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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
Date of Report (Date of earliest event reported): May 20, 2024 (May 16, 2024)

Alnylam Pharmaceuticals, Inc.

Delaware 001-36407 77-0602661
(State or Other Jurisdiction (Commission (IRS Employer of Incorporation) File Number) Identification No.)

675 West Kendall Street, Henri A. Termeer Square
Cambridge, Massachusetts 02142
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (617) 551-8200

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<table>
<thead>
<tr>
<th>Title of Each Class</th>
<th>Trading Symbol(s)</th>
<th>Name of Each Exchange on Which Registered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock, $0.01 par value per share</td>
<td>ALNY</td>
<td>The Nasdaq Stock Market LLC</td>
</tr>
</tbody>
</table>

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐
**Item 5.07. Submission of Matters to a Vote of Security Holders**

The 2024 Annual Meeting of Stockholders (the “Annual Meeting”) of Alnylam Pharmaceuticals, Inc. (the “Company”) was held on May 16, 2024. As of March 22, 2024, the record date for the Annual Meeting, 126,452,099 shares of the Company’s common stock were issued and outstanding. A summary of the matters voted upon by stockholders at the Annual Meeting is set forth below.

1. The Company’s stockholders re-elected the four persons listed below as Class II directors, each to serve until the Company’s 2027 annual meeting of stockholders or until his successor is duly elected and qualified. The voting results were as follows:

<table>
<thead>
<tr>
<th>Director</th>
<th>Votes For</th>
<th>Votes Against</th>
<th>Abstentions</th>
<th>Broker Non-Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dennis A. Ausiello, M.D.</td>
<td>103,971,532</td>
<td>8,960,235</td>
<td>14,285</td>
<td>4,991,057</td>
</tr>
<tr>
<td>Olivier Brandicourt, M.D.</td>
<td>106,444,201</td>
<td>6,487,472</td>
<td>14,379</td>
<td>4,991,057</td>
</tr>
<tr>
<td>Peter N. Kellogg</td>
<td>108,577,015</td>
<td>4,354,577</td>
<td>14,460</td>
<td>4,991,057</td>
</tr>
<tr>
<td>David E.I. Pyott</td>
<td>102,273,209</td>
<td>10,658,278</td>
<td>14,565</td>
<td>4,991,057</td>
</tr>
</tbody>
</table>

The terms of office of the following directors continued after the Annual Meeting:
- Carolyn R. Bertozzi, M.D.
- Michael W. Bonney
- Yvonne L. Greenstreet, MBChB
- Margaret A. Hamburg, M.D.
- Colleen F. Reitan
- Amy W. Schulman
- Phillip A. Sharp, Ph.D.
- Elliott Sigal, M.D., Ph.D.

2. The Company’s stockholders approved, in a non-binding advisory vote, the compensation of the Company’s named executive officers. The voting results were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Votes For</th>
<th>Votes Against</th>
<th>Abstentions</th>
<th>Broker Non-Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>106,783,262</td>
<td>6,133,628</td>
<td>29,162</td>
<td>4,991,057</td>
</tr>
</tbody>
</table>
3. The Company’s stockholders ratified the appointment by the Company’s Board of Directors of PricewaterhouseCoopers LLP as the Company’s independent auditors for the fiscal year ending December 31, 2024. The voting results were as follows:

<table>
<thead>
<tr>
<th>Votes For</th>
<th>Votes Against</th>
<th>Abstentions</th>
<th>Broker Non-Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>114,460,115</td>
<td>3,456,326</td>
<td>20,668</td>
<td>0</td>
</tr>
</tbody>
</table>

Item 9.01.  Financial Statements and Exhibits

(d) Exhibits

104   Cover Page Interactive Data File (embedded within the Inline XBRL document).
SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 20, 2024

ALNYLAM PHARMACEUTICALS, INC.

By: /s/ Jeffrey V. Poulton

Jeffrey V. Poulton
Executive Vice President, Chief Financial Officer