024 was 104.32%. Our one-year TSR for 2024 was 22.94%

Components of our Executive Compensation Program

The guiding principle of our executive compensation program is to provide a structure that allows us to attract and retain highly qualified executives and to motivate such executives to achieve clinical, business and financial goals that create long-term stockholder value in a manner consistent with our core business objectives. Our executive compensation program consists of three components: base salary, short-term incentive in the form of an annual cash bonus, and long-term incentives in the form of annual equity awards.

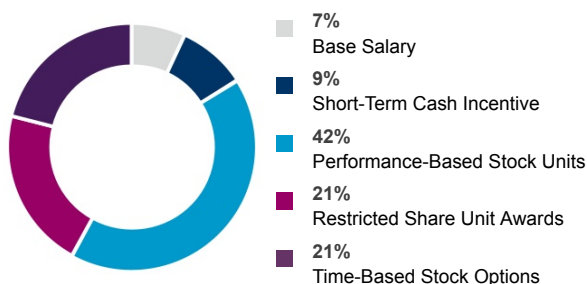


Each Compensation Element Serves a Unique Purpose

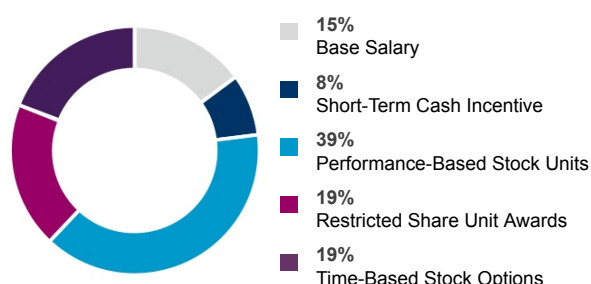
PAY ELEMENT	AT-RISK	DESCRIPTION	RATIONALE
Base Salary		<ul style="list-style-type: none"> Fixed cash compensation reflective of individual performance, skills, experience and internal equity, after review of peer group data 	<ul style="list-style-type: none"> Attracts and rewards executives via market competitive pay and industry norms and reflects individual performance and experience
Short-Term Cash Incentives	✓	<ul style="list-style-type: none"> Annual performance against pre-established goals Payouts earned only if corporate performance exceeds 50% of targets Awards capped at 200% of preset targets 	<ul style="list-style-type: none"> Drives company-wide performance Rewards achievement against pre-established goals Motivates executives to achieve performance objectives that are key to our annual operating and strategic plans Aligns executive and stockholder interests
Long-Term Equity Incentives	✓	<ul style="list-style-type: none"> Award value split 50% performance stock units, or PSUs, 25% restricted stock units, or RSUs, and 25% stock options PSUs only vest upon successful achievement of pre-established goals RSUs vest based on continued service Stock options vest based on continued service and only have value if and to the extent that our stock price appreciates after grant 	<ul style="list-style-type: none"> Motivates executives to deliver sustained long-term growth by achieving multi-year strategic objectives Focuses on significant use of performance-based vesting for equity awards to align executive and stockholder interests through long-term value creation Enhances retention of executives with a mix of performance- and service-based vesting

The PC&C committee is committed to ensuring that a substantial portion of NEO compensation is “at-risk” and variable. For 2024, 93% of our CEO’s total direct compensation and, on average, 85% of our other NEOs’ total direct compensation, is variable and directly affected by both our company’s and each NEO’s performance. In addition, for both our CEO and our other NEOs, 50% of annual long-term incentive compensation consists of performance-based equity awards in the form of PSUs.

CEO 2024 TARGET COMPENSATION MIX



ALL OTHER NEO AVERAGE 2024 TARGET COMPENSATION MIX



Base Salary

Our PC&C committee reviews and approves base salary adjustments for our NEOs, other than our CEO, after review of peer group data conducted by its compensation consultant, the NEO’s individual performance and the recommendation of our CEO. The PC&C committee reviews and recommends to the board, for its consideration and approval, base salary adjustments for our CEO, after review of peer group data conducted by its compensation consultant and consideration of an individual performance assessment. For more information regarding the process the PC&C committee uses to determine NEO base salaries, see the section below entitled “Committee Process for Setting Total Compensation.”



During the first quarter of 2024, the PC&C committee approved base salary adjustments for each of our NEOs other than our CEO, and the PC&C committee recommended, and our board approved, a base salary adjustment for our CEO. These adjustments, which are reflected in the table below, were effective as of March 1, 2024, and were based upon each NEO's individual performance and a review by the PC&C committee and, in the case of our CEO, our board, of the base salaries payable to comparable executive officers by companies in our peer group.

The table below sets forth the 2024 and 2023 base salaries, in dollars, and the adjustment to base salaries, as a percentage, for each of our NEOs:

BASE SALARY ADJUSTMENTS

NAME	2024 BASE SALARY (\$)	2023 BASE SALARY (\$)	INCREASE(%)
Yvonne L. Greenstreet, M.D.	1,305,000	1,000,000	30.5 ⁽¹⁾
Jeffrey V. Poulton	693,000	660,000	5.0 ⁽²⁾
Pushkal Garg, M.D.	686,000	663,000	3.5
Tolga Tanguer	631,000	610,000	3.4
Kevin J. Fitzgerald, Ph.D.	590,000	570,000	3.5

⁽¹⁾ Increase reflects Dr. Greenstreet's performance and a market adjustment necessary to align Dr. Greenstreet's base salary with the market median.

⁽²⁾ Increase includes a market adjustment of 1.5% to address a gap in Mr. Poulton's base salary relative to the market median.

Short-Term Incentives—2024 Annual Incentive Program

Annual cash incentives are paid to our NEOs through our Annual Incentive Program, or AIP. Our AIP design is intended to align our NEOs' interests directly with our corporate goals. In 2024, the PC&C committee, in consultation with its independent compensation consultant, evaluated our AIP plan design by considering benchmarking data for both our industry and peers, including the fact that we do not utilize an individual performance multiplier for NEOs. Based on this evaluation, the PC&C committee determined that it would be appropriate and consistent with our pay for performance philosophy to adjust the maximum corporate performance modifier that would be payable in the event we significantly overachieved on our corporate goals for the year. Accordingly, the PC&C committee increased the maximum corporate performance modifier from 150% to 200% to more closely align with our peer group and the companies in our industry with which we compete for talent.

For 2024, management proposed, and the PC&C committee and board reviewed and approved, corporate goals in the following categories: Advance our Culture; Early Pipeline and Development Programs; and Marketed Products and Financial Performance. These categories, and the underlying metrics used to measure the company's progress against such goals, represent a broad array of short-term achievements that we believe are critical in the aggregate to the company fulfilling the *Alnylam P⁵x25* strategy and ultimately delivering long-term value to stockholders. The adopted goals represent milestones in our current evolutionary phase that the PC&C committee and board believe are essential to building an infrastructure of talent, systems and capabilities that is necessary for the company to continue to grow and scale, expanding our early pipeline and development programs to ensure additional opportunities for marketed products and continuing to drive strong growth in our marketed products and financial performance to ensure expansion of our marketed therapies. In making its determination regarding awards under the AIP for our NEOs, our PC&C committee and board considered our achievements against these goals, which were established in the first quarter of fiscal 2024. Based on its assessment of our performance after the close of the 2024 fiscal year, and as further set forth below, our PC&C committee and board determined that we achieved all of our culture and growth management goals, all of our early-pipeline and development goals, and the majority of our commercial and financial goals. Based on this determination, the PC&C committee recommended, and the board approved, a corporate performance modifier of 190%.



Annual Metrics and Goal Assessment

The 2024 corporate goals approved by our board, the weighting ranges assigned to each goal, our actual achievement during the performance period as a percentage of target and the weighted performance against these corporate goals, as approved by our PC&C committee and our board in determining our NEOs' compensation, were as follows:

ANNUAL INCENTIVE PAYOUT MATRIX

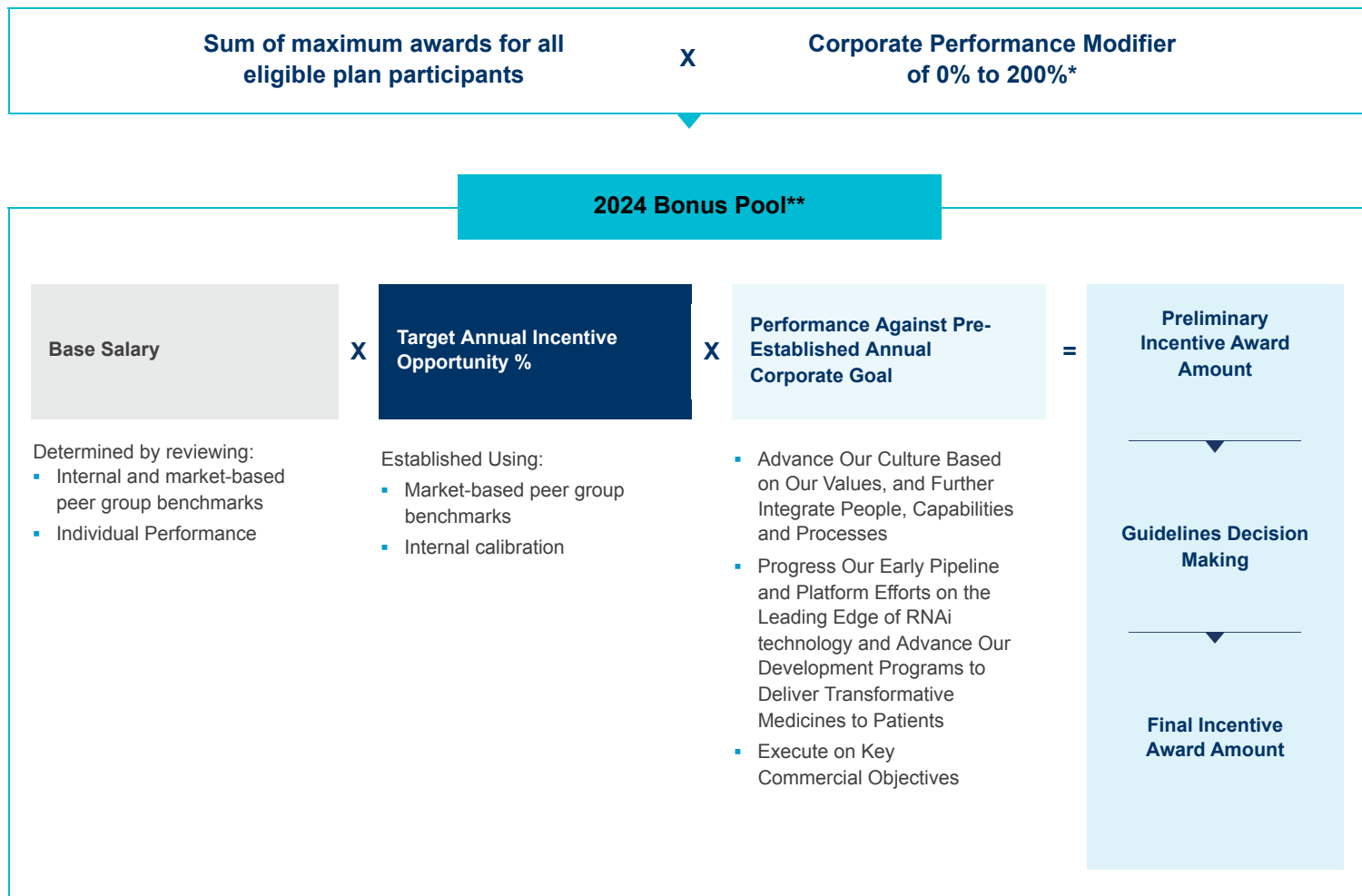
CORPORATE GOAL	WEIGHTING RANGE & ACTUAL ACHIEVEMENT
<p>Advance our Culture Advance our culture-based on our core values while effectively scaling and integrating the enterprise</p> <ul style="list-style-type: none"> Continue to advance culture of integrity, compliance, quality and safety Maintain or improve 2023 overall culture score engagement with specific improvements in key areas of focus: community, career development, and clarity 	<p>20% 40% ACTUAL: 40%</p>
<p>Early Pipeline and Development Programs Progress our early pipeline and platform efforts on the leading edge of RNAi technology and advance our development programs with the goal of delivering transformative medicines to patients</p> <ul style="list-style-type: none"> Ensure readiness of early pipeline programs towards clinical trial applications Continue to define the leading edge of RNAi therapeutics with extrahepatic expansion 	<p>40% 80% ACTUAL: 80%</p>
<p>Marketed Products and Financial Performance Execute on key commercial objectives, including:</p> <ul style="list-style-type: none"> Achieve TTR Franchise and Global Rare Franchise commercial targets, focusing on patient impact Achieve key financial targets in 2024 Investment Plan 	<p>40% 80% ACTUAL: 70%</p>
<p>Approved 2024 Corporate Performance Modifier for NEOs</p>	<p>100% 200% ACTUAL: 190%</p>

With respect to the Advance our Culture goal, our PC&C committee and board determined that we achieved above target after consideration of our overall culture survey engagement score, which was well above industry average and our enhanced enterprise risk management program, which identified critical risk scenarios and mitigation plans for all of our top enterprise risks. With respect to the Early Pipeline and Development Programs goal, the PC&C committee and board considered our above target performance with the results from our HELIOS-B Phase 3 clinical trial of vutrisiran for the treatment of ATTR amyloidosis with cardiomyopathy, or the HELIOS-B clinical trial, filing of four clinical trial applications, and the achievement of positive results from our KARDIA-2 clinical trial of zilebesiran. With respect to the Marketed Products and Financial Performance goal, our PC&C committee and board considered our above target performance on net product revenue, operating expenses, and our one-year stockholder return compared to peers. While reviewing our overall performance against these goals, the PC&C committee and board emphasized the importance of the positive results of the HELIOS-B clinical trial. The PC&C committee and board also noted the importance of our strong performance on net product revenue during 2024, with a 33% year-over-year increase as compared to 2023.



Calculation of Annual Cash Incentives

Annual cash incentives for our NEOs were calculated as shown below.



* If the 2024 corporate performance level had been below 50%, the corporate performance modifier would have been 0%, and no awards would have been granted under the AIP.

** Our board and/or PC&C committee has the discretion to adjust the AIP payouts as each deems appropriate.

In February 2024, our PC&C committee approved target awards for NEOs other than our CEO under the 2024 AIP, including the opportunity for such NEOs to achieve incentive awards above established bonus targets based on the company's performance against 2024 corporate goals. For purposes of determining 2024 target bonus opportunities for our NEOs other than the CEO, the PC&C committee, with the assistance of its compensation consultant, reviewed market data for each such NEO and determined that no adjustments were necessary at such time. The PC&C committee, with the assistance of its compensation consultant, also reviewed market data for the target award for our CEO. After such review, the PC&C committee recommended, and the board approved, a 10% increase in the CEO's target bonus opportunity.

Each potential AIP award ranged from 0% to 200% of the NEO's target award, and thus 200% of each NEO's target award was the maximum AIP award achievable in the event we exceeded all of our corporate goals.

The table below shows (1) the target AIP award opportunity as a percentage of each NEO's annual base salary, (2) the AIP award opportunity assuming all corporate goals were met; (3) the maximum AIP award opportunity assuming all corporate goals were exceeded; (4) the actual 2024 AIP awards for each NEO, which were paid in March 2025; and (5) the actual AIP award paid as a percentage of the respective NEO's target AIP award opportunity.



2024 Annual Incentive Plan Awards

NAME	2024 TARGET AWARD (% OF BASE SALARY)	2024 TARGET AWARD OPPORTUNITY (\$)	2024 MAXIMUM AWARD (\$) ⁽¹⁾	2024 ACTUAL AIP PAYOUT (\$)	2024 ACTUAL AIP PAYOUT (% OF TARGET AWARD OPPORTUNITY)
Yvonne L. Greenstreet, M.D.	120	1,566,000	3,132,000	2,975,400	190
Jeffrey V. Poulton	55	381,150	762,300	724,190	190
Pushkal Garg, M.D.	55	377,300	754,600	716,870	190
Tolga Tanguler	55	347,050	694,100	659,400	190
Kevin J. Fitzgerald, Ph.D.	55	324,500	649,000	616,550	190

⁽¹⁾ The maximum award under the AIP is 200% of the respective NEO's target award opportunity.

Long-Term Incentives – 2024 Equity Awards

The market for qualified and talented executives in the biopharmaceutical industry is highly competitive, and we compete for talent with many companies that have greater resources than we do. Accordingly, we believe long-term incentive compensation is a crucial component of our executive compensation package. The value of equity awards granted to our NEOs varies based on their role and annual performance assessments. For more information about how we set the compensation of our NEOs, please see the section below entitled "Committee Process for Setting Total Compensation."

Our long-term incentive compensation program is designed to:

- reward demonstrated leadership and performance;
- align our executive officers' interests with those of our stockholders through long-term value creation;
- reinforce our pay-for-performance philosophy;
- retain our executive officers through the vesting period of the awards;
- maintain competitive levels of executive compensation; and
- motivate our executive officers for outstanding future performance.

For our 2024 annual long-term incentive award, the PC&C committee approved the following equity award mix for our executive officers: 50% in the form of PSUs, 25% in the form of RSUs, and 25% in the form of stock options.

Annual Equity Awards

Stock options vest as to 25% of the shares subject to the award on the first anniversary of the grant date and as to an additional 6.25% of the shares subject to the award at the end of each successive three-month period thereafter until the fourth anniversary of the grant date. RSUs vest in substantially equal installments on the first, second and third anniversaries of the grant date. PSUs vest, if at all, upon the achievement of specific clinical development, regulatory or financial goals. PSUs cannot vest earlier than the one-year anniversary of the grant date.

Any determination as to whether a PSU vesting event has occurred must be approved by our PC&C committee. The performance goals for a PSU award granted before March 1, 2024 must occur within ten years following the grant date (or upon an earlier date specified in the award, as applicable) and performance goals for the PSU award granted on March 1, 2024 must occur within five years following the grant date. Vesting of equity awards typically ceases upon the award recipient's termination of employment with the company. Prior to the vesting of a PSU or RSU, the recipient does not have any rights as a stockholder with respect to the shares subject to such PSU or RSU, including voting rights and the right to receive dividends or dividend equivalents. We do not currently pay dividends or dividend equivalents on our equity awards.

In connection with the annual review of each NEO's individual performance and consistent with our compensation philosophy, in February 2024, the PC&C committee approved annual equity incentive awards for our executive officers.

The annual equity incentive awards granted to our NEOs in 2024 and the value of such awards listed by award vehicle (i.e., PSU, RSU and stock option), are set forth in the table below:



2024 Annual Equity Incentive Awards

NAME	PSU AWARD VALUE	RSU AWARD VALUE	OPTION AWARD VALUE	TOTAL AWARD VALUE
Yvonne L. Greenstreet, M.D.	7,250,000	3,625,000	3,625,000	14,500,000
Jeffrey V. Poulton	2,362,500	1,181,250	1,181,250	4,725,000
Pushkal Garg, M.D.	1,450,000	725,000	725,000	2,900,000
Tolga Tanguler	1,450,000	725,000	725,000	2,900,000
Kevin J. Fitzgerald, Ph.D.	1,450,000	725,000	725,000	2,900,000

Similar to prior years, the PC&C committee reviewed and selected performance goals for the 2024 PSU awards that are consistent with our long-range plan and that represent multi-year strategic objectives that are related to clinical development, regulatory and/or financial milestones. The PC&C committee believes that these performance goals were appropriate for the fiscal 2024 annual equity award because they balance growth within our existing TTR business and expansion into other disease states (including prevalent indications) with financial performance in achieving significant revenue growth. One of the metrics included in the 2024 PSU award — initiation of a phase 3 clinical trial in a prevalent indication — is also an outstanding metric in the PSU award that we granted in February 2021, or the 2021 PSU. The PC&C committee determined that it was critical to replicate this metric and include it in the 2024 PSU award because 40% of our active employees and one-third of our executive leadership team did not receive the 2021 PSU. For that reason, the PC&C committee determined that including such a goal as part of the 2024 PSU awards would help to foster alignment across the organization toward achieving this significant milestone.

The chart below lists the performance goals for our 2024 PSU awards, along with the performance goals for currently outstanding PSU awards, noting which goals have been achieved to date. The PSU award granted on February 23, 2022 is not listed in the chart below because the final outstanding performance metric included in such award was achieved in June 2024, and the award has vested and is no longer outstanding.

DATE OF GRANT	PERFORMANCE GOAL (WEIGHTING %)	ACHIEVED/NOT YET ACHIEVED
February 24, 2021	▪ Positive Data from Phase 3 Clinical Study in ATTR Amyloidosis Patients with Cardiomyopathy (25%)	✓ August 2022
	▪ Achievement, on or before December 31, 2024, of First \$2.5 Billion in Cumulative Net Product Revenues (25%)	✓ August 2023
	▪ Achievement, on or before December 31, 2025, of Non-GAAP Operating Income Profitability for a 12-month Calendar Year (25%)	✓ February 2025
	▪ Initiation of first Phase 3 Clinical Study for an Alynkam Proprietary RNAi Therapeutic in Development to Treat a Prevalent Disease (25%)	Not Yet Achieved
February 27, 2023	▪ FDA Acceptance of an NDA for a Therapeutic to Treat ATTR Amyloidosis with Cardiomyopathy, After Receipt of Positive Result on Clinical Outcomes Endpoint from Phase 3 Clinical Study (30%)	✓ November 2024
	▪ Achievement of Human Proof of Concept for Investigational RNAi Therapeutic Directed to an Extrahepatic, non-CNS Target (30%)	Not Yet Achieved
	▪ Achievement of Non-GAAP Operating Income in Fiscal 2025 (40%)	Not Yet Achieved
March 1, 2024	▪ Initiation of Phase 3 Clinical Study in a Prevalent Indication (e.g., Hypertension, Alzheimer's, Diabetes) (30%)	Not Yet Achieved
	▪ Start of Phase 3 Clinical Study in ALN-TTRsc04 in ATTR Cardiomyopathy (30%)	Not Yet Achieved
	▪ Achievement of First \$2.5 Billion in Annual Net Product Revenue Determined in Accordance with GAAP (40%)	Not Yet Achieved

Equity Grant Practices

Our PC&C committee generally approves the target value of annual equity awards for our executive officers, including each of our NEOs (except for the CEO whose annual equity awards are approved by our board), at a pre-scheduled meeting in the first quarter of the fiscal year. In certain circumstances, including the hiring or promotion of an individual, or where the PC&C committee determines it is in the best interests of the company, the PC&C committee may approve the grant of equity awards at other times.



