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 | |
| X | 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): | | |
| \boxtimes | 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. | |

Your **Vote** Counts!

ALNYLAM PHARMACEUTICALS, INC.

2024 Annual Meeting
Vote by May 15, 2024 11:59 PM ET. For shares held in a
401(k) Plan, vote by May 13, 2024 11:59 PM ET.

ALNYLAM PHARMACEUTICALS, INC. ATTN: SECRETARY 675 WEST KENDALL STREET HENRI A. TERMEER SQUARE CAMBRIDGE MA 02142

V36688-P08487-Z87180

You invested in ALNYLAM PHARMACEUTICALS, INC. and it's time to vote!

You have the right to vote on proposals being presented at the Annual Meeting. This is an important notice regarding the availability of proxy material for the stockholder meeting to be held on May 16, 2024.

Get informed before you vote

View the Proxy Statement, Annual Report on Form 10-K and Annual Report to Stockholders online OR you can receive a free paper or email copy of the material(s) by requesting prior to May 2, 2024. If you would like to request a copy of the material(s) for this and/or future stockholder meetings, you may (1) visit www.ProxyVote.com, (2) call 1-800-579-1639 or (3) send an email to sendmaterial@proxyvote.com. If sending an email, please include your control number (indicated below) in the subject line. Unless requested, you will not otherwise receive a paper or email copy.



For complete information and to vote, visit www.ProxyVote.com

Control #

Smartphone users

Point your camera here and vote without entering a control number





Vote Virtually at the Meeting*

May 16, 2024 10:30 a.m., Eastern Time

Virtually at: www.virtualshareholdermeeting.com/ALNY2024

^{*}Please check the meeting materials for any special requirements for meeting attendance.

Vote at www.ProxyVote.com

THIS IS NOT A VOTABLE BALLOT

This is an overview of the proposals being presented at the upcoming stockholder meeting. Please follow the instructions on the reverse side to vote these important matters.

| | | Board |
|--|--|--------------|
| Voting Items | | Recommends |
| 1. | To elect the following nominees as Class II directors of Alnylam: | |
| | Nominees: | |
| | Dennis A. Ausiello, M.D. | For |
| 1b. | Olivier Brandicourt, M.D. | ⊘ For |
| 1c. | Peter N. Kellogg | For |
| 1d. | David E.I. Pyott | ⊘ For |
| 2. | To approve, in a non-binding advisory vote, the compensation of Alnylam's named executive officers. | ⊘ For |
| 3. | 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, 2024. | ⊘ For |
| 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. | | |
| | | |

Prefer to receive an email instead? While voting on www.ProxyVote.com, be sure to click "Delivery Settings".