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 the appropriate box):  
☒ No fee required. 
☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.  

(1) Title of each class of securities to which transaction applies:  

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(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):  

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☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.  

(1) Amount previously paid:
(2)  Form, Schedule or Registration Statement No.:

(3)  Filing Party:

(4)  Date Filed:
April 8, 2019

To our Stockholders:

We are writing to you to request your support at our 2019 annual meeting by voting in accordance with the recommendations of our Board of Directors, or Board. In particular, we ask that you vote "FOR" the election of Steven M. Paul, M.D. as a director of Alnylam Pharmaceuticals, Inc., along with the other director nominees named in our 2019 Proxy Statement.

Certain proxy advisory firms have recommended votes “FOR” three of the four director nominees nominated by the Board, but recommended “AGAINST” Dr. Paul’s election. We understand that the recommendations to vote “AGAINST” Dr. Paul are solely due to his 2018 Board and committee meeting attendance record.

**Dr. Paul’s Attendance Record**

In 2018, Dr. Paul attended fewer than 75% of the meetings of the Board and committees on which he served. In 2017, Dr. Paul attended 100% of the meetings of the Board and the committees on which he served and attended more than 90% of such meetings in 2016. In all prior years since his initial election to the Board, Dr. Paul attended greater than 75% of the aggregate number of meetings of the Board and committees on which he served.

During our most recent fiscal year, Dr. Paul attended 75% of our regularly scheduled Board meetings. However, Dr. Paul’s required attendance to present at an unforeseen meeting with a review division of the United States Food and Drug Administration, or FDA, with respect to a drug in development by another company that he is affiliated with, prevented him from attending regular meetings of our compensation committee and Board held December 3-4, 2018. In the absence of this unforeseeable conflict due to an important meeting with the FDA, Dr. Paul’s attendance in 2018 would have been greater than 75%.

Throughout 2018, Dr. Paul participated in all major decisions of the Board, and kept himself apprised of all Company developments through regular communications with his fellow directors and management. For meetings that Dr. Paul was unable to attend, he received meeting materials and held pre-meeting or post-meeting discussions with relevant members of the Board, Board committees, or management to review and provide input on the topics covered during such meetings. In addition, management often seeks Dr. Paul’s guidance outside of meetings on scientific matters, and every major transaction of the Company during Dr. Paul’s tenure beginning in 2010, including during the last fiscal year, has been undertaken with his review, input and approval.
In discussions with Dr. Paul, he has re-affirmed his commitment to attend all scheduled meetings of the Board and the committees on which he serves, absent illness or a family emergency.

**Request for Support**

Dr. Paul has been a highly valued Board member for over eight years. He brings to our Board more than 20 years of executive leadership experience in the biopharmaceutical industry and 35 years of scientific research experience, making him a critical member of our science and technology committee, which oversees our research and clinical development programs. In addition, his expertise in the field of neuroscience and his extensive experience in central nervous system, or CNS, drug development is integral to our emerging pipeline targeting the CNS, announced in 2018, and make him particularly well-suited to continue to serve on our Board as we advance our efforts to discover and develop RNAi therapeutics directed to CNS targets.

We believe Dr. Paul’s strong attendance record over many years preceding 2018, and the unforeseeable conflict with the FDA that arose for Dr. Paul in early December constitute unassailable mitigating circumstances and once again we urge all stockholders to vote “FOR” the re-election of Dr. Paul to our Board. If any stockholder has already submitted a vote “AGAINST” Dr. Paul, we urge each such stockholder to resubmit their proxy with a “FOR” vote on the re-election of Dr. Paul.

Thank you for your consideration and support.

Very truly yours,

John M. Maraganore, Ph.D.
*Chief Executive Officer and Director*
On behalf of the Board of Directors of Alnylam Pharmaceuticals, Inc.