During fiscal 2024, we did not time the disclosure of material nonpublic information for the purpose of affecting the value of any executive compensation awarded, and no NEO was granted an equity award during the period beginning four business days before, and ending one business day after, the filing of a periodic report on Form 10-Q or an annual report on Form 10-K, or the filing or furnishing of a current report on Form 8-K that disclosed material nonpublic information.

Benefits and Other Compensation

Other compensation to our executive officers consists primarily of the broad-based benefits we provide to all U.S. based employees, including health and dental insurance, life and disability insurance and a 401(k) plan; however, our executive officers are not eligible to participate in our employee stock purchase plan. Our 401(k) plan is a tax-qualified retirement savings plan pursuant to which all U.S. based employees, including executive officers, may contribute the lesser of up to 60% of their annual salary or the limit prescribed by the Internal Revenue Service. We provide an immediately vested matching contribution in our 401(k) plan that equals 100% of the first 4% of a plan participant's contributions and 50% of the next 2% of contributions.

Committee Process for Setting Total Compensation

We conduct our annual performance reviews and then determine base salary increases, annual cash incentive awards and annual long-term equity awards in the first quarter of each year. As part of this process, our Chief Human Resources Officer, or CHRO, and CEO, with the assistance of the PC&C committee's independent compensation consultant, review the individual performance of each NEO (other than the CEO and CHRO), and the PC&C committee evaluates the compensation level of each NEO and then determines any adjustments to base salary, the target value of an annual incentive award for the current performance year, the actual award payable under the AIP for the recently concluded performance year, and the grant date value of annual long-term incentive awards. The PC&C committee reviews the performance of our CHRO based upon the recommendation of our CEO, without the CHRO being present for such discussion. The PC&C committee reviews the performance of our CEO, without the CEO being present for such discussion, and determines whether to recommend to the board for approval a base salary adjustment, the target value of an annual incentive award for the current performance year, the actual award payable under the AIP for the recently concluded performance year, and the grant date value of annual long-term incentive awards. The PC&C committee applies its discretion, as it deems appropriate, in determining NEO compensation and does not set compensation based solely on benchmarking or a formulaic approach.

With respect to our AIP, each year the company employs a goal-setting process to establish annual corporate goals and individual performance objectives for our employees, including our NEOs. The individual goals for NEOs generally are the same as the corporate goals for purposes of determining the bonus payable under the AIP, but the NEOs' individual performance in achieving the corporate goals is taken into consideration for purposes of determining any base salary adjustment and the value of the annual long-term incentive award issued to them in the following year. Once annual corporate goals are established, the PC&C committee and board review and approve such goals, along with the applicable weightings, range of payouts, and overall plan design for the AIP. Early in the second half of each year, management reviews performance against these goals for the first half of the year and may re-align key goals for the second half of the year, if necessary and subject to board approval. In 2024, no key goals were re-aligned for the second half of the year. During the first quarter of the following year, management evaluates the company's performance against the prior year's corporate goals and recommends to the PC&C committee a proposed level of achievement against the goals. The PC&C committee then discusses the recommendations and considers the appropriate level of achievement against each of the respective corporate goals. The PC&C committee then recommends a level of achievement, which we refer to as the "corporate performance modifier," to the board, and the board considers and approves the final corporate performance modifier. The PC&C committee and board award annual incentive bonus payouts under the AIP to NEOs based solely on the corporate performance modifier approved by the PC&C committee and board, without adjustment for individual performance.



Compensation Peer Group and Peer Selection Process

We develop our executive compensation programs after reviewing publicly available compensation data for our peer group and subscription survey data where there is not sufficient data publicly available. In evaluating the total direct compensation of our NEOs, our PC&C committee, using information provided by its independent compensation consultant, establishes a peer group of publicly traded companies in the biopharmaceutical and biotechnology industries that is selected based on the following criteria:

PEER SELECTION CONSIDERATIONS

Organizational Structure	<ul style="list-style-type: none"> Companies that are similar to our company with respect to: organizational structure, number of employees (headcount between 500 and 5,000) and positions, stage of development (commercial stage with robust pipeline), market capitalization (generally between \$8 billion and \$100 billion, with a focus on companies with market capitalization greater than \$20 billion), and product revenues (greater than \$500 million)
Executive Positions	<ul style="list-style-type: none"> Companies with similar executive positions to ours
Executive Talent Pool	<ul style="list-style-type: none"> Companies with which we compete for executive talent
Global Operations	<ul style="list-style-type: none"> Public companies with international presence

In addition to the criteria set forth above, the PC&C committee also reviewed the peer selection criteria used by proxy advisors as well as the specific peers identified by each advisor.

2024 Peer Group

The PC&C committee annually reviews our peer group to determine whether it continues to include appropriate peers for executive compensation benchmarking purposes. The PC&C committee typically conducts this review in the fourth quarter of each fiscal year and uses the approved peer group to benchmark and set compensation for our NEOs in the first quarter of the following fiscal year. Accordingly, in the fourth quarter of 2023, the PC&C committee reviewed our peer group which, at the time, consisted of 12 companies operating in the biopharmaceutical/biotechnology industry. After review and analysis performed by the compensation consultant, the PC&C committee determined that the peer group remained appropriate for purposes of setting compensation for our NEOs. The following peer group was used in connection with compensation decisions made by the PC&C committee and board in February 2024 relating to base salary adjustments, target annual incentive adjustments, and annual long-term incentive awards granted in March 2024.

2024 PEER GROUP

BeiGene, Ltd.	Exelixis, Inc.	Neurocrine Biosciences, Inc.
Biogen Inc.	Incyte Corporation	Sarepta Therapeutics, Inc.
BioMarin Pharmaceutical Inc.	Jazz Pharmaceuticals plc	United Therapeutics Corporation
Exact Sciences Corporation	Moderna, Inc.	Vertex Pharmaceuticals Incorporated

In the fourth quarter of 2024, the PC&C committee reviewed the peer group for purposes of setting 2025 compensation. After review and analysis performance by the compensation consultant, the PC&C committee determined that Exelixis, Inc. and Jazz Pharmaceuticals plc were no longer appropriate peers due to their low market capitalization relative to our selection criteria. The PC&C committee also determined that it would be appropriate to add two companies — Regeneron Pharmaceuticals, Inc. and Gilead Sciences, Inc. — to our peer group based primarily on our financial and business position as a maturing company and because both companies are industry-relevant competitors for talent.

Compensation Benchmarking

To provide the appropriate context for its executive pay decisions, our PC&C committee, in consultation with its compensation consultant, assessed the compensation practices and pay levels of our peer group.

Notwithstanding the similarities of our peer group companies to Alnylam, due to the nature of our business, we compete for executive talent with many companies that are larger and more established than we are or that possess greater resources than we do. Because we need to retain significant clinical expertise and because our corporate headquarters is located in a geographic region that is highly competitive for talent, we also compete with prestigious academic and non-profit institutions. In keeping with our pay-for-performance philosophy, actual compensation levels are directly related to the achievement of corporate goals and individual performance against those goals. In addition, our PC&C committee uses competitive compensation data from the annual compensation study of peer companies to inform its decisions about overall compensation opportunities and specific compensation elements. Additionally, the PC&C



committee uses multiple reference points when establishing targeted compensation levels. The PC&C committee does not make decisions based solely on benchmarking for specific compensation elements or total compensation and does not fix compensation to any specific percentile relative to the peer companies or the broader market. Instead, the committee applies judgment and discretion in establishing targeted pay levels, taking into account not only competitive market data, but also factors such as experience level of the executive, scope of responsibility, critical needs and skill sets, leadership potential and succession planning, individual performance, and contributions to the achievement of long-term strategic objectives.

Other Key Performance Factors and Industry Specific Considerations

The biopharmaceutical industry is characterized by a very long product development cycle, including a lengthy research and development period and a rigorous approval phase involving human testing and governmental regulatory approval. While we became a commercial-stage company in 2018 and have independently launched four products to date, we have not yet achieved profitability and therefore several of the traditional benchmarking metrics, such as earnings per share, have been inappropriate measures for us as we move towards our goal of financial self-sustainability. Accordingly, the specific performance factors our PC&C committee considers when determining the compensation of our NEOs include:

- key research and development achievements, including advances in RNAi delivery and technology and identification of new therapeutic areas and novel disease targets;
- initiation and progress of clinical trials, in particular late-stage programs;
- achievement of regulatory milestones, including regulatory filings for product approvals and regulatory approvals;
- establishment or expansion of global commercial and medical infrastructure and commercial launch readiness, as well as patient and physician education initiatives;
- revenue results, as well as other key metrics, including progress on pricing and reimbursement efforts;
- establishment and maintenance of key strategic relationships and new business initiatives;
- filing, prosecution, defense and enforcement of key intellectual property rights;
- success in our human capital management strategy, including development of global organizational capabilities, success in hiring, employee retention, and growth management, in each case executed with excellence, patient focus, safety, quality and compliance; and
- financial and operating performance.

These performance factors are considered by our PC&C committee in connection with our annual performance reviews and are a critical component in the determination of base salary and equity incentive awards for our NEOs.

Compensation Risk Oversight

We structure our executive compensation programs with both fixed and variable pay to motivate our NEOs to produce superior short- and long-term results that are in the best interests of our company and stockholders to attain our ultimate objective of building stockholder value. In addition, we have established, and the PC&C committee endorses, several controls to address and mitigate compensation-related risk, such as maintaining an anti-hedging and anti-pledging policy, stock ownership guidelines, good standing requirements under our AIP for eligibility to receive an award, and a clawback policy to recover incentive-based compensation in the event of a restatement of a previously issued financial statement.

The PC&C committee's independent compensation consultant assisted the PC&C committee in evaluating our policies and practices to determine if they create excessive risk in our executive and employee compensation programs. This evaluation included an assessment of the potential risks associated with field-based incentive compensation and commercial-related goals and targets in our incentive compensation plans, as well as our other compensation policies and practices. In conducting its independent assessment, the compensation consultant reviewed our incentive compensation and other programs and determined there were no compensation policies or practices that encourage excessive or inappropriate risk-taking. The compensation consultant discussed the detailed findings of this review with management, and management and the compensation consultant discussed the results of the review with the PC&C committee. Following its review, the PC&C committee concluded that our compensation policies and practices are not reasonably likely to have a material adverse effect on the company. The PC&C committee will continue to evaluate on an annual basis the potential risks associated with our compensation policies and practices with input from its compensation consultant and internal and external counsel.



Employment Arrangements

Our executive officers are at-will employees and do not have employment agreements, with the exception of our CEO, Dr. Greenstreet. Each executive officer has signed a nondisclosure, non-competition and assignment of intellectual property agreement providing for the protection of our confidential information and ownership of intellectual property developed by such executive officer and a covenant not to compete with us for a period of at least 12 months after termination of employment.

Greenstreet Employment Agreement

Dr. Greenstreet entered into a written employment agreement with us upon her appointment as our CEO, which we refer to as the Greenstreet Employment Agreement. Following an initial two-year term, the Greenstreet Employment Agreement automatically renews for successive one-year periods unless 90 days prior written notice of termination is given by either party (neither party provided such notice prior to commencement of such 90-day period in 2024). The Greenstreet Employment Agreement set Dr. Greenstreet's initial annual base salary, which is subject to increase in the discretion of the board. The Greenstreet Employment Agreement also entitles Dr. Greenstreet to a target AIP award, subject to achievement of the company's annual corporate goals, as determined by our PC&C committee and board. Under the Greenstreet Employment Agreement, Dr. Greenstreet received initial stock-based awards and is eligible to participate in our long-term incentive programs on the same basis as our other executive officers. She is also eligible to participate in our employee benefit programs on a basis no less favorable than applicable to our other executive officers.

Potential Payments Upon Termination or Change-in-Control

Certain executives, including our NEOs, may be entitled to severance and/or change in control protections, in the case of Dr. Greenstreet pursuant to her employment agreement, and in the case of each of our other NEOs pursuant to a change in control agreement, or CIC agreement, the terms of which are described below. We provide these severance and change in control arrangements because we believe that, in a competitive market for talent, severance arrangements are necessary to attract and retain high quality executives. In addition, the change in control benefit allows and incentivizes executives to maintain their focus on our business during a period when they otherwise might be distracted because of uncertainty around their positions or the go-forward company.

Greenstreet Employment Agreement

Under the Greenstreet Employment Agreement, if Dr. Greenstreet's employment is terminated by the company without Cause or by Dr. Greenstreet for Good Reason, as such terms are defined in the Greenstreet Employment Agreement, prior to a CIC, she will not receive any cash severance, her outstanding unvested equity awards will continue to vest until the second anniversary of the termination date, and her outstanding stock options shall remain exercisable until the earlier of the second anniversary of the termination date and the original expiration dates of such options; provided that in the event a CIC occurs on or before the second anniversary of the termination date, her then-outstanding stock options will be treated in the same manner as the then-outstanding stock options held by continuing members of our executive leadership team.

In addition, under the Greenstreet Employment Agreement, if Dr. Greenstreet's employment is terminated by the company without Cause or by Dr. Greenstreet for Good Reason within 18 months following a CIC, she will be entitled to receive (i) a lump sum cash payment equal to two times the sum of: (A) her annual base salary in effect immediately prior to termination (or prior to the CIC, if higher) and (B) her target bonus for the fiscal year in which the CIC occurred; and (ii) if she was participating in our group health plan immediately prior to such termination and elects continuation coverage under COBRA, a monthly cash payment for 24 months (or the expiration of the COBRA continuation period, if earlier) equal to the monthly employer contribution we would have paid to provide Dr. Greenstreet with health insurance if she had remained employed. In addition, following a CIC and qualifying termination of employment, all of her outstanding unvested stock options and other stock-based awards shall immediately accelerate and become fully exercisable or nonforfeitable.

If any payment and benefits to be paid or provided to Dr. Greenstreet, whether pursuant to the terms of her employment agreement or otherwise, would be subject to "golden parachute" excise taxes under the Internal Revenue Code of 1986, as amended, or the Code, the payments and benefits will be reduced to the extent necessary to avoid such excise taxes, but only if such a reduction of pay or benefits would result in a greater after-tax benefit to her.

Change in Control Agreements

We have entered into an individual CIC agreement with each of our executive officers, including all NEOs, with the exception of Dr. Greenstreet. The CIC agreements entitle each executive officer to certain benefits in the event of certain terminations of employment within 12 months following a CIC. Pursuant to each CIC agreement, if an executive officer is terminated by us without Cause (as defined in the CIC agreement) or if an executive officer terminates employment for Good Reason (as defined in the CIC agreement), in either case,



within 12 months following a CIC, such executive officer will be entitled to receive (i) a lump sum cash payment equal to one and a half times the sum of: (A) such executive officer's annual base salary in effect immediately prior to termination (or prior to the CIC, if higher) and (B) such executive officer's target bonus for the fiscal year in which the CIC occurred; and (ii) if the executive officer was participating in our group health plan immediately prior to such termination and elects continuation coverage under COBRA, a monthly cash payment for 18 months (or the expiration of the COBRA continuation period, if earlier) equal to the monthly employer contribution we would have paid to provide the executive with health insurance if such executive officer remained employed. In addition, following a CIC and qualifying termination of employment, all of an executive officer's outstanding unvested stock options and other stock-based awards shall immediately accelerate and become fully exercisable or nonforfeitable.

If any payment and benefits to be paid or provided to an executive officer, whether pursuant to the terms of a CIC Agreement, employment agreement or otherwise, would be subject to "golden parachute" excise taxes under the Code, the payments and benefits will be reduced to the extent necessary to avoid such excise taxes, but only if such a reduction of pay or benefits would result in a greater after-tax benefit to the executive.

Each CIC Agreement will terminate upon the earlier of (i) an executive officer's termination of employment with us for any reason prior to a CIC, (ii) an executive officer's termination of employment with us after a CIC for Cause or without Good Reason or (iii) the date that is 12 months after a CIC, if the executive officer is still employed by the company.

There are no other agreements with our NEOs that provide for separation pay in the event of a termination of employment.

Stock Ownership Guidelines

We have stock ownership guidelines for our directors and our executive officers. Under these guidelines, our non-executive directors are required to hold shares of our stock with a minimum value equal to five times the amount of the annual cash retainer (i.e., \$300,000), our CEO is required to hold shares of our stock with a minimum value equal to six times her base salary, and our other executive officers are required to hold shares of our stock with a minimum value equal to three times the executive officer's base salary. All executive officers and non-executive directors have five years from the date they become subject to the guidelines to satisfy the respective ownership guidelines. The following forms of equity count toward satisfaction of the ownership guidelines: shares owned outright; unvested shares of restricted stock, RSUs, and deferred stock units to be settled in shares; and vested but unexercised, in-the-money stock options. We review compliance with the stock ownership guidelines annually and, currently, all of our non-executive directors and NEOs are in compliance.

Anti-Hedging and Anti-Pledging Policy

Our insider trading policy expressly prohibits all of our employees, including our NEOs, as well as our directors, from engaging in speculative transactions in our stock, including short sales, puts/calls, hedging transactions and margin accounts or pledges. Waivers of these prohibitions allowing for pre-clearance/pre-approval under certain situations are also not permitted under the policy.

Clawback Policy

In accordance with the rules adopted by the SEC and The Nasdaq Stock Market, the PC&C committee adopted a Clawback Policy, effective as of December 1, 2023. Under this policy, the company is required to recover compensation that is granted, earned or vested based wholly or in part upon the attainment of any financial reporting measure in the event that the company is required to prepare a financial restatement to correct a material error.

Role of the Compensation Consultant

Pursuant to its charter, our PC&C committee has the authority to select and retain independent advisors and counsel to assist it with carrying out its duties and responsibilities, and the company has provided appropriate funding to the PC&C committee to do so. The PC&C committee previously exercised this authority and engaged Pay Governance as its independent compensation consultant, effective July 2022.

Pay Governance served as an advisor to our PC&C committee on topics primarily related to our incentive compensation programs (including annual and long-term incentive compensation), peer group evaluation and selection, and director and executive compensation. Pay Governance reported directly to the PC&C committee chair on the matters on which it had been retained. Pay Governance did not provide any services to the company other than the services that it provided to the PC&C committee.



Our PC&C committee regularly reviews the services provided by its outside consultant and believes that Pay Governance is independent from the company in providing executive compensation consulting services. Our PC&C committee has assessed the independence of Pay Governance consistent with Nasdaq Global Select Market listing standards and SEC rules and has concluded that the engagement of Pay Governance does not raise any conflicts of interest. Our PC&C committee monitors the independence of the compensation consultant on an annual basis.

Tax Considerations

The PC&C committee considers certain tax implications when designing our executive compensation programs and certain specific awards. However, the PC&C committee believes that stockholders' interests may best be served by offering compensation that is not fully deductible, where appropriate, to attract, retain and motivate talented executives. Accordingly, the PC&C committee has discretion to authorize compensation that does not qualify for income tax deductibility.

People, Culture and Compensation Committee Report on Executive Compensation

The members of our people, culture and compensation committee have reviewed and discussed the "Compensation Discussion and Analysis" required by Item 402(b) of Regulation S-K with management. Based upon such review and discussions, our people, culture and compensation committee recommended to our board that such section be included in this proxy statement and incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 13, 2025.

This people, culture and compensation committee report shall not be deemed to be incorporated by reference into any filing made by the company under the Securities Act of 1933 or the Exchange Act, notwithstanding any general statement contained in any such filing incorporating this proxy statement by reference, except to the extent the company incorporates such Report by specific reference.

By the people, culture and compensation committee of the board of directors of Alnylam,

Colleen F. Reitan, Chair
Olivier Brandicourt, M.D.
Elliott Sigal, M.D., Ph.D.



Executive Compensation

The following table sets forth the total compensation paid or accrued for the years ended December 31, 2024, 2023 and 2022 to our NEOs.

Summary Compensation Table

NAME AND PRINCIPAL POSITION	YEAR	SALARY (\$)	BONUS (\$)	STOCK AWARDS (\$) ⁽¹⁾	OPTION AWARDS (\$) ⁽²⁾	NON-EQUITY INCENTIVE PLAN COMPENSATION (\$) ⁽³⁾	ALL OTHER COMPENSATION (\$) ⁽⁴⁾	TOTAL (\$)
Yvonne L. Greenstreet, M.D. <i>Chief Executive Officer (principal executive officer)</i>	2024	1,253,400	—	3,625,000 ⁽⁵⁾	3,614,400	2,975,400	24,770	11,492,970
	2023	975,800	—	3,375,150 ⁽⁶⁾	3,369,000	1,155,000	20,720	8,895,670
	2022	850,000	—	— ⁽⁷⁾	2,498,790	977,500	262,520	4,588,810
Jeffrey V. Poulton <i>Executive Vice President, Chief Financial Officer (principal financial officer)</i>	2024	687,400	—	1,181,250 ⁽⁵⁾	1,177,790	724,190	22,150	3,792,780
	2023	651,900	—	1,087,620 ⁽⁶⁾	1,085,590	381,150	18,100	3,224,360
	2022	604,500	—	— ⁽⁷⁾	1,449,280	350,750	17,100	2,421,630
Pushkal Garg, M.D. <i>Executive Vice President, Chief Medical Officer</i>	2024	682,100	—	775,170 ⁽⁵⁾⁽⁸⁾	722,900	716,870	22,150	2,919,190
	2023	656,900	—	1,087,620 ⁽⁶⁾	1,085,590	382,880	18,100	3,231,090
	2022	625,000	—	— ⁽⁷⁾	1,899,100	359,380	17,100	2,900,580
Tolga Tanguler <i>Executive Vice President, Chief Commercial Officer</i>	2024	627,400	—	725,000 ⁽⁵⁾	722,900	659,400	19,870	2,754,570
	2023	603,200	—	950,050 ⁽⁶⁾	948,360	352,280	15,820	2,869,710
	2022	564,800	—	— ⁽⁷⁾	1,449,280	326,370	11,620	2,352,070
Kevin J. Fitzgerald, Ph.D. <i>Executive Vice President, Chief Scientific Officer</i>	2024	586,600	—	725,000 ⁽⁵⁾	722,900	616,550	22,150	2,673,200
	2023	539,600	—	950,050 ⁽⁶⁾	948,360	329,180	17,960	2,785,150
	2022	493,700	—	— ⁽⁷⁾	1,604,260	330,630	17,090	2,445,680

⁽¹⁾ The amounts reported in the Stock Awards column represent the aggregate grant date fair value for the fiscal years ended December 31, 2024, 2023, and 2022 of grants of RSUs and PSUs to each of the NEOs, calculated in accordance with FASB ASC Topic 718. For RSUs, these amounts are calculated as the number of shares of RSUs granted multiplied by the quoted closing market price of our common stock on the date of grant. For PSUs, these amounts are calculated based on the probable outcome of the performance conditions as of the grant date. The amounts reported reflect our total accounting expense, excluding the effect of estimated forfeitures, and may not represent the amounts our NEOs will actually receive from the awards.

