



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

DIVISION OF
CORPORATION FINANCE

February 18, 2021

Mary Beth Delena
Deputy General Counsel
675 West Kendall Street
Henri A. Termeer Square
Cambridge, MA

Re: ALNYLAM PHARMACEUTICALS, INC.
Form 10-Q for the quarterly period ended September 30, 2020
Exhibit No. 10.1
Filed November 5, 2020
File No. 001-36407

Dear Ms. Delena:

We have concluded our assessment of your redacted exhibit for compliance with applicable form requirements and will process your supplemental response and related materials in accordance with your request.

Sincerely,

Division of Corporation Finance