

---

---

**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.
- 
-

# 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](http://www.ProxyVote.com), (2) call 1-800-579-1639 or (3) send an email to [sendmaterial@proxyvote.com](mailto: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](http://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](http://www.virtualshareholdermeeting.com/ALNY2024)

\*Please check the meeting materials for any special requirements for meeting attendance.

## 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.

| Voting Items                                                                                                                                                                                  | Board Recommends |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1. To elect the following nominees as Class II directors of Alnylam:<br><b>Nominees:</b>                                                                                                      |                  |
| 1a. 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](http://www.ProxyVote.com), be sure to click "Delivery Settings".