⁽²⁾ The amounts reported in the Option Awards column represent the aggregate grant date fair value for the fiscal years ended December 31, 2024, 2023, and 2022 of grants of time-based stock options to each of the NEOs, calculated in accordance with FASB ASC Topic 718. The assumptions we used in calculating these amounts are included in Note 11 to our audited consolidated financial statements for the year ended December 31, 2024 included in our Annual Report on Form 10-K, filed with the SEC on February 13, 2025. The amounts reported reflect our accounting expense, excluding the effect of estimated forfeitures, and may not represent the amounts our NEOs will actually receive from the awards.

⁽³⁾ The amounts reported in the Non-Equity Incentive Plan Compensation column reflect the annual AIP award earned by the NEOs for each respective year. The annual AIP awards were paid in the first quarter of the calendar year following the year to which the AIP award relates.

⁽⁴⁾ The amounts reported in the All Other Compensation column for 2024 reflect, for each NEO, the sum of (i) the dollar value of life insurance premiums we paid; (ii) the amount we contributed to the NEO's 401(k) plan; and (iii) the incremental cost to us of all perquisites and other personal benefits. Specifically, the All Other Compensation column above for 2024 includes:

NAME	YEAR	TERM LIFE INSURANCE PREMIUMS PAID BY ALNYLAM (\$)	DOLLAR VALUE OF CONTRIBUTION BY ALNYLAM TO THE EXECUTIVE'S ACCOUNT UNDER 401(K) PLAN (\$)
Yvonne L. Greenstreet, M.D.	2024	7,520	17,250
Jeffrey V. Poulton	2024	4,900	17,250
Pushkal Garg, M.D.	2024	4,900	17,250
Tolga Tanguler	2024	2,620	17,250
Kevin J. Fitzgerald, Ph.D.	2024	4,900	17,250

⁽⁵⁾ Amounts represent the aggregate grant date fair value for grants of RSUs and PSUs, calculated in accordance with FASB ASC Topic 718. For PSUs granted during 2024, we determined that, as of the date of grant, it was not probable, as defined under applicable accounting guidance, that any of the performance conditions associated with the PSUs would be achieved and therefore we assigned a grant date fair value of \$0 to the PSUs. If we had determined that, as of the date of grant, it was probable that 100% of the performance conditions associated with the PSUs would be achieved, we would have assigned the following grant date fair values for the PSUs: \$7,250,000 for Dr. Greenstreet, \$2,362,500 for Mr. Poulton, \$1,450,000 for Dr. Garg, \$1,450,000 for Mr. Tanguler and \$1,450,000 for Dr. Fitzgerald.



- (6) Amounts represent the aggregate grant date fair value for grants of RSUs and PSUs, calculated in accordance with FASB ASC Topic 718. For PSUs granted during 2023, we determined that, as of the date of grant, it was not probable, as defined under applicable accounting guidance, that any of the performance conditions associated with the PSUs would be achieved and therefore we assigned a grant date fair value of \$0 to the PSUs. If we had determined that, as of the date of grant, it was probable that 100% of the performance conditions associated with the PSUs would be achieved, we would have assigned the following grant date fair values for the PSUs: \$6,750,110 for Dr. Greenstreet, \$2,175,040 for Mr. Poulton, \$2,175,040 for Dr. Garg, \$1,900,100 for Mr. Tanguler and \$1,900,100 for Dr. Fitzgerald.
- (7) Amounts represent the aggregate grant date fair value for grants of PSUs, calculated in accordance with FASB ASC Topic 718. For PSUs granted during 2022, we determined that, as of the date of grant, it was not probable, as defined under applicable accounting guidance, that any of the performance conditions associated with the PSUs would be achieved and therefore we assigned a grant date fair value of \$0 to the PSUs. If we had determined that, as of the date of grant, it was probable that 100% of the performance conditions associated with the PSUs would be achieved, we would have assigned the following grant date fair values to the PSUs: \$7,500,030 for Dr. Greenstreet, \$1,450,070 for Mr. Poulton, \$1,900,000 for Dr. Garg, \$1,450,110 for Mr. Tanguler and \$1,105,140 for Dr. Fitzgerald.
- (8) In 2024, we granted Dr. Garg a restricted stock award in recognition of his ten consecutive years of employment with us. The award had an aggregate grant date fair value of \$50,170, calculated in accordance with FASB ASC Topic 718, and the shares subject to the award were fully vested as of the grant.

The following table sets forth information concerning each grant awarded to a NEO during the fiscal year ended December 31, 2024 under any plan, contract, authorization or arrangement pursuant to which cash, securities, similar instruments or other property may be received:

2024 Grants of Plan-Based Awards

NAME	DATE OF GRANT	ESTIMATED FUTURE PAYOUTS UNDER NON-EQUITY INCENTIVE PLAN AWARDS ⁽¹⁾			ESTIMATED FUTURE PAYOUTS UNDER EQUITY INCENTIVE PLAN AWARDS ⁽²⁾			ALL OTHER OPTION AWARDS: NUMBER OF SECURITIES UNDERLYING OPTIONS (#)	EXERCISE PRICE OF OPTION AWARDS (\$/SHARE) ⁽³⁾	GRANT DATE FAIR VALUE OF STOCK AND OPTION AWARDS (\$) ⁽⁴⁾
		THRESHOLD (\$)	TARGET (\$)	MAXIMUM (\$)	THRESHOLD (#)	TARGET (#)	MAXIMUM (#)			
Yvonne L. Greenstreet, M.D.	—	783,000	1,566,000	3,132,000						
	3/1/2024 ⁽⁵⁾							46,394	152.61	3,614,400
	3/1/2024 ⁽⁶⁾				—	47,507	47,507			—
	3/1/2024 ⁽⁷⁾							23,754		3,625,000
Jeffrey V. Poulton	—	190,575	381,150	762,300						
	3/1/2024 ⁽⁵⁾							15,118	152.61	1,177,790
	3/1/2024 ⁽⁶⁾				—	15,481	15,481			—
	3/1/2024 ⁽⁷⁾							7,741		1,181,250
Pushkal Garg, M.D.	—	188,650	377,300	754,600						
	3/1/2024 ⁽⁵⁾							9,279	152.61	722,900
	3/1/2024 ⁽⁶⁾				—	9,502	9,502			—
	3/1/2024 ⁽⁷⁾							4,751		725,000
Tolga Tanguler	10/8/2024 ⁽⁸⁾							185		50,170
	—	173,525	347,050	694,100						
	3/1/2024 ⁽⁵⁾							9,279	152.61	722,900
	3/1/2024 ⁽⁶⁾				—	9,502	9,502			—
Kevin J. Fitzgerald, Ph.D.	3/1/2024 ⁽⁷⁾							4,751		725,000
	—	162,250	324,500	649,000						
	3/1/2024 ⁽⁵⁾							9,279	152.61	722,900
	3/1/2024 ⁽⁶⁾				—	9,502	9,502			—
3/1/2024 ⁽⁷⁾							4,751		725,000	

(1) The amounts shown in the threshold, target and maximum columns reflect the minimum, target and maximum amounts payable, respectively, under our AIP, which is described above in the "Compensation Discussion and Analysis" under the heading "Short-Term Incentives—2024 Annual Incentive Program." The actual amounts paid to each NEO can be found above in the Summary Compensation Table under the column titled "Non-Equity Incentive Plan Compensation."

(2) The amounts shown in the threshold, target and maximum columns reflect the minimum, target and maximum potential future payout range, respectively, for equity awards granted with performance-based vesting milestones.

(3) The exercise price of the option awards is equal to the closing price of our common stock on the Nasdaq Global Select Market on March 1, 2024.



- (4) The grant date fair value is calculated in accordance with FASB ASC Topic 718 and represents the value of awards granted during the year. For RSUs, the grant date fair value is calculated by multiplying the number of shares subject to the RSU by \$152.61, which was the closing price of our common stock on the Nasdaq Global Select Market on the date of grant. For PSUs, the grant date fair value is calculated based on the probable outcome of the performance conditions as of the grant date. For PSUs granted during 2024, we determined that, as of the date of grant, it was not probable, as defined under applicable accounting guidance, that any of the performance conditions associated with the PSUs would be achieved and therefore we assigned a grant date fair value of \$0 to the PSUs. The grant date fair value for stock option awards is calculated based on the assumptions included in Note 11 to our audited consolidated financial statements for the year ended December 31, 2024 included in our Annual Report on Form 10-K, filed with the SEC on February 13, 2025. The amounts reported reflect our total accounting expense, excluding the effect of estimated forfeitures, and may not represent the amounts our NEOs will actually realize from the awards.
- (5) Represents the portion of the annual equity award granted in 2024 in the form of time-based stock option awards, which vest as to 25% of the shares subject to the award on the first anniversary of the grant date and as to the remaining shares ratably at the end of each three-month period thereafter over the following thirty-six months, generally provided that the NEO continues to be employed with us through each vesting date.
- (6) Represents the portion of the annual equity award granted in 2024 in the form of PSUs. The shares subject to the PSUs granted in March 2024 vest upon the achievement of three underlying performance-based vesting conditions, with 30% of the shares subject to the PSU vesting upon achievement of one of the performance conditions, 30% of the shares subject to the PSU vesting upon achievement of the second of the performance conditions, and 40% of the shares subject to the PSU vesting upon achievement of the third of the performance conditions. As of the grant date, none of the three performance conditions were considered probable, as defined under applicable accounting guidance.
- (7) Represents the portion of the annual equity award granted in 2024 in the form of RSUs. The shares subject to the RSUs vest ratably on each of the first, second and third anniversaries of the grant date, generally provided that the NEO continues to be employed with us through each vesting date.
- (8) In October 2024, we granted Dr. Garg a restricted stock award in recognition of ten years of service by the employee. The shares subject to the award were fully vested upon grant.



Information Relating to Equity Awards and Holdings

The following table sets forth information concerning outstanding equity awards held by each of our NEOs on December 31, 2024.

Outstanding Equity Awards at Fiscal Year-End for 2024

NAME	GRANT DATE	OPTION AWARDS ⁽¹⁾				STOCK AWARDS ⁽²⁾			
		NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#)	OPTION EXERCISE PRICE (\$)	OPTION EXPIRATION DATE	NUMBER OF SHARES OR UNITS OF STOCK THAT HAVE NOT VESTED (#)	MARKET VALUE OF SHARES OR UNITS OF STOCK THAT HAVE NOT VESTED (\$)	EQUITY INCENTIVE PLAN AWARDS: NUMBER OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (#)	EQUITY INCENTIVE PLAN AWARDS: MARKET OR PAYOUT VALUE OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (\$)
Yvonne L. Greenstreet, M.D.	12/20/2016	650	—	42.22	12/20/2026				
	03/01/2018	25,000	—	119.13	03/01/2028				
	03/01/2018	25,000 ⁽³⁾	—	119.13	03/01/2028				
	02/28/2019	2,352	—	85.00	02/28/2029				
	02/26/2020	27,623	—	118.05	02/25/2030				
	02/24/2021	27,000	1,800	151.59	02/23/2031				
	02/24/2021							7,719 ⁽⁵⁾	1,816,358
	12/31/2021	41,962	13,987	169.58	12/30/2031				
	02/23/2022	21,826	9,921	147.47	02/22/2032				
	02/27/2023	16,089	20,686	190.01	02/26/2033				
	02/27/2023							24,867 ⁽⁶⁾	5,851,454
	02/27/2023					11,842 ⁽⁸⁾	2,786,541		
	03/01/2024	—	46,394	152.61	02/28/2034				
	03/01/2024							47,507 ⁽⁷⁾	11,178,872
03/01/2024					23,754 ⁽⁹⁾	5,589,554			
Jeffrey V. Poulton	08/01/2019	125,000	—	75.36	08/01/2029				
	02/26/2020	24,554	—	118.05	02/25/2030				
	02/24/2021	21,750	1,450	151.59	02/23/2031				
	02/24/2021							6,217 ⁽⁵⁾	1,462,922
	02/23/2022	12,659	5,754	147.47	02/22/2032				
	02/27/2023	5,184	6,666	190.01	02/26/2033				
	02/27/2023							8,013 ⁽⁶⁾	1,885,539
	02/27/2023					3,816 ⁽⁸⁾	897,943		
	03/01/2024	—	15,118	152.61	02/28/2034				
	03/01/2024							15,481 ⁽⁷⁾	3,642,834
03/01/2024					7,741 ⁽⁹⁾	1,821,535			



NAME	GRANT DATE	OPTION AWARDS ⁽¹⁾				STOCK AWARDS ⁽²⁾			
		NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) EXERCISABLE	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) UNEXERCISABLE	OPTION EXERCISE PRICE (\$)	OPTION EXPIRATION DATE	NUMBER OF SHARES OR UNITS OF STOCK THAT HAVE NOT VESTED (#)	MARKET VALUE OF SHARES OR UNITS OF STOCK THAT HAVE NOT VESTED (\$)	EQUITY INCENTIVE PLAN AWARDS: NUMBER OF SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (#)	EQUITY INCENTIVE PLAN AWARDS: MARKET OR PAYOUT VALUE OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (\$)
Pushkal Garg, M.D.	12/18/2015	23,876	—	88.95	12/18/2025				
	12/18/2015	25,000 ⁽⁴⁾	—	88.95	12/18/2025				
	12/20/2016	5,445	—	42.22	12/20/2026				
	03/01/2018	13,750	—	119.13	03/01/2028				
	03/01/2018	13,750 ⁽³⁾	—	119.13	03/01/2028				
	02/28/2019	25,000	—	85.00	02/28/2029				
	02/26/2020	26,089	—	118.05	02/25/2030				
	02/24/2021	21,750	1,450	151.59	02/23/2031				
	02/24/2021							6,217 ⁽⁵⁾	1,462,922
	12/31/2021	10,071	3,357	169.58	12/30/2031				
	02/23/2022	16,588	7,540	147.47	02/22/2032				
	02/27/2023	5,184	6,666	190.01	02/26/2033				
	02/27/2023							8,013 ⁽⁶⁾	1,885,539
	02/27/2023					3,816 ⁽⁶⁾	897,943		
	03/01/2024	—	9,279	152.61	02/28/2034				
	03/01/2024							9,502 ⁽⁷⁾	2,235,916
03/01/2024					4,751 ⁽⁹⁾	1,117,958			
Tolga Tanguler	02/01/2021	52,934	3,529	149.25	01/31/2031				
	02/23/2022	12,659	5,754	147.47	02/22/2032				
	02/27/2023	4,529	5,823	190.01	02/26/2033				
	02/27/2023							7,000 ⁽⁶⁾	1,647,170
	02/27/2023					3,333 ⁽⁶⁾	784,288		
	03/01/2024	—	9,279	152.61	02/28/2034				
	03/01/2024							9,502 ⁽⁷⁾	2,235,916
	03/01/2024					4,751 ⁽⁹⁾	1,117,958		
Kevin J. Fitzgerald, Ph.D.	03/01/2018	9,000	—	119.13	03/01/2028				
	03/01/2018	9,000 ⁽³⁾	—	119.13	03/01/2028				
	02/28/2019	2,192	—	85.00	02/28/2029				
	02/26/2020	14,580	—	118.05	02/25/2030				
	02/24/2021	14,711	981	151.59	02/23/2031				
	02/24/2021							4,205 ⁽⁵⁾	989,479
	02/23/2022	14,012	6,370	147.47	02/22/2032				
	02/27/2023	4,529	5,823	190.01	02/26/2033				
	02/27/2023							7,000 ⁽⁶⁾	1,647,170
	02/27/2023					3,333 ⁽⁶⁾	784,288		
	03/01/2024	—	9,279	152.61	02/28/2034				
	03/01/2024							9,502 ⁽⁷⁾	2,235,916
03/01/2024					4,751 ⁽⁹⁾	1,117,958			



- (1) Unless otherwise noted, stock option awards were granted with a ten-year term and vest as to 25% of the shares on the first anniversary of the grant date and as to an additional 6.25% at the end of each successive three-month period thereafter, unless otherwise noted, generally provided that the NEO continues to be employed with us through each vesting date.
- (2) The market value of PSUs or RSUs that have not vested is based on the number of unvested PSUs or RSUs outstanding multiplied by \$235.31 per share, which was the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024.
- (3) These options vested in three equal installments upon the achievement of each of three specific clinical development, regulatory or commercial events.
- (4) These options vested in four equal installments upon the achievement of each of four specific clinical development or commercial events.
- (5) These PSU awards were granted on February 24, 2021 and vest in four equal installments upon the achievement of each of four specific clinical development, regulatory or commercial events, generally provided that the NEO continues to be employed with us through each vesting date. One-quarter of these PSUs vested in August 2022 upon the achievement of a clinical milestone, and one-quarter of these PSUs vested in August 2023 based upon the achievement of a financial milestone. The amount reported in this table reflects the PSUs that remain subject to achievement of specified performance targets. For a description of these performance targets, please see the description of the PSUs granted in 2021 in the section of the CD&A entitled "Annual Equity Awards."
- (6) These PSU awards were granted on February 27, 2023 and will vest upon the later of one year from the date of grant and the achievement of specified clinical development, regulatory or financial events, generally provided that the NEO continues to be employed with us through each vesting date. For a description of these performance targets, please see the description of the PSUs granted in 2023 in the section of the CD&A entitled "Annual Equity Awards."
- (7) These PSU awards were granted on March 1, 2024 and will vest upon the later of one year from the date of grant and the achievement of specified clinical development, regulatory or financial events, generally provided that the NEO continues to be employed with us through each vesting date. For a description of these performance targets, please see the description of the PSUs granted in 2024 in the section of the CD&A entitled "Annual Equity Awards."
- (8) These RSU awards were granted on February 27, 2023, and the shares subject to this RSU vest in substantially equal installments on the first, second and third anniversaries of the grant date, generally provided that the NEO continues to be employed with us through each vesting date.
- (9) These RSU awards were granted on March 1, 2024, and the shares subject to this RSU vest in substantially equal installments on the first, second and third anniversaries of the grant date, generally provided that the NEO continues to be employed with us through each vesting date.

The following table sets forth information concerning the exercise of stock options and the vesting of RSUs and PSUs during 2024 for each of our NEOs.

2024 Option Exercises and Stock Vested

NAME	OPTION AWARDS		STOCK AWARDS	
	NUMBER OF SHARES ACQUIRED ON EXERCISE (#)	VALUE REALIZED ON EXERCISE (\$) ⁽¹⁾	NUMBER OF SHARES ACQUIRED ON VESTING (#)	VALUE REALIZED ON VESTING (\$) ⁽²⁾
Yvonne L. Greenstreet, M.D.	30,148	5,727,380	50,485	9,894,588
Jeffrey V. Poulton	—	—	11,898	2,379,179
Pushkal Garg, M.D.	—	—	14,117	2,805,975
Tolga Tanguler	—	—	11,223	2,231,935
Kevin J. Fitzgerald, Ph.D.	20,725	3,769,372	9,663	1,943,077

(1) The value realized on exercise is based on the market price of the shares on the day of exercise less the applicable option exercise price.

(2) The value is calculated based on the number of shares acquired on vesting, multiplied by the closing price per share of our common stock on the Nasdaq Global Select Market on the vesting date.

Potential Payments Upon Termination or Change-in-Control (CIC)

CEO Employment Agreement

Under the Greenstreet Employment Agreement, if Dr. Greenstreet's employment is terminated by the company without Cause or by Dr. Greenstreet for Good Reason prior to a CIC, as such terms are defined in the Greenstreet Employment Agreement, she will not receive any cash severance, her outstanding unvested equity awards will continue to vest until the second anniversary of the termination date, and her outstanding stock options shall remain exercisable until the earlier of the second anniversary of the termination date and the original expiration dates of such options; provided that in the event that a CIC occurs on or before the second anniversary of the termination date, her then-outstanding stock options will be treated in the same manner as the then-outstanding stock options held by continuing members of our executive leadership team. The Greenstreet Employment Agreement had an initial term through December 31, 2023 and automatically renews for one-year periods unless written notice to terminate is given by either party. Assuming Dr. Greenstreet's employment had been terminated without Cause or for Good Reason on December 31, 2024, and not in connection with a CIC, the estimated value of continued vesting of her equity awards for an additional two years is \$1,853,470, based on a stock price of \$235.31 per share (the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024).



Change in Control Arrangements

We have entered into an individual CIC agreement with each of our NEOs, with the exception of our CEO, Dr. Greenstreet, with whom we have entered into the Greenstreet Employment Agreement, as described above. The CIC agreements and Greenstreet Employment Agreement, respectively, entitle each executive to certain benefits in the event of certain terminations of employment with us within a specified period following a CIC. Pursuant to each CIC Agreement and the Greenstreet Employment Agreement, if an executive is terminated by us without Cause (as defined in the applicable agreement) or if an executive terminates his or her employment for Good Reason (as defined in the applicable agreement), in either case, within 12 months following a CIC (or, in the case of Dr. Greenstreet, 18 months), such executive will be entitled to receive (i) a lump sum cash payment equal to one and a half times, or in the case of Dr. Greenstreet, two times, the sum of: (A) his or her annual base salary in effect immediately prior to termination (or prior to the CIC, if higher) and (B) his or her target bonus for the fiscal year in which the CIC occurred; and (ii) if the executive was participating in our group health plan immediately prior to such termination and elects continuation coverage under COBRA, a monthly cash payment for 18 months (or, in the case of Dr. Greenstreet, 24 months) (or the expiration of the COBRA continuation period, if earlier) equal to the monthly employer contribution we would have paid to provide the executive with health insurance if he or she had remained employed. In addition, in the event of a CIC and a qualifying termination of employment, all of the executive's outstanding unvested stock options and other stock-based awards shall immediately accelerate and become fully exercisable or nonforfeitable. Receipt of these payments and benefits is subject to execution of a general release of claims in favor of us.

If any payment and benefits to be paid or provided to an executive, whether pursuant to the terms of a CIC Agreement or the Greenstreet Employment Agreement, would be subject to "golden parachute" excise taxes under the Code, the payments and benefits will be reduced to the extent necessary to avoid such excise taxes, but only if such a reduction of pay or benefits would result in a greater after-tax benefit to the executive.

Each CIC Agreement will terminate upon the earlier of (i) an executive's termination of employment with us for any reason prior to a CIC, (ii) an executive's termination of employment with us after a CIC for Cause or without Good Reason or (iii) the date that is 12 months after a CIC, if the executive is still employed by us at such time.

Accordingly, the following table sets forth potential payments and benefits payable assuming a termination date of December 31, 2024 for our NEOs in connection with a CIC. Other than the Greenstreet Employment Agreement and the CIC agreements with our other NEOs, each as described above, we do not maintain employment agreements with any of our NEOs pursuant to which they would become eligible for potential severance payments upon termination of employment or in connection with a change in control.

NAME ⁽¹⁾	CASH SEVERANCE BENEFITS (\$) ⁽²⁾	CONTINUATION OF MEDICAL, DENTAL AND VISION BENEFITS (\$) ⁽³⁾	ACCELERATED VESTING OF STOCK OPTIONS (\$) ⁽⁴⁾	ACCELERATED VESTING OF RESTRICTED STOCK UNIT AWARDS (\$) ⁽⁵⁾	TOTAL AMOUNT (\$)
Yvonne L. Greenstreet, M.D.	5,742,000	60,380	6,715,383	27,222,779	39,740,542
Jeffrey V. Poulton	1,611,230	45,290	2,179,054	9,710,773	13,546,347
Pushkal Garg, M.D.	1,594,950	45,290	2,073,707	7,600,278	11,314,225
Tolga Tanguler	1,467,070	45,290	1,840,292	5,785,332	9,137,984
Kevin J. Fitzgerald, Ph.D.	1,371,750	45,290	1,672,825	6,774,811	9,864,676

⁽¹⁾ We have entered into an individual CIC agreement with each of our NEOs, with the exception of Dr. Greenstreet with whom we entered into an employment agreement in December 2021 that includes potential payments and benefits payable upon termination or upon a CIC.

⁽²⁾ The amount represents 150%, or in the case of Dr. Greenstreet, 200%, of the sum of the NEO's (i) base salary for 2024 and (ii) target bonus for 2024.

⁽³⁾ The amount is calculated as the monthly contribution we would pay to provide the executive with medical, dental and vision benefits if he or she remained employed based on rates as of January 2025 multiplied by 18 months, or in the case of Dr. Greenstreet, 24 months, based on each NEO's participation status as of December 31, 2024.

⁽⁴⁾ The value is calculated based on the number of stock options unvested as of December 31, 2024 multiplied by \$235.31 per share (the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024) less the respective exercise price per share.

⁽⁵⁾ The value is calculated based on the number of unvested PSUs and RSUs held by the NEO as of December 31, 2024, multiplied by \$235.31 per share (the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024).

The actual amount an executive would realize upon termination of employment in connection with a CIC would likely differ from the amounts above, including due to adjustments to base salary, adjustments to target bonus, stock price fluctuations and the vesting and grant of additional stock-based awards, as well as the exercise and sale of any stock-based award prior to any such termination. In the event an executive would be subject to "golden parachute taxes" under the Code, payments and benefits in connection with a CIC will be reduced to the extent necessary to avoid such taxes, but only if such reduction provided a greater after-tax benefit to an executive.



Death, Disability, Retirement

In 2024, our PC&C committee, with the assistance of its independent compensation consultant, reviewed the terms of our outstanding equity awards, with a focus on the treatment of the awards held by our employees, including our NEOs, in various termination of employment scenarios, including death, disability (within the meaning of Section 409A of the Code) and certain retirements. Based on this review, the PC&C committee determined that it would be appropriate for our equity awards to provide for full vesting of such awards in the event of the award recipient's death or disability, and to provide for full vesting of all awards that had been outstanding for at least one year in the event of the award recipient's qualifying retirement. For this purpose, a qualifying retirement is defined as termination of employment after attaining age 60 and having been credited with at least 10 years of service. As of the last day of 2024, none of our NEOs satisfied the requirements for a qualifying retirement.

The following table sets forth the potential payments to each of our NEOs in connection with a termination of employment due to death or disability that occurred on the last trading day of 2024.

NAME	Death or Disability	
	ACCELERATED VESTING OF STOCK OPTIONS (\$) ⁽¹⁾	ACCELERATED VESTING OF RESTRICTED STOCK UNIT AWARDS (\$) ⁽²⁾
Yvonne L. Greenstreet, M.D.	6,715,383	27,222,779
Jeffrey V. Poulton	2,179,054	9,710,773
Pushkal Garg, M.D.	2,073,707	7,600,278
Tolga Tanguler	1,840,292	5,785,332
Kevin J. Fitzgerald, Ph.D.	1,672,825	6,774,811

⁽¹⁾ The value is calculated based on the number of stock options unvested as of December 31, 2024 multiplied by \$235.31 per share (the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024) less the respective exercise price per share.

⁽²⁾ The value is calculated based on the number of unvested PSUs and RSUs held by the NEO as of December 31, 2024, multiplied by \$235.31 per share (the closing price of our common stock on the Nasdaq Global Select Market on the last trading day of 2024).

CEO Pay Ratio

In connection with Item 402(u) of Regulation S-K, we are required to calculate and disclose the median annual compensation of all of our employees (excluding our CEO during 2024, Dr. Greenstreet), the annual compensation of Dr. Greenstreet, and the ratio of these two amounts.

Because we had a significant number of new hires in 2024, we elected to redetermine our median employee for purposes of the pay ratio disclosure. Our median employee was identified using the entire population of our employees as of October 1, 2024 based on a consistently applied compensation measure, or CACM, that reasonably reflects the annual compensation of employees. The CACM we selected for our disclosure includes annual base salary for salaried employees (or wages based on an annual work schedule for non-permanent employees), overtime for 2024, target bonus opportunity for 2024 and the grant-date fair value for stock-based awards (calculated in accordance with the requirements for the Summary Compensation Table). In 2024, the target bonus opportunity for our non-field-based employees was based on corporate and individual performance under our AIP and the target bonus opportunity for field-based employees consisted of sales-related metrics in connection with the continued launch and commercialization of our commercial products during 2024 under our field-based incentive plan.

Based on the CACM methodology described above, we identified the median employee. We calculated the 2024 compensation for our median employee of \$297,040 in the same manner we determine the annual total compensation of our NEOs for purposes of the Summary Compensation Table. Dr. Greenstreet's 2024 compensation as disclosed in the Summary Compensation Table is \$11,492,970. As a result, our CEO to median employee pay ratio for 2024 is 39:1, representing an increase from the ratio we disclosed for 2023 as a result of the increase in equity granted to Dr. Greenstreet in 2024.

This pay ratio is a reasonable estimate calculated by a method consistent with the SEC requirements described above, based on our payroll and employment records. As a result of a variety of factors, including employee populations, potential differences in the components used for the CACM, compensation philosophies and certain assumptions, pay ratios reported by other companies may not be comparable to our pay ratio. The pay ratio is not utilized by our management or our PC&C committee for compensation-related decisions.



Pay Versus Performance

This section has been prepared in accordance with the SEC's pay versus performance, or PvP, disclosure rules. Under the PvP rules, the SEC has developed a definition of pay, referred to as Compensation Actually Paid, or CAP, which we are required to calculate and then compare to certain specified performance measures. Under the PvP disclosure rules, CAP for the principal executive officer, or PEO, and the average non-PEO NEOs is calculated by starting with the Summary Compensation Table values for the relevant years and then making the following adjustments (each as applicable):

- Subtracting: the grant date fair value of equity awards granted during the year; and the change in pension value for the year; and
- Adding: the year-end fair value of unvested equity awards granted during the year; for equity awards granted in prior years that are outstanding and unvested at the end of the year, the difference between the fair value at the end of the year as compared to the end of the immediately prior year; for equity awards granted in prior years that vested during the year, the difference between the fair value as of the vesting date as compared to the end of the immediately prior year; and the pension service cost for that year.

As a general matter, our board and PC&C committee do not use CAP as a basis for making compensation decisions. Our PC&C committee has adopted an executive compensation philosophy that is designed to ensure that a substantial majority of NEO compensation is performance-based and at risk. Further to this philosophy, our PC&C committee has adopted incentive structures and governance policies that we believe align the interests of our NEOs with those of our long-term stockholders, including a strong emphasis on performance-based equity awards, annual incentive payouts based on our performance against preset goals (with no guaranteed minimum payout), and no guaranteed increases in base salaries. We believe these structures and governance policies incentivize our NEOs and other employees to achieve goals aimed at increasing the long-term value of our enterprise. Importantly, because of the SEC-mandated formula for calculating CAP, period-to-period fluctuations in CAP reported for our NEOs may not correlate with our performance against our goals and the related compensation decisions made by our board and PC&C committee.

Most Important Financial Measures for 2024 Compensation

As described above and in greater detail in the CD&A section of this proxy statement, our executive compensation programs reflect a pay-for-performance philosophy. Our compensation programs incorporate goals and measures to link pay and performance in alignment with our business strategies and the interests of our long-term stockholders. In accordance with the PvP rules, we have listed below the most important financial measures we used to link 2024 pay to performance. Note that we have identified these performance measures because they were among the most important financial and non-financial measures that were used in our 2024 annual incentive cash compensation program, but they are not the only measures we used to measure our 2024 performance.

- Net product revenues
- Collaboration and royalty revenues
- Non-GAAP operating expenses*
- Non-GAAP operating income (loss)*

* Non-GAAP operating expenses and non-GAAP operating income (loss) are non-GAAP financial measures that exclude the impact of stock-based compensation expense from the corresponding GAAP numbers.

The performance measures listed above are not ranked by relative importance, and their impact on annual incentive compensation in 2024 varied depending on their weighting and the weightings of the other financial and non-financial performance measures used by our PC&C committee and board (refer to the CD&A section of this proxy statement for a more complete discussion). However, under the PvP rules, we are required to identify a "Company Selected Measure", or CSM, which is used for purposes of the pay-versus-performance data and analysis presented below. The PvP rules specify that the CSM represents our most important financial performance measure (other than total shareholder return or net income) used to link 2024 NEO CAP to our 2024 performance. As noted above, as a general matter our PC&C committee and board do not use CAP for purposes of making compensation decisions. However, for purposes of the PvP rules, we have chosen global net product revenues as our 2024 CSM. We chose this financial measure as our 2024 CSM because it is one of the two most important financial measures used in our annual incentive program and had the most significant impact on the corporate performance modifier that was awarded by our board for 2024 performance against goals, and in turn had the most significant impact on the amount of the AIP awards received by our NEOs and other employees.



Pay Versus Performance Table

YEAR	SUMMARY COMPENSATION TABLE TOTAL FOR PEO (\$) ⁽¹⁾	COMPENSATION ACTUALLY PAID TO PEO (\$) ⁽¹⁾⁽³⁾⁽⁵⁾	AVERAGE SUMMARY COMPENSATION TABLE TOTAL FOR NON-PEO NEOS (\$) ⁽²⁾	AVERAGE COMPENSATION ACTUALLY PAID TO NON-PEO NEOS (\$) ⁽²⁾⁽⁴⁾⁽⁵⁾	VALUE OF INITIAL FIXED \$100 INVESTMENT BASED ON:		(IN THOUSANDS)	
					TSR (\$) ⁽⁶⁾	PEER GROUP TSR (\$) ⁽⁶⁾	NET LOSS (\$)	CSM - GLOBAL NET PRODUCT REVENUE (\$)
2024	11,492,970	29,836,503	3,034,948	7,842,013	204.32	118.20	(278,157)	1,646,228
2023	8,895,670	11,410,294	2,922,458	1,574,481	166.20	118.87	(440,242)	1,241,474
2022	4,588,810	19,043,460	3,580,510	12,601,300	206.35	113.65	(1,131,156)	894,329
2021	10,176,685	17,514,345	5,918,910	10,714,290	147.24	126.45	(852,824)	662,138
2020	7,818,164	10,766,569	4,240,550	4,221,270	112.85	126.42	(858,281)	361,520

⁽¹⁾ For 2024, 2023 and 2022, our PEO was Yvonne L. Greenstreet, M.D. For 2021 and 2020, our PEO was John M. Maraganore, Ph.D.

⁽²⁾ For 2024, our non-PEO NEOs were Jeffrey V. Poulton, Pushkal Garg, M.D., Tolga Tanguler, and Kevin J. Fitzgerald, Ph.D. For 2023, our non-PEO NEOs were Mr. Poulton, Dr. Garg, Mr. Tanguler, Indrani L. Franchini, J.D., and Akshay K. Vaishnav, M.D., Ph.D. For 2022, our non-PEO NEOs were Dr. Vaishnav, Mr. Poulton, Dr. Garg, and Ms. Franchini. For 2021, our non-PEO NEOs were Dr. Greenstreet, Dr. Vaishnav, Mr. Poulton, and Mr. Tanguler. For 2020, our non-PEO NEOs were Dr. Greenstreet, Dr. Vaishnav, Mr. Poulton, Laurie B. Keating, and Barry E. Greene.

⁽³⁾ The following is a summary of the adjustments made to PEO compensation as reported in the Summary Compensation Table to determine PEO CAP as reported in this table:

	2024	2023	2022	2021	2020
Total Compensation Reported in SCT	11,492,970	8,895,670	4,588,810	10,176,685	7,818,164
LESS: the grant date fair value of equity awards granted in the year indicated	(7,239,400)	(6,744,150)	(2,498,790)	(7,861,410)	(5,746,295)
ADD: the year-end fair value of outstanding and unvested equity awards granted in the year indicated ^(a)	17,187,024	8,173,520	5,823,820	9,100,080	7,670,290
ADD: the change in fair value of equity awards granted in years prior to the year indicated that were outstanding and unvested at the end of the year indicated (as compared to fair value at the end of the immediately prior year) ^(a)	2,538,755	344,240	7,353,620	2,419,780	743,590
ADD: the change in fair value of equity awards granted in years prior to the year indicated that vested in the year indicated (fair value at vesting date as compared to the end of the immediately prior year) ^(a)	5,857,154	741,014	3,776,000	3,679,210	280,820
Total (Net) Adjustments	29,836,503	11,410,294	19,043,460	17,514,345	10,766,569

^(a) We determined the year-end fair value of PSUs for the year indicated. If the achievement of the performance condition for the PSU was not probable, as defined under applicable accounting guidance, then we assigned a fair value of \$0.



(4) The following is a summary of the adjustments made to average non-PEO NEO compensation as reported in the Summary Compensation Table to determine average non-PEO NEO CAP as reported in this table:

	2024	2023	2022	2021	2020
Average Total Compensation Reported in SCT	3,034,948	2,922,458	3,580,510	5,918,910	4,240,550
LESS: the grant date fair value of equity awards granted in the year indicated	(1,688,240)	(1,888,468)	(2,548,800)	(4,891,560)	(3,113,250)
ADD: the year-end fair value of outstanding and unvested equity awards granted in the year indicated ^(a)	3,978,386	2,288,708	5,582,350	6,583,990	2,334,450
ADD: the change in fair value of equity awards granted in years prior to the year indicated that were outstanding and unvested at the end of the year indicated (as compared to fair value at the end of the immediately prior year) ^(a)	1,028,665	(852,294)	3,941,750	962,260	389,660
ADD: the change in fair value of equity awards granted in years prior to the year indicated that vested in the year indicated (fair value at vesting date as compared to the end of the immediately prior year) ^(a)	1,488,254	(895,923)	2,045,490	2,140,690	369,860
Total (Net) Adjustments	7,842,013	1,574,481	12,601,300	10,714,290	4,221,270

(a) We determined the year-end fair value of PSUs for the year indicated. If the achievement of the performance condition for the PSU was not probable, as defined under applicable accounting guidance, then we assigned a fair value of \$0.

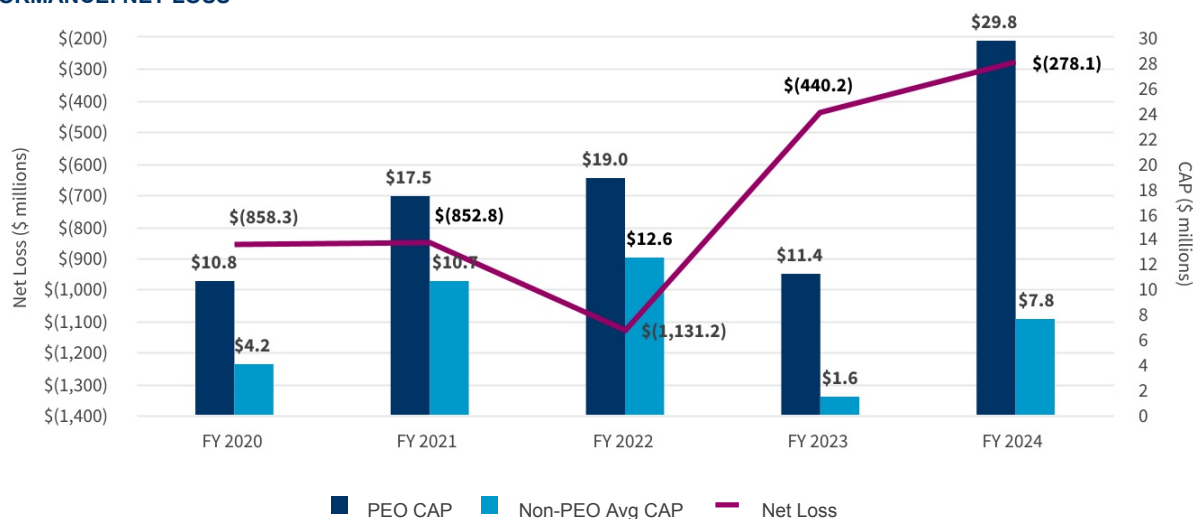
(5) In calculating CAP reflected in these columns, the fair value or change in fair value, as applicable, of the equity award adjustments included in such calculations was determined in accordance with FASB ASC Topic 718. We did not report a change in pension benefit values for any of the years reflected in the table, and therefore adjustments to pension benefit values were not included in calculating CAP reflected in these columns, because we do not sponsor, maintain or contribute to a defined benefit pension plan.

(6) The company TSR and the company's Peer Group TSR reflected in these columns for each applicable fiscal year is calculated based on a fixed investment of \$100 at the applicable measurement point on the same cumulative basis as is used in Item 201(e) of Regulation S-K. The peer group used to determine the company's Peer Group TSR for each applicable fiscal year is the following published industry index, as disclosed in our Annual Report on Form 10-K for the year ended December 31, 2024 pursuant to Item 201(e) of Regulation S-K: Nasdaq Biotechnology Index (NBI).

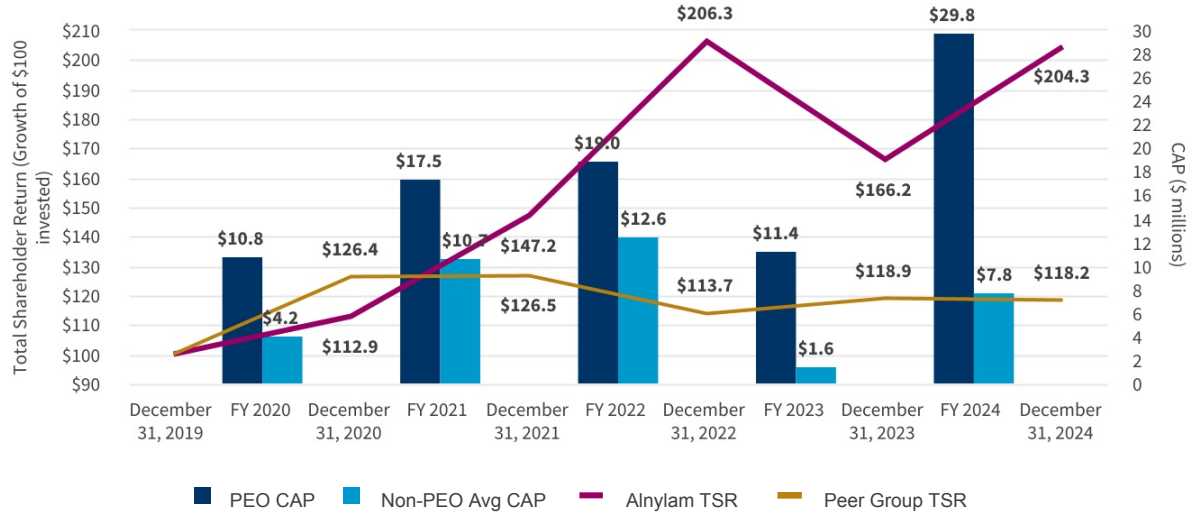
Pay versus Performance Comparative Disclosure

The following graphs reflect the relationships between (i) CAP for our PEO, and the average of CAP for our non-PEO NEOs, to our net loss, (ii) CAP for our PEO, and the average of CAP for our non-PEO NEOs, to our cumulative total shareholder return and our cumulative total shareholder return to our peer group total shareholder return, and (iii) CAP for our PEO, and the average of CAP for our non-PEO NEOs, to our global net product revenues (the CSM), in each case for the years 2020 through 2024.

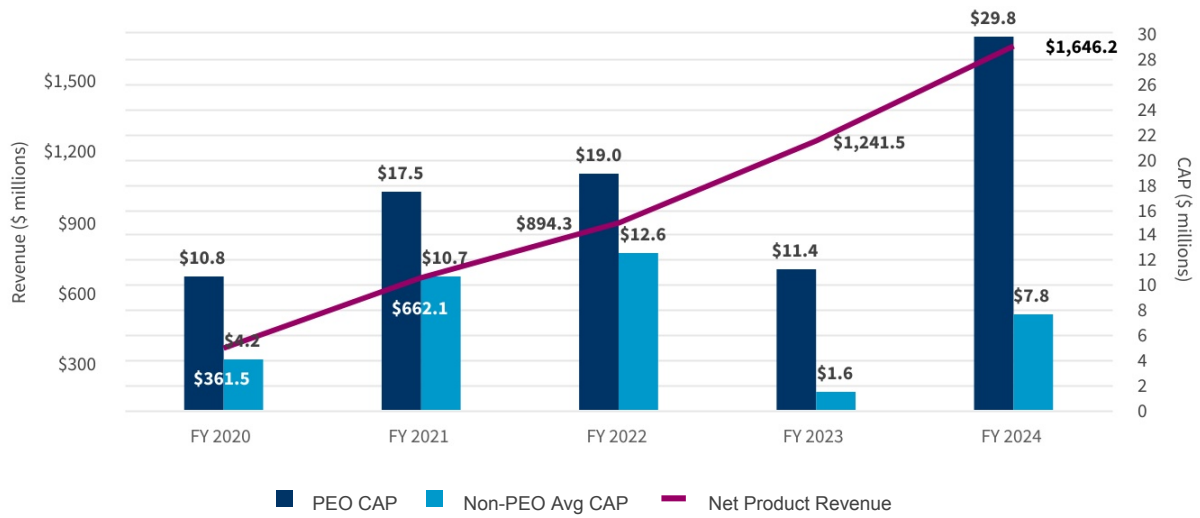
PAY VS. PERFORMANCE: NET LOSS



PAY VS. PERFORMANCE: TOTAL SHAREHOLDER RETURN



PAY VS. PERFORMANCE: GLOBAL NET PRODUCT REVENUES



PROPOSAL 2

Approval of a Charter Amendment Allowing for Officer Exculpation

Proposal

On December 4, 2024, our board unanimously adopted a resolution approving, and recommending that our stockholders approve, an amendment, or the Charter Amendment, to Article SEVENTH of our Restated Certificate of Incorporation, also referred to as our Charter, allowing for officer exculpation.

Purpose and Effect of the Proposal

Our Charter currently provides for the elimination of monetary liability of directors in certain circumstances pursuant to, and consistent with, Section 102(b)(7) of the Delaware General Corporation Law, or DGCL.

Effective August 1, 2022, Section 102(b)(7) of the DGCL was amended to enable corporations to eliminate or limit monetary liability of certain corporate officers in limited circumstances. Section 102(b)(7) of the DGCL, as amended, only permits, and if Proposal 2 is approved, our Charter Amendment would only provide for, exculpation from liability for these officers in connection with direct claims brought by stockholders for breach of an officer's fiduciary duty of care, including class actions, and would not eliminate officers' monetary liability for breach of fiduciary duty claims brought by the company itself or for derivative claims brought by stockholders on behalf of the company. In addition, as is currently the case with directors under our Charter, the limitation of liability for our officers would not apply to breaches of the duty of loyalty, acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, or any transaction in which the officer derived an improper personal benefit.

Our board has determined that amending our Charter to allow for officer exculpation would better position our officers to carry out their duties and exercise their business judgment in furtherance of the interests of our stockholders without fearing litigation for unintended mistakes or being second guessed.

Rationale for the Proposal

The nominating and corporate governance committee of our board, which is composed entirely of independent directors, regularly considers and evaluates a broad range of our corporate governance practices and reports to the board regarding the same. The proposed Charter Amendment is a result of the nominating and corporate governance committee's ongoing review of our corporate governance practices. In developing the proposed Charter Amendment, the board carefully considered the implications of amending our Charter to extend exculpation protection to our officers.

Our board is strongly committed to good corporate governance and engages with its advisors to understand and keep abreast of changes and developments in corporate governance best practices. In its review and evaluation, our board noted that an increasing number of our peers have adopted or are likely to adopt similar exculpation clauses limiting the personal liability of officers in their certificates of incorporation, and failing to adopt the proposed amendment could impact our ability to recruit and retain talent.

Our board believes that it is appropriate for directors and officers to remain free of the risk of financial ruin as a result of an unintentional misstep. In the absence of such protection, qualified officers might be deterred from serving due to exposure to personal liability and the risk that substantial expense will be incurred. The nature of the role of directors and officers often requires them to make decisions on crucial matters. Frequently, directors and officers must make decisions in response to time-sensitive opportunities and challenges, which can create substantial risk of investigations, claims, actions, suits or proceedings seeking to impose liability on the basis of hindsight, especially in the current litigious environment and regardless of merit. Limiting the personal risk to our officers in addition to the existing limitation for directors would empower our officers to best exercise their business judgment in furtherance of stockholder interests. Our board also took into account the narrow class and type of claims for which such officers would be exculpated from liability pursuant to DGCL Section 102(b)(7), the limited number of the Company officers that would be impacted and the benefits the board believes would



accrue to the company by providing exculpation in accordance with DGCL Section 102(b)(7), including, without limitation, the ability to recruit and retain key officers and the potential to reduce litigation costs associated with frivolous lawsuits. For these reasons, our board believes that our Charter should extend exculpation protection to our officers.

Timing of the Proposed Charter Amendment

The above description of the Charter Amendment is only a summary and is qualified in its entirety by reference to the complete text of the Certificate of Amendment, which is attached to this proxy statement as Appendix A. We urge you to read Appendix A in its entirety before casting your vote. If the Charter Amendment is approved, as soon as practicable after the annual meeting, we will file the Certificate of Amendment with the office of the Secretary of State of the State of Delaware to extend exculpation protection to our officers. Upon approval and following such filing with the Secretary of State of Delaware, the Certificate of Amendment will become effective on the date it is filed. The Board reserves the right to delay or abandon the filing of the Certificate of Amendment even if it is approved by our stockholders.

Vote Required

The affirmative vote of the holders of a majority of the outstanding shares of our common stock is required to approve the Charter Amendment. Abstentions and broker non-votes will not be counted as shares voting on this matter and accordingly will have no effect on the approval of Proposal 2. If the proposed Charter Amendment is not approved by the affirmative vote of the holders of a majority of the outstanding shares of our common stock, then the proposed Charter Amendment will not be adopted, and our Charter will not eliminate or limit monetary liability for our officers.

BOARD RECOMMENDATION



Our board of directors unanimously recommends that you vote to approve the proposed Charter Amendment to extend exculpation protection to our officers by voting **“FOR”** Proposal 2.



PROPOSAL 3

Approval of the Alnylam Pharmaceuticals, Inc. Second Amended and Restated 2018 Stock Incentive Plan

Proposal

Our board believes that stock options and other stock-based incentive awards, including RSUs and PSUs, can play an important role in our success by encouraging and enabling our and our global subsidiaries' employees, officers, non-employee directors and other key persons upon whose judgment, initiative and efforts we largely depend for the successful conduct of our business to acquire a proprietary interest in our company. Our board anticipates that providing these individuals with a direct stake in our company will align the interests of these individuals with our interests and our stockholders' interests, thereby incentivizing their efforts to create long-term value. Our board views equity incentive compensation as a critical component of our compensation strategy and therefore to date we have maintained a broad-based program for all employees to have an opportunity to participate as owners of the company.

On February 27, 2025, our board, following the recommendation of our PC&C committee, approved the second amendment and restatement of the 2018 Plan. We refer to the 2018 Plan, as amended and restated, as the Amended Plan. As discussed below, stockholders are being asked to approve the Amended Plan, which increases the aggregate number of shares authorized for issuance under the 2018 Plan by 7,000,000 shares for a total of 42,270,000 shares (including Shares underlying any awards under the 2018 Plan or our Amended and Restated 2009 Equity Incentive Plan, or the 2009 Plan, that are forfeited, canceled or otherwise terminated (other than by exercise), which will be added to the shares available for issuance under the Amended Plan).

The Amended Plan is designed to provide us with the flexibility to grant stock options, RSUs, PSUs and other equity awards to our officers, employees, non-employee directors and other key persons, as determined by our board and/or our PC&C committee, to effectively compete in our industry, incentivize superior results and long-term value creation, and align the interests of our employees and other service providers with those of our stockholders. Our board believes that the Amended Plan will promote the interests of our stockholders and is consistent with principles of good corporate governance, including the following:

- **Use of Fungible Share Ratio.** Grants of "full-value" awards are deemed for purposes of determining the number of shares available for future grants under the Amended Plan as an award for 1.5 shares for each share of common stock subject to the award. Grants of stock options or stock appreciation rights are deemed to be an award of one share for each share of common stock subject to the award.
- **No Liberal Share Recycling.** Shares tendered or held back for taxes will not be added back to the reserved pool under the Amended Plan. Upon the exercise of a stock appreciation right that is settled in shares of common stock, the full number of shares underlying the award will be charged to the reserved pool. Additionally, shares we reacquire on the open market or otherwise using cash proceeds of option exercises will not be added to the reserved pool.
- **No Repricing.** Stock options and stock appreciation rights will not be repriced in any manner without stockholder approval.
- **No Dividends/Dividend Equivalents Paid on Unvested Awards.** To the extent an award is eligible to receive dividends or dividend equivalents, in no event shall any such amounts be paid unless and until such award has vested. In addition, no dividends or dividend equivalents will be paid with respect to stock options or stock appreciation rights.
- **No Reload Grants.** In no event shall the term of an award under the Amended Plan provide for automatic "reload" grants of additional awards upon the exercise of an option or stock appreciation right.



Reasons for Seeking Stockholder Approval

Equity grants are an important element of our compensation program. In the opinion of our board, our future success depends in large part on our ability to use equity incentives to attract, retain and motivate key employees and other service providers with experience and ability. Our board approved the Amended Plan and the additional shares of our common stock authorized for issuance under it based upon its review and consideration of:

- our historic rates of equity award issuances, including the broad-based eligibility for equity incentive awards for all of our employees;
- the dilutive impact to stockholders; and
- advice provided by Pay Governance, the independent compensation consultant of the PC&C committee.

Our board believes that the Amended Plan will provide us with the flexibility to grant stock options, RSUs, PSUs, and other equity awards to our officers, employees, non-employee directors and other key persons to effectively compete in our industry, incentivize superior results and long-term value creation, and align the interests of our employees and other service providers with those of our stockholders. In addition, our board believes that equity ownership fosters an ownership mindset by allowing employees to take part in the successes of our company. Our management will carefully consider all proposed grants under the Amended Plan. If the proposed Amended Plan is not approved by our stockholders, we currently anticipate that we will exhaust all the shares available for issuance under the 2018 Plan by early 2026 and such shares may be exhausted sooner depending on the pace of our hiring to support our global growth. The inability to make competitive equity awards to attract and retain talented employees in a highly competitive market could have an adverse impact on our business.

Existing Equity Plan Information

As of February 28, 2025, there were stock options to acquire 4,975,974 shares of common stock outstanding under our equity compensation plans, including stock options to acquire 244,766 shares of common stock subject to performance vesting, as well as equity awards granted outside of our equity compensation plans to new hires as inducement grants made in accordance with Nasdaq Listing Rule 5635(c)(4). These stock options have a weighted-average exercise price of \$132.47 and a weighted-average remaining contractual term of 5.33 years. In addition, as of February 28, 2025, there were 2,391,434 unvested full-value awards, including 869,293 unvested PSU awards, outstanding under our equity compensation plans. Other than the foregoing, no other equity awards were outstanding as of February 28, 2025.

As of February 28, 2025, the number of remaining securities available for future issuance under our equity compensation plans consisted of 5,703,757 shares available under 2018 Plan. This amount does not reflect the additional 7,000,000 shares that may be issued under the Amended Plan, as set forth in this Proposal 3.

The closing price of a share of our common stock, as reported on the Nasdaq Global Select Market on February 28, 2025 was \$246.75 per share.

Potential Dilution

The following table sets forth information regarding historical awards granted and earned, and the corresponding “burn rate,” for each of the last three fiscal years. For this purpose, “burn rate” is defined as the number of shares subject to time-based equity awards granted and performance-based equity awards earned in a year divided by the weighted-average number of shares of common stock outstanding for that year.

SHARE ELEMENT	YEAR		
	2024	2023	2022
Time-Based Stock Options Granted	462,917	412,048	1,873,941
Performance-Based Stock Options Earned	—	—	—
Time-Based Full-Value Awards Granted	1,260,740	922,173	248,933
Performance-Based Full-Value Awards Earned	480,731	472,537	499,080
Total Time-Based Awards Granted and Performance-Based Awards Earned	2,204,388	1,806,758	2,621,954
Weighted-Average Common Shares Outstanding During the Fiscal Year	127,650,781	124,905,673	121,689,472
Annual Burn Rate	1.73 %	1.45 %	2.15 %
Three Year Average Burn Rate⁽¹⁾	1.78 %		

⁽¹⁾ As illustrated in the table above, our three-year average burn rate for the 2022-2024 period was 1.78%, which is below the ISS industry category (Russell 3000 Index companies excluding S&P 500 constituents) burn rate threshold of 5.24%.



We manage our long-term stockholder dilution by limiting the number of equity incentive awards we grant annually. Our PC&C committee carefully reviews both our annual net burn rate and total dilution and our projected burn rate and dilution over the next several years based upon our expected growth and equity strategy in order to maximize stockholder value by granting only the number of equity incentive awards that it believes is necessary and appropriate to attract, reward and retain our employees. Our compensation philosophy reflects broad-based eligibility for equity incentive awards for all of our employees. By doing so, we link the interests of our employees with those of our long-term stockholders and motivate our employees to act as owners of the business.

If our request to adopt the Amended Plan is approved by stockholders, we will have approximately 10,914,158 shares available for grant after the 2025 annual meeting of stockholders, based on the shares reserved for issuance under the Amended Plan. Our PC&C committee determined the number of shares available for issuance under the Amended Plan based on projected equity awards to anticipated new hires, projected annual equity awards to existing employees, non-employee directors and scientific advisory board members, and an assessment of the magnitude of increase that our institutional investors and the firms that advise them would likely find acceptable. We anticipate that if our request to increase the share reserve is approved by our stockholders, it will be sufficient to provide equity incentives to attract, retain and motivate employees until our 2028 annual meeting of stockholders.

Supplemental Equity Compensation Plan Information

The following table provides information as of December 31, 2024 about the securities authorized for issuance under our stockholder approved equity compensation plans, consisting of our 2009 Plan, our 2018 Plan and our Amended and Restated Employee Stock Purchase Plan, as amended, or ESPP, as well as equity awards granted outside of such stockholder approved plans to new hires as inducement grants made in accordance with Nasdaq Listing Rule 5635(c)(4).

Equity Compensation Plan Information as of December 31, 2024

	NUMBER OF SECURITIES TO BE ISSUED UPON EXERCISE OF OUTSTANDING OPTIONS AND RIGHTS (#)	WEIGHTED-AVERAGE EXERCISE PRICE OF OUTSTANDING OPTIONS AND RIGHTS (\$) ⁽¹⁾	NUMBER OF SECURITIES REMAINING AVAILABLE FOR FUTURE ISSUANCE UNDER EQUITY COMPENSATION PLANS (#)
Equity compensation plans approved by stockholders	7,815,035 ⁽²⁾	131.96	6,195,792 ⁽³⁾
Equity compensation plans not approved by stockholders ⁽⁴⁾	—	—	—
Total	7,815,035	131.96	6,195,792

⁽¹⁾ PSUs and RSUs are not included in the weighted-average exercise price calculation because they do not have an exercise price.

⁽²⁾ Includes 5,135,606 shares of common stock issuable upon the exercise of outstanding options and 2,679,429 shares of common stock that will be released upon the vesting of outstanding PSUs and RSUs.

⁽³⁾ Consists of 5,728,086 shares of our common stock available for future issuance under our 2018 Plan and 467,706 shares of our common stock available for future issuance under our ESPP. Shares of our common stock available for issuance under our 2018 Plan include any shares underlying any awards granted under the 2009 Plan or the 2018 Plan that expire, or are terminated, surrendered or canceled without having been fully exercised or are forfeited in whole or in part after the effective date of the 2018 Plan.

The following table provides the information presented in the table above as of February 28, 2025.

Equity Compensation Plan Information as of February 28, 2025

	NUMBER OF SECURITIES TO BE ISSUED UPON EXERCISE OF OUTSTANDING OPTIONS AND RIGHTS (#)	WEIGHTED-AVERAGE EXERCISE PRICE OF OUTSTANDING OPTIONS AND RIGHTS (\$) ⁽¹⁾	NUMBER OF SECURITIES REMAINING AVAILABLE FOR FUTURE ISSUANCE UNDER EQUITY COMPENSATION PLANS (#)
Equity compensation plans approved by stockholders	7,367,408 ⁽²⁾	132.47	6,171,463 ⁽³⁾
Equity compensation plans not approved by stockholders ⁽⁴⁾	—	—	—
Total	7,367,408	132.47	6,171,463

⁽¹⁾ PSUs and RSUs are not included in the weighted-average exercise price calculation because they do not have an exercise price.

⁽²⁾ Includes 4,975,974 shares of common stock issuable upon the exercise of outstanding options and 2,391,434 shares of common stock that will be released upon the vesting of outstanding PSUs and RSUs.

⁽³⁾ Consists of 5,703,757 shares of our common stock available for future issuance under our 2018 Plan and 467,706 shares of our common stock available for future issuance under our ESPP. Shares of our common stock available for issuance under our 2018 Plan include any shares underlying any awards granted under the 2009 Plan or the 2018 Plan that expire, or are terminated, surrendered or canceled without having been fully exercised or are forfeited in whole or in part after the effective date of the 2018 Plan.



Summary of the Amended Plan

The following description of certain features of the Amended Plan is intended to be a summary only. The summary is qualified in its entirety by the complete text of the Amended Plan, which is attached to this proxy statement as Appendix A.

Plan Administration

The Amended Plan is administered by our PC&C committee. The PC&C committee has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the Amended Plan. The PC&C committee may delegate to one or more officers of the company the authority to grant equity awards to employees who are not “executive officers” (as defined by Rule 3b-7 under the Exchange Act) and who are not “officers” (as defined by Rule 16a-1 under the Exchange Act), subject to certain limitations and guidelines.

Eligibility

Persons eligible to participate in the Amended Plan are our employees, officers, directors, consultants and advisors as selected from time to time by the PC&C committee in its discretion. As of February 28, 2025, 2,314 individuals are currently eligible to participate in the Amended Plan, which includes six executive officers, 2,290 employees who are not executive officers, eleven non-employee directors, seven non-employee/director members of our scientific advisory board, and no consultants or other advisors.

Director Limits

The value of all compensation, including any awards granted under the Amended Plan, paid or granted to any individual (i) in connection with his or her initial appointment or election as a non-employee director shall be \$1,500,000 and (ii) in connection with such individual’s service on the board of directors (excluding the value of any awards or compensation granted or paid(a) to such individual for services provided other than as a non-employee director, or (b) pursuant to clause (i) above) shall be \$1,000,000.

Effect of Awards

For purposes of determining the number of shares of common stock available for issuance under the Amended Plan, the grant of any “full-value” award, such as a restricted stock, RSU or other stock-based award will be counted as 1.5 shares for each share of common stock actually subject to the award. The grant of any stock option or stock appreciation right will be counted for this purpose as one share from each share of common stock actually subject to the award.

Minimum Vesting

Awards granted under the Amended Plan shall not become exercisable and/or vested (as applicable) prior to the first anniversary of the date of grant, provided that annual awards to non-employee directors that occur in connection with our annual meeting of stockholders may vest (i) on the earlier of the first anniversary of the date of grant or the date of our next annual meeting of stockholders which is at least 50 weeks after the immediately preceding year’s annual meeting and (ii) upon any retirement or resignation of the non-employee director other than for cause that occurs no more than 90 days prior to the first anniversary of the date of grant. This minimum vesting restriction does not apply to awards granted for up to an aggregate of 5% of the maximum number of shares authorized for issuance under the Amended Plan. In addition, the PC&C committee retains discretion to accelerate the vesting schedule of awards.

Stock Options

The Amended Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and (2) options that do not so qualify. Options granted under the Amended Plan will be non-qualified options if they fail to qualify as incentive options or exceed the annual limit on incentive stock options. Incentive stock options may only be granted to employees of Alnylam and its subsidiaries. Non-qualified options may be granted to any persons eligible to receive incentive options and to non-employee directors, consultants and advisors. The option exercise price of each option will be determined by the PC&C committee but may not be less than 100% of the fair market value of the common stock on the date of grant. Fair market value for this purpose and for purpose of determining the exercise price for SARs (as described below) will be the closing price of the shares of common stock on the Nasdaq Global Select Market on the grant date. The exercise price of an option may not be reduced after the date of the option grant, other than to appropriately reflect changes in our capital structure.

The term of each option will be fixed by the PC&C committee and may not exceed ten years from the date of grant. The PC&C committee will determine at what time or times each option may be exercised. Options may be made exercisable in installments and the exercisability of options may be accelerated by the PC&C committee.



Upon the exercise of an option, the option exercise price must be paid in full by (i) cash or check, (ii) by delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to Alnylam sufficient funds to pay the exercise price and any required tax withholding or by delivery by the participant of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to Alnylam cash or check sufficient to pay the exercise price and any required tax withholding, (iii) by delivery (either by actual delivery or attestation) of shares of common stock owned by the participant valued at the fair market value, subject to certain restrictions and subject to the prior approval by the PC&C committee with respect to any executive officer, (iv) with respect to non-qualified options, by a "net exercise" arrangement, as a result of which the participant would receive the number of shares of common stock underlying the option reduced by the number of shares equal to the aggregate exercise price of the option divided by the fair market value on the date of exercise, subject to the prior approval by the board with respect to any executive officer, (v) to the extent provided in the applicable option agreement or approved by the PC&C committee and subject to applicable law, by payment of such other lawful consideration as the PC&C committee may determine or (vi) a combination of the above permitted forms of payment.

To qualify as incentive options, options must meet additional federal tax requirements, including a \$100,000 limit on the value of shares subject to incentive options that first become exercisable by a participant in any one calendar year.

No term of an Award shall provide for automatic "reload" grants of additional Awards upon the exercise of an option or stock appreciation right.

Stock Appreciation Rights

The PC&C committee may award stock appreciation rights subject to such conditions and restrictions as the PC&C committee may determine. Stock appreciation rights entitle the recipient to shares of common stock equal to the value of the appreciation in the stock price over the exercise price. The exercise price may not be less than the fair market value of the common stock on the date of grant. The maximum term of a stock appreciation right is ten years.

Restricted Stock and Restricted Stock Units

The PC&C committee may award shares of common stock and RSUs to participants subject to such conditions and restrictions as the PC&C committee may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified restricted period. RSUs are ultimately payable in the form of shares of common stock. During the vesting period, restricted stock may be credited with dividends and RSU awards may be credited with dividend equivalent rights (but no dividends shall be paid unless and until such restricted stock or RSUs have vested).

Other Stock-Based Awards

The PC&C committee may award shares of common stock or other awards that are valued, in whole or in part, by reference to, or are otherwise based on, shares of our common stock or other property.

Change in Control Provisions

The Amended Plan provides that, in connection with a "reorganization event," as defined in the Amended Plan, the PC&C committee may take any one or more of the following actions as to all or any outstanding awards other than restricted stock and RSUs: (i) provide that awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or succeeding corporation (or affiliate thereof), (ii) upon written notice to a participant, provide that the participant's unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant within a specified period of time following the date of such notice, (iii) provide that outstanding awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an award shall lapse, in whole or in part, prior to the reorganization event, (iv) in the event of a reorganization event in which holders of common stock will receive, upon the consummation thereof, a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to a participant, in exchange for the cancellation of such awards, equal to the excess, if any, of (a) the price paid to the holders of common stock in the reorganization event multiplied by the number of shares subject to the participant's awards over (b) the aggregate exercise price of all such outstanding awards and any applicable tax withholdings, (v) provide that, in connection with a liquidation or dissolution of Alnylam, awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise price thereof and any applicable tax withholdings), and (vi) any combination of the foregoing.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, our repurchase and other rights with respect to outstanding restricted stock and RSUs shall inure to the benefit of the successor entity and shall, unless the board determines otherwise, apply to the cash, securities or other property into which the common stock was converted or exchanged for pursuant to such reorganization event in the same manner and to the same extent they applied to the common stock subject to the restricted stock or RSU. However, the PC&C committee may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing the restricted stock or RSUs or other agreement between the participant and us. Upon the occurrence of a reorganization event involving the liquidation or dissolution of Alnylam, except to the extent specifically provided to the contrary in the instrument evidencing the award or any other agreement between the participant and us, all restrictions and conditions on all restricted stock and RSUs then outstanding shall automatically be deemed terminated or satisfied.

Adjustments for Stock Dividends, Stock Splits, Etc.

The Amended Plan requires the PC&C committee to make appropriate adjustments to the number of shares of common stock that are subject to the Amended Plan, subject to certain limits in the Amended Plan, and to any outstanding awards to reflect stock dividends, stock splits, recapitalization and similar events.

Tax Withholding

Participants in the Amended Plan are responsible for the payment of any federal, state or local taxes that we are required by law to withhold upon the exercise of options or stock appreciation rights or vesting of other awards. Participants may elect to have the tax withholding obligations satisfied by delivery of shares of common stock, subject to the prior approval by our PC&C committee for any of our executive officers.

Clawback Policy

All awards made under the Amended Plan will be subject to our Policy for the Recovery of Erroneously Awarded Incentive-Based Compensation, as the same may be amended and in effect from time to time, to the extent applicable to a participant, and to any other clawback or recoupment policies that are in effect from time to time.

Amendments and Termination

Our board may at any time amend or discontinue the Amended Plan. However, no such action may materially adversely affect any rights under any outstanding award without the holder's consent. To the extent required under Nasdaq rules, any amendments that materially change the terms of the Amended Plan will be subject to approval by our stockholders. Amendments shall also be subject to approval by our stockholders if and to the extent determined to be required by the Code to preserve the qualified status of incentive options.

Effective Date of the Amended Plan

Our board adopted the Alnylam Pharmaceuticals, Inc. 2018 Stock Incentive Plan on March 8, 2018, and it became effective on May 10, 2018 upon approval by our stockholders at our 2018 annual meeting of stockholders. Our board adopted the Amended and Restated Alnylam Pharmaceuticals, Inc. 2018 Stock Incentive Plan on March 31, 2022, and it became effective on May 18, 2022 upon approval by our stockholders at our 2022 annual meeting of stockholders. Our board adopted the Amended Plan on February 27, 2025, and it will become effective upon approval by our stockholders at our 2025 annual meeting of stockholders. Awards of incentive options may be granted under the Amended Plan until February 27, 2035. No other awards may be granted under the Amended Plan after the date that is ten years from the date of stockholder approval.

New Plan Benefits

Because the grant of awards under the Amended Plan is within the discretion of our PC&C committee, we cannot determine the dollar value or number of shares of common stock that will in the future be received by or allocated to any participant in the Amended Plan. Accordingly, in lieu of providing information regarding benefits that will be received under the Amended Plan, the following table provides information concerning the benefits that were received by the following persons and groups during 2024 under the 2018 Plan: (a) each named executive officer; (b) all then current executive officers, as a group; (c) all current directors who are not executive officers, as a group; and (d) all current employees who are not executive officers, as a group.

NAME AND POSITION	OPTION AWARDS		STOCK AWARDS	
	WEIGHTED-AVERAGE EXERCISE PRICE (\$)	NUMBER OF AWARDS (#)	DOLLAR VALUE (\$) ⁽¹⁾	NUMBER OF AWARDS (#)
Yvonne L. Greenstreet , M.D., Chief Executive Officer	152.61	46,394	10,875,141	71,261
Jeffrey V. Poulton , Executive Vice President, Chief Financial Officer	152.61	15,118	3,543,909	23,222
Pushkal Garg , M.D., Executive Vice President, Chief Medical Officer	152.61	9,279	2,225,320	14,438
Tolga Tanguler , Executive Vice President, Chief Commercial Officer	152.61	9,279	2,175,150	14,253
Kevin J. Fitzgerald , Ph.D., Chief Scientific Officer	152.61	9,279	2,175,150	14,253
All executive officers as of December 31, 2024, as a group	152.61	89,349	22,994,726	144,672
All current directors who are not executive officers, as a group	151.22	57,508	—	—
All current employees who are not executive officers, as a group	155.11	316,060	282,352,911	1,709,763

⁽¹⁾ The dollar value of restricted stock awards is based on the number of shares of RSUs and PSUs granted, as applicable, multiplied by the closing price of our common stock on the Nasdaq Global Select Market on the applicable grant date.



Tax Aspects under the Code

The following is a summary of the principal U.S. federal income tax consequences of certain transactions under the Amended Plan. It does not describe all federal tax consequences under the Amended Plan, nor does it describe state or local tax consequences.

Incentive Options

No taxable income is generally realized by the optionee upon the grant or exercise of an incentive option. If shares of common stock issued to an optionee pursuant to the exercise of an incentive option are sold or transferred after two years from the date of grant and after one year from the date of exercise, then, (i) upon sale of such shares, any amount realized in excess of the option price (the amount paid for the shares) will be taxed to the optionee as a long-term capital gain, and any loss sustained will be a long-term capital loss, and (ii) we will not be entitled to any deduction for federal income tax purposes. The exercise of an incentive option will give rise to an item of tax preference that may result in alternative minimum tax liability for the optionee.

If shares of common stock acquired upon the exercise of an incentive option are disposed of prior to the expiration of the two-year and one-year holding periods described above, which is referred to as a “disqualifying disposition,” generally (i) the optionee will realize ordinary income in the year of disposition in an amount equal to the excess (if any) of the fair market value of the shares of common stock at exercise (or, if less, the amount realized on a sale of such shares of common stock) over the exercise price thereof, and (ii) we will be entitled to deduct such amount. Special rules will apply where all or a portion of the exercise price of the incentive option is paid by tendering shares of common stock.

If an incentive option is exercised at a time when it no longer qualifies for the tax treatment described above, the option is treated as a non-qualified option. Generally, an incentive option will not be eligible for the tax treatment described above if it is exercised more than three months following termination of employment (or one year in the case of termination of employment by reason of disability). In the case of termination of employment by reason of death, the three-month rule does not apply.

Non-Qualified Options

No income is realized by the optionee at the time the option is granted. Generally (i) at exercise, ordinary income is realized by the optionee in an amount equal to the difference between the exercise price and the fair market value of the shares of common stock on the date of exercise, and we receive a tax deduction for the same amount, and (ii) at disposition, appreciation or depreciation after the date of exercise is treated as either short-term or long-term capital gain or loss depending on how long the shares of common stock have been held. Special rules will apply where all or a portion of the exercise price of the non-qualified option is paid by tendering shares of common stock. Upon exercise, the optionee will also be subject to Social Security taxes on the excess of the fair market value over the exercise price of the option.

Other Awards

We will generally be entitled to a tax deduction in connection with an award under the Amended Plan in an amount equal to the ordinary income realized by the participant at the time the participant recognizes such income. Participants typically are subject to income tax and recognize that tax at the time that an award is exercised, vests or becomes non-forfeitable, unless the award provides for a further deferral.

Parachute Payments

The vesting of any portion of an option or other award that is accelerated due to the occurrence of a change in control (such as a reorganization event) may cause a portion of the payments with respect to such accelerated awards to be treated as “parachute payments” as defined in the Code. Any such parachute payments may be non-deductible by us, in whole or in part, and may subject the recipient to a non-deductible 20% federal excise tax on all or a portion of such payment (in addition to other taxes ordinarily payable).

Limitation on Deductions

Under Section 162(m) of the Code, our deduction for certain awards under the Amended Plan may be limited to the extent that any “covered employee” (generally, the chief executive officer, chief financial officer or other executive officer whose compensation is required to be reported in the Summary Compensation Table for any year following 2016) receives compensation in excess of \$1.0 million a year.



Required Vote

The Amended Plan will be approved if a majority of the votes cast affirmatively or negatively on the matter are cast “for” the proposal. Abstentions and broker non-votes will not be counted as shares voting on this matter and accordingly will have no effect on the approval of this Proposal 3.

BOARD RECOMMENDATION



Our board of directors believes that our future success depends, in large part, upon our ability to maintain a competitive position in attracting, retaining and motivating key personnel. Accordingly, our board of directors believes approval of the Alnylam Pharmaceuticals, Inc. Second Amended and Restated 2018 Equity Incentive Plan is in the best interests of Alnylam and our stockholders and unanimously recommends that you vote to approve the Second Amended and Restated 2018 Equity Incentive Plan by voting “**FOR**” Proposal 3.



PROPOSAL 4

Say-on-Pay — Advisory Vote on Executive Compensation

We are providing our stockholders with the opportunity to vote to approve, on an advisory, non-binding basis, the compensation of our NEOs as disclosed in this proxy statement in accordance with the SEC's rules. This proposal, which is commonly referred to as "say-on-pay," is required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which added Section 14A to the Exchange Act.

We encourage stockholders to read closely the "Executive Compensation" section of this proxy statement beginning with the "Compensation Discussion and Analysis" on page 42, which describes in detail our executive compensation program and the compensation-related decisions made by our PC&C committee and our board with respect to the fiscal year ended December 31, 2024.

As we describe in the "Compensation Discussion and Analysis," we maintain straight-forward executive compensation programs that generally consist of base salary, an annual cash incentive award and long-term equity incentive awards upon the commencement of employment and annually thereafter. These elements of compensation have been selected by our PC&C committee because the committee believes that they effectively achieve the fundamental goals of our compensation program, which are to attract, motivate and retain qualified and talented executives, who are critical to our success, motivating them to achieve our business goals and rewarding them for superior short- and long-term performance. The goal of our PC&C committee is to ensure that our compensation programs are aligned with the interests of our stockholders and our business goals in order to attain our ultimate objective of increasing stockholder value. We believe that, consistent with these goals, the total compensation paid to each of our NEOs is fair, reasonable and competitive. Further, we believe our programs do not encourage excessive risk-taking by management, as supported by the assessment described above conducted by Pay Governance, an independent compensation consultant to the PC&C committee.

With very limited exceptions, we do not provide any compensation or benefit plans to executive officers that are not also available to other employees. We generally differentiate among executive officers primarily based on size of annual cash incentive awards and annual equity incentive awards and, to a lesser extent, base salary. Annual compensation decisions for executive officers are made by our PC&C committee, and, in the case of our CEO, recommended to our board of directors for approval, based on the achievement of pre-established corporate performance goals, and with respect to base salary and annual long-term equity incentive awards, consideration of the executive officer's individual contributions to the achievement of the corporate goals, as described above under "Compensation Discussion and Analysis."

Our board is asking stockholders to approve, on a non-binding advisory basis, the following resolution:

RESOLVED, that the compensation paid to the named executive officers of Alnylam Pharmaceuticals, Inc., as disclosed pursuant to the compensation disclosure rules of the SEC, including the compensation discussion and analysis, the compensation tables and any related material disclosed in the proxy statement of Alnylam Pharmaceuticals, Inc., is hereby approved.

As an advisory vote, this proposal is not binding. The outcome of this advisory vote will not overrule any decision by us or our board of directors (or any committee thereof). However, our PC&C committee and board of directors value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for NEOs.

This proposal will be approved if a majority of the votes cast affirmatively or negatively on the matter are cast "for" the proposal. Abstentions and broker non-votes will have no effect on the outcome of Proposal 4.

BOARD RECOMMENDATION

Our board of directors unanimously recommends that you vote to approve the compensation of our named executive officers by voting **FOR** Proposal 4.



PROPOSAL 5

Ratification of Appointment of Independent Auditors

Our board has appointed PricewaterhouseCoopers LLP, an independent registered public accounting firm, as our independent auditors for the fiscal year ending December 31, 2025. Although stockholder approval of our board's appointment of PricewaterhouseCoopers LLP is not required by law, our board believes that it is advisable to give stockholders an opportunity to ratify this appointment. If this proposal is not approved at the annual meeting, our audit committee will reconsider its appointment of PricewaterhouseCoopers LLP. Representatives of PricewaterhouseCoopers LLP are expected to participate in the annual meeting and will have the opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions from our stockholders.

Proposal 5 will be approved if a majority of the votes cast affirmatively or negatively on the matter are cast "for" the proposal. Abstentions and broker non-votes will have no effect on the outcome of Proposal 5.

BOARD RECOMMENDATION



Our board of directors unanimously recommends a vote **"FOR"** the ratification of the appointment of PricewaterhouseCoopers LLP as our independent auditors for the fiscal year ending December 31, 2025.



Audit Information

Report of the Audit Committee

Our audit committee reports to and acts on behalf of our board by providing oversight of our financial management, related person transaction policies and procedures, audits of our financial statements and financial reporting controls and accounting policies and procedures. Our management is responsible for the preparation, presentation and integrity of our financial statements, the appropriateness of our accounting principles and reporting policies, and for establishing and maintaining adequate internal control over financial reporting. The independent registered public accounting firm is responsible for conducting an independent audit of our annual financial statements and our internal control over financial reporting. Our audit committee is responsible for independently overseeing the conduct of these activities by our management and our independent registered public accounting firm.

Our audit committee operates under a written charter adopted by our board that reflects standards contained in the Nasdaq Marketplace Rules. Our audit committee reviews its charter annually. A complete copy of the current audit committee charter is posted on the Corporate Governance page of the Investors section of our website, www.alnylam.com.

Our audit committee has reviewed our audited financial statements for the fiscal year ended December 31, 2024, and has discussed them with our management and our independent registered public accounting firm, PricewaterhouseCoopers LLP. Our audit committee has also received from, and discussed with, PricewaterhouseCoopers LLP various communications that PricewaterhouseCoopers LLP is required to provide to our audit committee, including the matters required to be discussed by the Public Company Accounting Oversight Board, or PCAOB, Auditing Standard No. 1301, *Communications with Audit Committees*, which requires the independent registered public accounting firm to provide the audit committee with additional information regarding the scope and results of the audit, including the independent registered public accounting firm's responsibilities under PCAOB standards, significant issues or disagreements concerning our accounting practices or financial statements, significant accounting policies, critical accounting estimates, alternative accounting treatments, accounting for significant unusual transactions, and other judgments and uncertainties.

In addition, PricewaterhouseCoopers LLP provided our audit committee with the written disclosures and the letter required by PCAOB Rule 3526, *Communication with Audit Committees Concerning Independence*, as amended, and our audit committee and PricewaterhouseCoopers LLP have discussed its independence from us and our management, including the matters in those written disclosures.

In this context, our audit committee meets regularly with PricewaterhouseCoopers LLP and our management (including private sessions with each of PricewaterhouseCoopers LLP and members of management) to discuss any matters that our audit committee or these individuals believe should be discussed, including the matters required by the applicable requirements of the PCAOB and the SEC. Our audit committee conducts a meeting each quarter to review the financial statements prior to the public release of earnings.

Based on its discussions with management and PricewaterhouseCoopers LLP, and its review of the representations and information provided by management and PricewaterhouseCoopers LLP, our audit committee recommended to our board that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2024. Our audit committee also recommended to our board, and our board has approved, subject to stockholder ratification, the appointment of PricewaterhouseCoopers LLP as our independent auditors for the fiscal year ending December 31, 2025.

By the audit committee of the board of directors of Alnylam,

Peter N. Kellogg, Chair
Olivier Brandicourt, M.D.
Colleen F. Reitan



Principal Accountant Fees and Services

The following table summarizes the fees that our independent auditors, PricewaterhouseCoopers LLP, an independent registered public accounting firm, billed to us for each of the last two fiscal years for audit and other services:

Fee Category	2024 (\$)	2023 (\$)
Audit Fees ⁽¹⁾	4,050,752	3,578,550
Audit-Related Fees	—	—
Tax Fees ⁽²⁾	90,000	80,000
All Other Fees ⁽³⁾	206,295	9,720
Total Fees	4,347,047	3,668,270

⁽¹⁾ "Audit Fees" consist of fees for the audit of our annual financial statements, the review of the interim financial statements included in our quarterly reports on Form 10-Q, statutory audits of our international operations, and other professional services provided in connection with regulatory filings or audit engagements. In 2024 and 2023, this amount includes \$150,000 for fees in connection with the review of the consolidated financial statements incorporated by reference into our outstanding Japanese registration statements.

⁽²⁾ "Tax Fees" in 2024 consist of fees for procedures completed in connection with an application for change in method of accounting for specified research or experimental expenditures, as well as fees for procedures completed in connection with a research and development tax credit study. "Tax Fees" in 2023 consist of fees for procedures completed in connection with a research and development tax credit study.

⁽³⁾ "All Other Fees" represent non-audit fees in connection with access to the PricewaterhouseCoopers LLP online accounting research and disclosures tool (in 2024 and 2023), as well as non-audit fees in connection with information systems reviews not performed in connection with the audit (in 2024).

All such accountant services and fees were pre-approved by our audit committee in accordance with the "Pre-Approval Policies and Procedures" described below. There were no other fees billed by PricewaterhouseCoopers LLP for services rendered to us, other than the services described above, for the fiscal years ended December 31, 2024 and 2023.

Pre-Approval Policies and Procedures

Our audit committee is required to pre-approve all audit services to be provided to us by our principal independent auditors, as well as all other services to be provided to us by such independent auditors, except that de minimis non-audit services may be approved in accordance with applicable SEC rules.



Important Information about the Annual Meeting and Voting

Notice and Access

We have made these proxy materials available to you on the internet in connection with the solicitation by our board of directors of proxies to be voted at our 2025 annual meeting of stockholders to be held online on Thursday, May 8, 2025 at 8:30 a.m., Eastern Time (ET). We have elected to provide access to our proxy materials over the internet under the SEC's "notice and access" rules. On or about March 26, 2025, we will mail to our stockholders a Notice of Internet Availability containing instructions on how to access our proxy materials, including our proxy statement and our 2024 Annual Report. We believe that providing our proxy materials over the internet expedites stockholders' receipt of proxy materials, lowers costs and reduces the environmental impact of our annual meeting. As a stockholder of Alynlam, you are invited to participate in our annual meeting virtually via the internet, and are entitled and requested to vote on the proposals described in this proxy statement. The Notice of Internet Availability instructs you on how to submit your proxy or voting instructions through the Internet.

In accordance with the SEC rules, we may furnish proxy materials, including this proxy statement and our 2024 Annual Report, to our stockholders by providing access to such documents on the internet instead of mailing printed copies. If you would like to receive a paper copy of our proxy materials, the Notice of Internet Availability instructs you on how to request a paper copy of our proxy materials, including a proxy card or voting instruction form that includes instructions on how to submit your proxy or voting instructions by mail or telephone. Other stockholders, in accordance with their prior requests, have received email access to our proxy materials and instructions to submit their vote via the internet, or have been mailed paper copies of our proxy materials and a proxy card or voting instruction form.

Who Can Vote

To be entitled to vote, you must be a stockholder of record at the close of business on March 10, 2025, the record date for our annual meeting. As of the record date, there were 130,084,858 shares of our common stock outstanding.

If you were a stockholder of record on March 10, 2025, you are entitled to vote all of the shares that you held on that date at the annual meeting and at any postponement or adjournment thereof. A list of such stockholders will be open to examination, during regular business hours, by any stockholder for at least ten days prior to the annual meeting at our offices at 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142

Voting Rights

Each outstanding share of our common stock will be entitled to one vote on each matter considered at the annual meeting.

Voting

Alynlam's stockholders may vote their shares over the Internet, by telephone or during the annual meeting by going to www.virtualshareholdermeeting.com/ALNY2025. If you requested and/or received a printed version of the proxy card, you may also vote by mail.

By Internet

You may vote at www.proxyvote.com, 24 hours a day, seven days a week. You will need the 16-digit control number included on your proxy card or voting instruction form. Votes submitted through the Internet must be received by 11:59 p.m. ET on May 7, 2025.

By Telephone

You may vote using a touch-tone telephone by calling 1-800-690-6903, 24 hours a day, seven days a week. You will need the 16-digit control number included on your proxy card or voting instruction form. Votes submitted by telephone must be received by 11:59 p.m. ET on May 7, 2025.



By Mail

If you received printed proxy materials, you may submit your vote by completing, signing and dating each proxy card received and returning it in the prepaid envelope. Sign your name exactly as it appears on the proxy card. Proxy cards submitted by mail must be received no later than May 7, 2025 to be voted at the annual meeting.

During the Annual Meeting

You may vote during the annual meeting by going to www.virtualshareholdermeeting.com/ALNY2025. You will need the 16-digit control number included on your proxy card or voting instruction form. If you previously voted via the Internet (or by telephone or mail), this will not limit your right to vote online at the annual meeting.

If you vote via the Internet or by telephone, your electronic vote authorizes the named proxies in the same manner as if you signed, dated and returned your proxy card. If you vote via the Internet or by telephone, do not return your proxy card.

Revoking a Proxy

If your shares are registered directly in your name, you may revoke your proxy and change your vote at any time before the annual meeting. To do so, you must do one of the following:

- Vote over the Internet or by telephone as instructed above. Only your latest Internet or telephone vote is counted. You may not change your vote over the Internet or by telephone after 11:59 p.m. ET on May 7, 2025.
- Sign a new proxy and submit it by mail as instructed above. Only your latest dated proxy, received by no later than May 7, 2025, will be counted.
- Participate in the annual meeting virtually via the Internet and vote again. Attending the virtual annual meeting will not revoke your previous internet vote, telephone vote or proxy, unless you vote again during the annual meeting.

Note that if your shares are held in “street name,” you may submit new voting instructions by contacting your bank, broker or other nominee.

Discretionary Voting Authority

If your shares are registered directly in your name, you are a “stockholder of record” who may vote at the meeting. As the stockholder of record, you have the right to direct the voting of your shares by voting over the Internet, by telephone, by returning your proxy or by voting online during the annual meeting at www.virtualshareholdermeeting.com/ALNY2025.

If your shares are held in an account at a bank or at a brokerage firm or other nominee, you are considered the beneficial owner of shares held in “street name,” and these proxy materials are being forwarded to you by your bank, broker or other nominee who is considered the stockholder of record for purposes of voting at the annual meeting. As the beneficial owner, you have the right to direct your bank, broker or other nominee on how to vote your shares and to participate in the virtual annual meeting. You will receive instructions from your bank, broker or other nominee explaining how you can vote your shares and whether they permit Internet or telephone voting. Follow the instructions from your bank, broker or other nominee included with these proxy materials, or contact your bank, broker or other nominee to request a proxy form. We encourage you to provide voting instructions to your bank, broker or other nominee by giving your proxy to them. This ensures that your shares will be voted at the annual meeting according to your instructions. **You will not be able to vote shares you hold in “street name” at the annual meeting; instead, you must instruct your bank, broker or other nominee in advance of the meeting.**

Note that under New York Stock Exchange, or NYSE, rules, if you hold shares through a bank, broker or other institution and you do not provide your voting instructions to them at least ten days before the annual meeting, that firm has the discretion to vote your shares on proposals that the NYSE has determined are routine. Such firm will not have the discretion to vote your shares on proposals that the NYSE has determined are non-routine. A “broker non-vote” refers to a share represented at the meeting held by a broker, as to which instructions have not been received from the beneficial owner or person entitled to vote such shares and with respect to which, on one or more but not all matters, the broker does not have discretionary voting power to vote such share.

Participating in the Virtual Annual Meeting

This year our annual meeting will be a completely virtual meeting. There will be no physical meeting location. The meeting will only be conducted via live webcast.

To participate in the virtual meeting, visit www.virtualshareholdermeeting.com/ALNY2025 and enter the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. You may begin to log into the meeting platform beginning at 8:15 a.m. ET on May 8, 2025. The meeting will begin promptly at 8:30 a.m. ET on May 8, 2025.



If you wish to submit a question, you may do so in two ways. If you want to ask a question before the meeting, then beginning on March 24, 2025 and until 11:59 p.m. ET on May 7, 2025, you may log into www.proxyvote.com and enter your 16-digit control number. Once past the login screen, click on “Questions for Management,” type in your question, and click “Submit.” Alternatively, if you want to submit your question during the meeting, log into the virtual meeting platform at www.virtualshareholdermeeting.com/ALNY2025, type your question into the “Ask a Question” field, and click “Submit.”

Questions pertinent to meeting matters will be answered during the meeting, subject to time constraints. The meeting is not to be used as a forum to present personal matters, or general economic, political or other views that are not directly related to the business of Alnylam and the matters properly before the meeting, and therefore questions on such matters will not be answered.

Any questions pertinent to meeting matters that cannot be answered during the meeting due to time constraints will be posted online and answered at <http://investors.alnylam.com/shareholder-services/annual-meeting>. The questions and answers will be available as soon as practical after the meeting and will remain available until one week after posting.

If you encounter any technical difficulties with the virtual meeting platform on the meeting day, please call the technical support number that will be posted on the virtual Annual Meeting log-in page. Technical support will be available starting at 8:00 a.m. ET on May 8, 2025 and will remain available until thirty minutes after the meeting has finished.

Requirements for a Meeting Quorum

The holders of a majority in voting power of our outstanding shares of common stock entitled to vote must be present to hold the annual meeting and conduct business. This is called a quorum. For purposes of determining whether a quorum exists, we count as present any shares that are voted over the Internet, by telephone, by completing and submitting a proxy, or that are represented online at the meeting, as well as any abstentions and broker non-votes. If a quorum is not present, we expect to adjourn the annual meeting until we obtain a quorum.

Vote Required to Approve Each Item on the Proxy

You may vote “for,” “against” or “abstain” on proposals 1, 2, 3, 4 and 5. Abstentions and broker non-votes are included in the determination of the number of shares present at the annual meeting for determining whether a quorum is present at the meeting but are not counted as shares cast. Accordingly, abstentions and broker non-votes, if any, would have no effect on the vote for any of the Proposals to be considered at the annual meeting, because these Proposals are based on a percentage of the votes that are actually cast at the annual meeting.

Proposal 1 – Election of Four (4) Class III Directors

With respect to the election of directors (Proposal 1), each nominee presented in Proposal 1 must be elected by a majority of the votes properly cast. Nominees are elected by a majority vote for non-contested director elections. Because the number of nominees properly nominated for the annual meeting is the same as the number of directors to be elected, the election of directors at this annual meeting is non-contested. If the number of votes FOR a nominee exceeds the number of votes AGAINST a nominee (among votes properly cast by stockholders who are either present online or represented by proxy), then the nominee will be elected.

With respect to Proposal 1, you may:

- vote FOR all nominees;
- vote FOR one or more nominee(s) and AGAINST one or more of the other nominee(s);
- vote AGAINST all nominees; or
- ABSTAIN from voting for or against one or more nominee(s).

Proposal 2 - Approval of a Charter Amendment Allowing for Officer Exculpation

To approve Proposal 2 relating to an amendment, or the Charter Amendment, to our Restated Certificate of Incorporation, also referred to as our Charter, allowing for officer exculpation, stockholders holding a majority of the outstanding shares of our common stock must vote FOR the proposal.



Proposal 3 - Approval of Second Amended and Restated 2018 Stock Incentive Plan

To approve Proposal 3, the second amended and restated 2018 Stock Incentive Plan, stockholders holding a majority of the votes cast on the matter must vote FOR the proposal.

Proposal 4 – Non-binding Advisory Vote on the Compensation of Our Named Executive Officers

To approve Proposal 4, stockholders holding a majority of the votes cast on the matter must vote FOR the approval of the compensation of our named executive officers, as described in the “Compensation Discussion and Analysis,” executive compensation tables and accompanying narrative disclosures in this proxy statement.

As an advisory vote, this proposal is not binding. The outcome of this advisory vote will not overrule any decision by us or our board (or any committee thereof). However, our PC&C committee and our board value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for our named executive officers.

Proposal 5 – Ratification of Appointment of Independent Auditors

To approve Proposal 5, stockholders holding a majority of the votes cast on the matter must vote FOR the proposal.

Although stockholder approval of our audit committee’s appointment of PricewaterhouseCoopers LLP as our independent auditors for the year ending December 31, 2025 is not required, we believe that it is advisable to give stockholders an opportunity to ratify this appointment. If this proposal is not approved at the annual meeting, our audit committee will reconsider its appointment of PricewaterhouseCoopers LLP as our independent auditors for the year ending December 31, 2025.

Other Matters to be Voted On

The board of directors is not aware of any other issue or matter that may come before the annual meeting other than the election of four (4) Class III directors, the approval of the Charter Amendment, the approval of the second amended and restated 2018 Stock Incentive Plan, the non-binding advisory vote on the compensation of our named executive officers and the ratification of the appointment of our independent auditors. If any other matters are properly presented at the annual meeting, the persons named in the accompanying proxy intend to vote, or otherwise act, in accordance with their best judgment on the matter.

Vote Results

Preliminary voting results will be announced at the annual meeting. We expect to report the voting results in a Current Report on Form 8-K within four business days following the adjournment of our annual meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K within four business days after the annual meeting, we intend to file a Current Report on Form 8-K to publish preliminary results and, within four business days after the final results are known to us, to file an additional Current Report on Form 8-K to publish the final results.

Inspector of Election

The inspector of election and the tabulator of all proxies, ballots and voting tabulations that identify stockholders are independent and are not Alnylam employees.

Cost of Soliciting Proxies

We will bear the cost of soliciting proxies. In addition to these proxy materials, our directors, officers and employees may solicit proxies by telephone, email, facsimile and in person, without additional compensation. We have also retained Innisfree M&A Incorporated to solicit proxies by mail, courier, telephone and facsimile and to request brokers, custodians and fiduciaries to forward proxy soliciting materials to the owners of stock held in their names. For these services, we paid a fee of approximately \$30,000, plus expenses. We may reimburse brokers or persons holding stock in their names, or in the names of their nominees, for their expenses in sending proxies and proxy materials to beneficial owners.



Alnylam's 401(k) Savings Plan

You may give voting instructions for the number of shares of Alnylam common stock equal to the interest in Alnylam common stock credited to your 401(k) plan account as of the record date. To vote these shares, complete and return the proxy card to Broadridge Financial Solutions, Inc. The 401(k) plan trustee will vote your shares according to your instructions. Only Broadridge and its affiliates or agents will have access to your individual voting instructions. You may revoke previously given voting instructions by filing with the trustee either a written revocation or a properly completed and signed proxy bearing a later date. To vote your 401(k) plan shares, you must provide your voting instructions to Broadridge before 11:59 p.m. ET on May 5, 2025. If you do not provide voting instructions to the 401(k) plan trustee, the 401(k) plan trustee will not vote your shares.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" proxy statements and annual reports. This means that only one copy of our proxy statement and annual report to stockholders may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to Alnylam Pharmaceuticals, Inc., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142, Attention: Investor Relations and Corporate Communications, telephone: (617) 551-8200. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.



Additional Information and Other Matters

Certain Relationships and Related Transactions

Policies and Procedures for Related Person Transactions

Our board has adopted written policies and procedures for the review of any transaction, arrangement or relationship in which Alnylam is a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a “related person,” has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a “related person transaction,” the related person must report the proposed related person transaction to our general counsel and our chief financial officer. The policy calls for the proposed related person transaction to be reviewed by our general counsel and/or our chief financial officer and, if deemed appropriate, approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, our audit committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chair of our audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by our audit committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by our audit committee after full disclosure of the related person’s interest in the transaction. As appropriate for the circumstances, our audit committee will review and consider:

- the related person’s interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person’s interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

Our audit committee may approve or ratify the transaction if the committee determines that, under all of the circumstances, the transaction is not inconsistent with our best interests. Our audit committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to related person transactions that are excluded by the instructions to the SEC’s related person transaction disclosure rule, our board has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person’s position as an executive officer of another entity (whether or not the person is also a director of such entity), that is a participant in the transaction, where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, and (b) the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction; and
- a transaction that is specifically contemplated by provisions of our Charter or bylaws.



The policy provides that transactions involving the compensation of our executive officers shall be reviewed and approved by our PC&C committee in the manner specified in its charter.

In addition to the policy described above, we have adopted a number of internal procedures to assist with the identification and approval of any related person transactions, including annual questionnaires to our directors and officers, quarterly questionnaires to certain legal, human resource and finance personnel, and quarterly review with our audit committee and independent registered public accounting firm.

Related Person Transactions

Since January 1, 2024, we have not been a participant in any transaction, nor is there any currently proposed transaction, that is currently reportable under Item 404(a) of Regulation S-K.

Other Matters

Our board of directors does not know of any other matters which may come before the meeting. However, if any other matters are properly presented to the meeting, it is the intention of the persons named in the accompanying proxy card to vote, or otherwise act, in accordance with their judgment on those matters.

Stockholder Proposals

To be considered for inclusion in the proxy materials for the 2026 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act, stockholders' proposals must be received by us at our principal executive offices, 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts 02142 no later than November 24, 2025 and must comply with all applicable requirements of Rule 14a-8. We suggest that proponents submit their proposals by certified mail, return receipt requested, addressed to our Corporate Secretary.

In addition, our bylaws require that we be given advance notice of stockholder nominations for election to our board of directors and of other matters which stockholders wish to present for action at an annual meeting of stockholders, other than matters included in our proxy statement. The required notice must be in writing and received by our Corporate Secretary at our principal executive offices not later than February 7, 2026 (90 days prior to the first anniversary of our 2025 annual meeting of stockholders) and not before January 8, 2026 (120 days prior to the first anniversary of our 2025 annual meeting of stockholders). However, if the 2026 annual meeting of stockholders is advanced by more than 20 days, or delayed by more than 60 days, from the first anniversary of the 2025 annual meeting of stockholders, notice must be received not earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (1) the 90th day prior to such annual meeting and (2) the 10th day following the date on which notice of the date of such annual meeting was mailed or public disclosure of the date of such annual meeting was made, whichever occurs first.

Our bylaws also specify requirements relating to the content of the notice which stockholders must provide, including a stockholder nomination for election to our board of directors, to be properly presented at the 2026 annual meeting of stockholders. Proxies solicited by the board will confer discretionary voting authority with respect to these proposals, subject to SEC rules governing the exercise of this authority.

To comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than the company's nominees at the 2026 annual meeting of stockholders must provide written notice to the company that sets forth the information required by Rule 14a-19 under the Exchange Act no later than March 9, 2026. If we change the date of the 2026 annual meeting of stockholders by more than 30 days from the date of this year's Annual Meeting, the written notice must be received by the later of 60 days prior the date of the 2026 annual meeting of stockholders or the 10th calendar day following the day on which the public announcement of the date of the 2026 annual meeting of stockholders is first made.

OUR BOARD OF DIRECTORS ENCOURAGES STOCKHOLDERS TO PARTICIPATE ONLINE IN OUR VIRTUAL ANNUAL MEETING. WHETHER OR NOT YOU PLAN TO PARTICIPATE IN THE VIRTUAL ANNUAL MEETING, YOU ARE URGED TO VOTE BY PROXY OVER THE INTERNET, BY TELEPHONE OR BY MAIL AS DESCRIBED IN THE ENCLOSED PROXY CARD. A PROMPT RESPONSE WILL GREATLY FACILITATE ARRANGEMENTS FOR THE VIRTUAL ANNUAL MEETING AND YOUR COOPERATION WILL BE APPRECIATED. YOU WILL NOT BE ABLE TO ATTEND THE ANNUAL MEETING IN PERSON.



Appendix A

**CERTIFICATE OF AMENDMENT TO
RESTATED CERTIFICATE OF INCORPORATION
OF
ALNYLAM PHARMACEUTICALS, INC.**

Alnylam Pharmaceuticals, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL") does hereby certify:

1. Pursuant to Section 242 of the DGCL, this Certificate of Amendment to Restated Certificate of Incorporation (this "Amendment") amends the provisions of the Restated Certificate of Incorporation of the Corporation (the "Certificate").
2. This amendment has been approved and duly adopted by the Corporation's Board of Directors and stockholders in accordance with Section 242 of the DGCL.
3. The Certificate is hereby amended as follows:

Article SEVENTH is hereby amended and restated in its entirety to read as set forth below:

"SEVENTH: No director or Officer of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or Officer, except for liability (a) for any breach of the director's or Officer's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) of a director under Section 174 of the DGCL, (d) for any transaction from which the director or Officer derived an improper personal benefit or (e) of an Officer in any action by or in the right of the Corporation. If the DGCL is amended hereafter to authorize the further elimination or limitation of the liability of directors or Officers, then the liability of a director or Officer of the Corporation, as applicable, shall be eliminated or limited to the fullest extent authorized by the DGCL, as so amended. Solely for the purposes of this Article SEVENTH, "Officer" shall mean a person who, at the time of the act or omission as to which liability is asserted, falls within the meaning of the term "officer," as defined in Section 102(b)(7) of the DGCL. No amendment to or repeal or elimination of this Article SEVENTH shall apply to or have any effect on the liability or alleged liability of any director or Officer of the Corporation for or with respect to any acts or omissions of such director or Officer occurring prior to such amendment, repeal or elimination."

* * * * *

IN WITNESS WHEREOF, the undersigned authorized officer of the Corporation has executed this Certificate of Amendment to Restated Certificate of Incorporation as of , 2025.

ALNYLAM PHARMACEUTICALS, INC.

Name:
Title:



Appendix B

ALNYLAM PHARMACEUTICALS, INC. SECOND AMENDED AND RESTATED 2018 STOCK INCENTIVE PLAN

1. Purpose

The purpose of this Second Amended and Restated 2018 Stock Incentive Plan (the "**Plan**") of Alnylam Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "**Company**" shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "**Code**") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "**Board**").

2. Eligibility

All of the Company's employees, officers and directors are eligible to be granted options, stock appreciation rights ("**SARs**"), restricted stock, restricted stock units ("**RSUs**") and other stock-based awards (each, an "**Award**") under the Plan. Consultants and advisors to the Company (as such terms are defined and interpreted for purposes of Form S-8 (or any successor form)) are also eligible to be granted Awards. Each person who is granted an Award under the Plan is deemed a "**Participant**."

3. Administration and Delegation

- a. Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.
- b. Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "**Committee**"). All references in the Plan to the "**Board**" shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or officers.
- c. Delegation to Officers. To the extent permitted by applicable law, the Board may delegate to one or more officers of the Company the power to grant Options and other Awards that constitute rights under Delaware law (subject to any limitations under the Plan) to employees or officers of the Company or any of its present or future subsidiary corporations and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of the Awards to be granted by such officers (including the exercise price of the Awards, which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to such Awards that the officers may grant; provided further, however, that no officer shall be authorized to grant Awards to any "executive officer" of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) or to any "officer" of the Company (as defined by Rule 16a-1 under the Exchange Act, an "**Executive Officer**") or to any Non-employee Director (as defined below). The Board may not delegate authority under this Section 3(c) to grant restricted stock, unless Delaware law then permits such delegation.
- d. Awards to Non-employee Directors. Discretionary Awards to directors who are not employees of the Company at the time of grant ("**Non-employee Directors**") will only be granted and administered by a Committee, all of the members of which are independent as defined by the rules of the NASDAQ Stock Market ("NASDAQ").

4. Stock Available for Awards

a. Number of Shares; Share Counting.

1. Authorized Number of Shares. Subject to adjustment under Section 10, Awards may be made under the Plan for up to the sum of (i) 26,790,000 shares of common stock, \$0.01 par value per share, of the Company (the "**Common Stock**"), (ii) 1,410,603 shares of Common Stock (representing the number of shares that remained available for grants under the Company's Second Amended and Restated 2009 Stock Incentive Plan (the "**2009 Plan**") immediately prior to the Original Effective Date) and (iii)

shares of Common Stock underlying any awards granted under the 2009 Plan that expire, or are terminated, surrendered or canceled without having been fully exercised or are forfeited in whole or in part after the Original Effective Date and become available for issuance under the Plan in accordance with Section 4(a)(3). No more than 42,270,000 shares may be issued in the form of Incentive Stock Options (as hereinafter defined). Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

2. **Fungible Share Pool.** Subject to adjustment under Section 10, any Award that is not a Full-Value Award shall be counted against the share limits specified in Sections 4(a)(1) as one share for each share of Common Stock subject to such Award and any Award that is a Full-Value Award shall be counted against the share limits specified in Sections 4(a)(1) as 1.5 shares for each one share of Common Stock subject to such Full-Value Award. "**Full-Value Award**" means any Restricted Stock Award or Other Stock-Based Award (each as defined below). To the extent a share that was subject to an Award under the Plan or an award under the 2009 Plan that counted as one share is returned to the Plan pursuant to Section 4(a)(3), each applicable share reserve will be credited with one share. To the extent that a share that was subject to a Full-Value Award under the Plan or an award under the 2009 Plan that counted as 1.5 shares is returned to the Plan pursuant to Section 4(a)(3), each applicable share reserve will be credited with 1.5 shares.
3. **Share Counting.** For purposes of counting the number of shares available for the grant of Awards under the Plan, (i) all shares of Common Stock covered by SARs shall be counted against the number of shares available for the grant of Awards; provided, however, that SARs that may be settled only in cash shall not be so counted; (ii) if any Award under the Plan or any award outstanding under the 2009 Plan (A) expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award or award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right) or (B) results in any Common Stock not being issued (including as a result of a SAR that was settleable either in cash or in stock actually being settled in cash or any other Award being settled in cash), the unused Common Stock covered by such Award or award shall again be available for the grant of Awards; provided, however, in the case of Incentive Stock Options (as hereinafter defined), the foregoing shall be subject to any limitations under the Code; and provided further, in the case of SARs, that the full number of shares subject to any stock-settled SAR shall be counted against the shares available under the Plan in proportion to the portion of the SAR actually exercised regardless of the number of shares actually used to settle such SAR upon exercise; (iii) shares of Common Stock delivered (by actual delivery, attestation, or net exercise) to the Company by a Participant to (A) purchase shares of Common Stock upon the exercise of an Award or (B) satisfy tax withholding obligations (including shares retained from the Award creating the tax obligation) shall not be added back to the number of shares available for the future grant of Awards; and (iv) shares of Common Stock repurchased by the Company on the open market using the proceeds from the exercise of an Award shall not increase the number of shares available for future grant of Awards.
- b. **Limits on Awards to Non-Employee Directors.** The maximum value of all compensation, including Awards hereunder, granted or paid to an individual in connection with such individual's initial appointment or election as a Non-employee Director shall be \$1,500,000. The maximum value of all compensation, including Awards hereunder, granted or paid to a Non-employee Director in any calendar year in connection with such individual's service on the Board (excluding for this purpose the value of any compensation, including Awards hereunder, granted under the preceding sentence) shall be \$1,000,000. For the purpose of these limitations, the value of any Award shall be its grant date fair value, as determined in accordance with ASC 718 or successor provision but excluding the impact of estimated forfeitures related to service-based vesting provisions. For the avoidance of doubt, the limitations in this Section 4(b) will not apply to any compensation granted or paid to a Non-employee Director for his or her services to the Company or a subsidiary other than as a Non-employee Director, including, without limitation, as a consultant or adviser to the Company or a subsidiary.
- c. **Substitute Awards.** In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant awards in substitution for any options, stock or stock-based awards granted by such entity or an affiliate thereof (each such award, a "**Substitute Award**"). Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a)(1) or any sub-limits contained in the Plan, except as may be required by reason of Section 422 and related provisions of the Code.
- d. **Minimum Vesting.** Except as provided in the following sentence, and notwithstanding anything in the Plan to the contrary, Awards granted to Participants shall not become exercisable and/or vested (as applicable) prior to the first-year anniversary of the date of grant. Notwithstanding the foregoing, (i) the Board retains the discretion to accelerate the vesting of Awards pursuant to Section 11(h), (ii) annual Awards to Non-Employee Directors that occur in connection with the Company's annual meeting of stockholders may vest on the earlier of the one-year anniversary of the date of grant or the date of the Company's next annual meeting of stockholders which is at least 50 weeks after the immediately preceding year's annual meeting and (iii) the vesting schedule prescribed by the preceding sentence shall not apply to Awards granted, in the aggregate, for up to 5% of the maximum number of authorized shares under the Plan calculated pursuant to Section 4(a)(1).



5. Stock Options

- a. General. The Board may grant options to purchase Common Stock (each, an “**Option**”) and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option that is not intended to be an Incentive Stock Option (as hereinafter defined) shall be designated a “**Nonstatutory Stock Option**”. No term of an Award shall provide for automatic “reload” grants of additional Awards upon the exercise of an Option or SAR.
- b. Incentive Stock Options. An Option that the Board intends to be an “incentive stock option” as defined in Section 422 of the Code (an “**Incentive Stock Option**”) shall only be granted to employees of Alnylam Pharmaceuticals, Inc., any of Alnylam Pharmaceuticals, Inc.’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or if the Company converts an Incentive Stock Option to a Nonstatutory Stock Option.
- c. Exercise Price. The Board shall establish the exercise price of each Option and specify the exercise price in the applicable option agreement. The exercise price shall be not less than 100% of the Fair Market Value (as defined below) on the date the Option is granted; provided that if the Board approves the grant of an Option with an exercise price to be determined on a future date, the exercise price shall be not less than 100% of the Fair Market Value on such future date. “**Fair Market Value**” of a share of Common Stock for purposes of the Plan will be determined as follows:
1. if the Common Stock trades on a national securities exchange, the closing sale price (for the primary trading session) on the date of grant;
 2. if the Common Stock does not trade on any such exchange, the average of the closing bid and asked prices as reported by an authorized OTCBB market data vendor as listed on the OTCBB website (otcbb.com) on the date of grant; or
 3. if the Common Stock is not publicly traded, the Board will determine the Fair Market Value for purposes of the Plan using any measure of value it determines to be appropriate (including, as it considers appropriate, relying on appraisals) in a manner consistent with the valuation principles under Section 409A of the Code, except as the Board or Committee may expressly determine otherwise.

For any date that is not a trading day, the Fair Market Value of a share of Common Stock for such date will be determined by using the closing sale price or average of the bid and asked prices, as applicable, for the immediately preceding trading day and with the timing in the formulas above adjusted accordingly. The Board can substitute a particular time of day or other measure of “closing sale price” or “bid and asked prices” if appropriate because of exchange or market procedures or can, in its sole discretion, use weighted averages either on a daily basis or such longer period as complies with Section 409A of the Code. The Board has sole discretion to determine the Fair Market Value for purposes of this Plan, and all Awards are conditioned on the Participants’ agreement that the Board’s determination is conclusive and binding even though others might make a different determination.

- a. Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement; provided, however, that no Option will be granted for a term in excess of 10 years.
- b. Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Company, together with payment in full as specified in Section 5(f) for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.
- c. Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:
1. in cash or by check, payable to the order of the Company;
 2. except as may otherwise be provided in the applicable option agreement, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;
 3. except as may otherwise be provided in the applicable option agreement, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their Fair Market Value, provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Board in its discretion, (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements, and (iv) if the Participant is an Executive Officer, prior approval is obtained from the Board;



4. with respect to Nonstatutory Options, and except as may otherwise be provided in the applicable option agreement, by delivery of a notice of “net exercise” to the Company, as a result of which the Participant would receive the number of shares of Common Stock underlying the Option so exercised reduced by the number of shares of Common Stock equal to the aggregate exercise price of the Option divided by the Fair Market Value on the date of exercise; provided, if the Participant is an Executive Officer, prior approval is obtained from the Board;
 5. to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by payment of such other lawful consideration as the Board may determine; or
 6. by any combination of the above permitted forms of payment.
- d. Limitation on Repricing. Unless such action is approved by the Company’s stockholders: (1) no outstanding Option granted under the Plan may be amended to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option (other than adjustments pursuant to Section 10) and (2) the Board may not cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option or effect repricing by cancellation in exchange for cash.

6. Director Options

- a. Board Discretion. The Board retains the specific authority to, from time to time, determine the number of shares subject to Options granted to Non-employee Directors under this Section 6, subject to the limitations contained in Section 4(b). All Options granted to Non-employee Directors shall be Nonstatutory Stock Options. The Board also retains the specific authority to issue SARs, Restricted Stock Awards or Other Stock-Based Awards in lieu of Options, subject to the limitations contained in Section 4(b).
- b. Terms of Director Options. Options granted under this Section 6 shall (i) have an exercise price equal to the Fair Market Value on the date of grant, (ii) expire on the earlier of 10 years from the date of grant or three months following cessation of service on the Board, provided that such three month period shall be extended to five years following cessation of service on the Board for any director with five or more years of continuous service on the Board, and (iii) contain such other terms and conditions as the Board shall determine.

7. Stock Appreciation Rights

- a. General. The Board may grant Awards consisting of SARs entitling the holder, upon exercise, to receive an amount of Common Stock or cash or a combination thereof (such form to be determined by the Board) determined by reference to appreciation, from and after the date of grant, in the Fair Market Value of a share of Common Stock over the measurement price established pursuant to Section 7(c). The date as of which such appreciation is determined shall be the exercise date.
- b. Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Fair Market Value on the date the SAR is granted; provided that if the Board approves the grant of a SAR with a measurement price to be determined on a future date, the measurement price shall be not less than 100% of the Fair Market Value on such future date.
- c. Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; provided, however, that no SAR will be granted with a term in excess of 10 years.
- d. Exercise of SARs. SARs may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Company, together with any other documents required by the Board.
- e. Limitation on Repricing. Unless such action is approved by the Company’s stockholders: (1) no outstanding SAR granted under the Plan may be amended to provide a measurement price per share that is lower than the then-current measurement price per share of such outstanding SAR (other than adjustments pursuant to Section 10) and (2) the Board may not cancel any outstanding SAR (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having a measurement price per share lower than the then-current measurement price per share of the cancelled SAR or effect repricing by cancellation in exchange for cash.

8. Restricted Stock; Restricted Stock Units

- a. General. The Board may grant Awards entitling recipients to acquire shares of Common Stock (“**Restricted Stock**”), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. Instead of granting Awards for Restricted Stock, the Board may grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests (“**Restricted Stock Units**”) (Restricted Stock and Restricted Stock Units are each referred to herein as a “**Restricted Stock Award**”).



- b. Terms and Conditions for All Restricted Stock Awards.** Subject to the provisions of the Plan (including, without limitation, Section 4(d)), the Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.
- c. Additional Provisions Relating to Restricted Stock.**
- 1. Dividends.** Participants holding shares of Restricted Stock will be entitled to dividends paid with respect to such shares; provided, however, with respect to any unvested share of Restricted Stock, dividends shall accrue during the vesting period but shall not be paid unless and until such share of Restricted Stock has vested. Any such accrued dividends that are attributable to a share of Restricted Stock shall be paid to the Participant in cash or, in the sole discretion of the Board, in shares of Common Stock having a Fair Market Value (on the date of distribution) equal to the amount of such dividends, upon the vesting of such share and, if such share is forfeited, the Participant shall have no right to such dividends.
 - 2. Stock Certificates.** The Company may require that any stock certificates issued in respect of shares of Restricted Stock shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "**Designated Beneficiary**"). In the absence of an effective designation by a Participant, "**Designated Beneficiary**" shall mean the Participant's estate.
- d. Additional Provisions Relating to Restricted Stock Units.**
- 1. Settlement.** Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company one share of Common Stock or an amount of cash equal to the Fair Market Value of one share of Common Stock, as provided in the applicable Award agreement. The Board may, in its discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant in a manner that complies with Section 409A of the Code.
 - 2. Voting Rights.** A Participant shall have no voting rights with respect to any Restricted Stock Units.
 - 3. Dividend Equivalents.** To the extent provided by the Board, in its sole discretion, a grant of Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ("**Dividend Equivalents**"). Dividend Equivalents shall be credited to an account for the Participants, shall be settled in cash and/or shares of Common Stock and may be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which paid, as determined by the Board in its sole discretion, subject in each case to such terms and conditions as the Board shall establish, in each case to be set forth in the applicable Award agreement. Notwithstanding the foregoing, with respect to any unvested Restricted Stock Unit, Dividend Equivalents shall accrue during the vesting period but shall not be paid unless and until such Restricted Stock Unit has vested. Any such Dividend Equivalents that have accrued and are attributable to a Restricted Stock Unit shall be paid to the Participant in cash or, in the sole discretion of the Board, in shares of Common Stock having a Fair Market Value (on the date of distribution) equal to the amount of such Dividend Equivalents, upon the vesting of such Restricted Stock Unit and, if such Restricted Stock Unit is forfeited, the Participant shall have no right to such Dividend Equivalents.
- 9. Other Stock-Based Awards**
- a. General.** Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ("**Other Stock-Based-Awards**"), including without limitation Awards entitling recipients to receive shares of Common Stock to be delivered in the future. Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine.
 - b. Terms and Conditions.** Subject to the provisions of the Plan (including, without limitation, Section 4(d)), the Board shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price applicable thereto.
- 10. Adjustments for Changes in Common Stock and Certain Other Events**
- a. Changes in Capitalization.** In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the sub-limits, fungible pool and share counting rules set forth in Sections 4(a), (iii) the minimum vesting provisions set forth in Section 4(d), (iv) the number and class of securities and exercise price per share of each outstanding Option and each Option issuable under Section 6, (v) the share- and per-share provisions and the measurement price of each SAR, (vi) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award and (vii) the share- and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the



exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

b. Reorganization Events.

1. **Definition.** A “**Reorganization Event**” shall mean: (a) any merger or consolidation of the Company with or into another entity where the stockholders of the Company immediately before the merger or consolidation would not, immediately after the merger or consolidation, beneficially own, directly or indirectly, shares representing a majority of the outstanding voting shares of the resulting or successor entity (or its ultimate parent, if applicable), (b) any transfer or disposition of all or substantially all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.
2. **Consequences of a Reorganization Event on Awards Other than Restricted Stock Awards.** In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock Awards on such terms as the Board determines: (i) provide that Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that the Participant’s unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the “**Acquisition Price**”), make or provide for a cash payment to a Participant equal to the excess, if any, of (A) the Acquisition Price times the number of shares of Common Stock subject to the Participant’s Awards (to the extent the exercise price does not exceed the Acquisition Price) over (B) the aggregate exercise price of all such outstanding Awards and any applicable tax withholdings, in exchange for the termination of such Awards, (v) provide that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section 10(b), the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

For purposes of clause (i) above, an Option shall be considered assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

3. **Consequences of a Reorganization Event on Restricted Stock Awards.** Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company’s successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award; provided, however, that the Board may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company, either initially or by amendment. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock Awards then outstanding shall automatically be deemed terminated or satisfied.

11. General Provisions Applicable to Awards

- a. **Transferability of Awards.** Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an Incentive Stock Option, pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant; provided, however, that the Board may permit or provide in an Award for the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, family trust or other entity established for the benefit of the Participant and/or an immediate family member thereof if, with respect to such proposed transferee, the Company would be eligible to use a Form S-8 for the registration of the sale of the Common Stock subject to such Award under the Securities Act of 1933, as amended; provided, further, that the Company shall not be required to recognize any such transfer until such time as the Participant and such permitted transferee shall, as a condition to such transfer, deliver to the



Company a written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.

- b. **Documentation.** Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.
- c. **Board Discretion.** Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.
- d. **Termination of Status.** The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.
- e. **Withholding.** The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise or release from forfeiture of an Award or, if the Company so requires, at the same time as is payment of the exercise price unless the Company determines otherwise. A Participant may satisfy such tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; provided, however, that if the Participant is an Executive Officer, prior approval is obtained from the Board; provided further, that where stock is being used to satisfy such tax obligations, the total tax withholding does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid liability accounting treatment. Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.
- f. **Amendment of Award.** Except as otherwise provided in Section 4(d) with respect to the vesting of Awards or Section 12(d) with respect to actions requiring stockholder approval, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, would not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 10 hereof.
- g. **Conditions on Delivery of Stock.** The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.
- h. **Acceleration.** The Board may at any time provide that any Award shall become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.
- i. **No Dividends on Unvested Awards:** No Dividends on Options or SARs. Notwithstanding anything herein to the contrary, to the extent any Participant is entitled to receive dividends or dividend equivalents with respect to any Award, no such dividends or dividend equivalents shall be paid unless and until the underlying Award has vested. In addition, in no event shall any dividend or dividend equivalents be paid with respect to any Options or SARs.

12. Miscellaneous

- a. **No Right To Employment or Other Status.** No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.
- b. **No Rights As Stockholder.** Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.
- c. **Effective Date and Term of Plan.** The 2018 Stock Incentive Plan became effective on May 10, 2018 (the "**Original Effective Date**"), the Amended and Restated 2018 Stock Incentive Plan became effective on May 18, 2022, the date it was approved by the Company's stockholders, and this Second Amended and Restated 2018 Stock Incentive shall become effective upon the date it is approved by the Company's stockholders (the "**Effective Date**"). No Awards shall be granted under the Plan after the expiration of 10 years from the Effective Date, but Awards previously granted may extend beyond that date.



- d. Amendment of Plan.** The Board may amend, suspend or terminate the Plan or any portion thereof at any time provided that no amendment that would require stockholder approval under the NASDAQ rules may be made effective unless and until the Company's stockholders approve such amendment (including, for the avoidance of doubt, any amendment of the provisions of Sections 5(g) and 7(f) that requires stockholder approval to effect certain actions that constitute a repricing under NASDAQ). In addition, if at any time the approval of the Company's stockholders is required as to any other modification or amendment under Section 422 of the Code or any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 12(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment does not materially and adversely affect the rights of Participants under the Plan. Options and other Awards, other than Restricted Stock, may be granted that are conditioned upon stockholder approval of any amendment adding shares of Common Stock to the Plan, but no such conditioned Options or other Awards may be exercised or settled, as applicable, until stockholder approval is obtained. If stockholder approval is not obtained, all such conditioned Option and other Award grants shall be cancelled and be of no further force or effect.
- e. Authorization of Sub-Plans.** The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities or tax laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.
- f. Non-U.S. Participants.** Awards may be granted to Participants who are non-U.S. citizens or residents employed outside the United States, or both, on such terms and conditions different from those applicable to Awards to Participants employed in the United States as may, in the judgment of the Board, be necessary or desirable in order to recognize differences in local law or tax policy. The Board also may impose conditions on the exercise or vesting of Awards in order to minimize the Board's obligation with respect to tax equalization for Participants on assignments outside their home country. The Board may approve such supplements to or amendments, restatements or alternative versions of the Plan as it may consider necessary or appropriate for such purposes, without thereby affecting the terms of this Plan as in effect for any other purpose, and the Secretary or other appropriate officer of the Company may certify any such document as having been approved and adopted in the same manner as this Plan.
- g. Compliance with Section 409A of the Code.** Except as provided in individual Award agreements initially or by amendment, if and to the extent any portion of any payment, compensation or other benefit provided to a Participant in connection with his or her employment termination is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code and the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, as determined by the Company in accordance with its procedures, by which determination the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A of the Code) (the "**New Payment Date**"), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule. For purposes of Section 409A of the Code, each payment made under the Plan or any Award will be treated as a separate payment. With regard to any payment considered to be nonqualified deferred compensation under Section 409A of the Code, to the extent applicable, that is payable upon a change in control of the Company or other similar event, to the extent required to avoid the imposition of an additional tax, interest or penalty under Section 409A of the Code, no amount will be payable on such transaction or event unless it constitutes a "change in control event" within the meaning of Section 1.409A-3(i)(5) of the Treasury Regulations.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section. The Company intends that any Award determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code complies with Section 409A of the Code. To the extent that any provision of the Plan or of any Award agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that the Plan and such Award complies with Section 409A of the Code. Accordingly, to the extent that any Award is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code, the Award shall be subject to such additional rules and requirements as specified by the Board from time to time in order to comply with Section 409A of the Code.

- h. Limitations on Liability.** Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee, or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, other employee, or agent of the Company. The Company will indemnify and hold harmless each director, officer, other employee, or agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Board's approval) arising out of any act or omission to act concerning this Plan unless arising out of such person's own fraud or bad faith.



- i. Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than such state.
- j. Clawback. Grants made under this Plan shall be subject to the Company's Policy for the Recovery of Erroneously Award Incentive-Based Compensation, as the same may be amended and in effect from time to time, to the extent applicable to a Participant, and to any other clawback or recoupment policies of the Company in effect from time to time.





www.alnylam.com

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CAMBRIDGE, MA 02142

VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 p.m. Eastern Time on May 7, 2025 for shares held directly and by 11:59 p.m. Eastern Time on May 5, 2025 for shares held in a 401(k) Plan. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/ALNY2025

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions. There will be no physical location at which stockholders may attend the meeting.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 p.m. Eastern Time on May 7, 2025 for shares held directly and by 11:59 p.m. Eastern Time on May 5, 2025 for shares held in a 401(k) Plan. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

If you received printed proxy materials by hand, mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

E61195-P19478

KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

ALNYLAM PHARMACEUTICALS, INC.

Proposals — The Board of Directors recommends you vote FOR each of the listed director nominees to serve for a term ending in 2028 and FOR Proposals 2, 3, 4 and 5.

1. To elect the following nominees as Class III directors of Alnylam:	For	Against	Abstain
a. Carolyn R. Bertozzi, Ph.D.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Margaret A. Hamburg, M.D.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Colleen F. Reitan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Amy W. Schulman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	For	Against	Abstain
2. To approve an Amendment to our Restated Certificate of Incorporation allowing for officer exculpation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. To approve the second amended and restated 2018 Stock Incentive Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To approve, in a non-binding advisory vote, the compensation of Alnylam's named executive officers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. To ratify the appointment of PricewaterhouseCoopers LLP, an independent registered public accounting firm, as Alnylam's independent auditors for the fiscal year ending December 31, 2025.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In their discretion, the Proxies are authorized to vote upon any other business that may properly come before the annual meeting or at any adjournment(s) thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX]	Date

Signature (Joint Owners)	Date

Important Notice Regarding the Availability of Proxy Materials for the Virtual Annual Meeting of Stockholders to be Held on May 8, 2025:

The Proxy Statement, our Annual Report on Form 10-K and our Annual Report to Stockholders are available for viewing, printing and downloading at www.proxyvote.com.

E61196-P19478

Proxy — ALNYLAM PHARMACEUTICALS, INC.

VIRTUAL ANNUAL MEETING OF STOCKHOLDERS

To be held on May 8, 2025 at 8:30 a.m., Eastern Time

This Proxy is solicited on behalf of the Board of Directors of Alnylam Pharmaceuticals, Inc. (“Alnylam”).

The undersigned, having received notice of the annual meeting of stockholders and the proxy statement therefor and revoking all prior proxies, hereby appoints each of Yvonne L. Greenstreet, M.D., Robert W. Hesslein and Jeffrey V. Poulton (each with full power of substitution), as Proxies of the undersigned, to participate in the annual meeting of stockholders of Alnylam to be held online at 8:30 a.m., Eastern Time, on Thursday, May 8, 2025, and any adjourned or postponed session thereof, and there to vote and act as indicated upon the matters on the reverse side in respect of all shares of common stock which the undersigned would be entitled to vote or act upon, with all powers the undersigned would possess if personally present.

You can revoke your proxy at any time before it is voted at the annual meeting by (i) submitting another properly completed proxy bearing a later date; (ii) giving written notice of revocation to the Secretary of Alnylam; (iii) if you submitted a proxy through the Internet or by telephone, by submitting a proxy again through the Internet or by telephone prior to the close of the Internet voting facility or the telephone voting facility; or (iv) voting online at the annual meeting. If you hold any of the shares of common stock in a fiduciary, custodial or joint capacity or capacities, this proxy is signed by you in every such capacity as well as individually.

The shares of common stock of Alnylam represented by this proxy will be voted as directed by you for the proposals herein proposed by Alnylam. If no direction is given with respect to a proposal specified herein, this proxy will be voted in accordance with the recommendation of the Board of Directors. In their discretion, the Proxies are authorized to vote upon any other business that may properly come before the annual meeting or any adjournment(s) thereof.

Please vote, date and sign on reverse side and return promptly in the enclosed pre-paid envelope.

Your vote is important. Please vote immediately.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE
SEE REVERSE SIDE