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): September 14, 2020

RHYTHM PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) **001-38223** (Commission File Number) 46-2159271 (IRS Employer Identification Number)

222 Berkeley Street 12th Floor Boston, MA 02116

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (857) 264-4280

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:

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:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	RYTM	The Nasdaq Stock Market LLC (Nasdaq Global Market)

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 \boxtimes

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 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On September 14, 2020, Rhythm Pharmaceuticals, Inc. (the "Company") announced the departure of Nithya Desikan, the Company's Chief Commercial Officer. The termination of Ms. Desikan's employment is expected to be effective on September 30, 2020. In connection with Ms. Desikan's separation from the Company, the Company expects to enter into a separation agreement and release with Ms. Desikan, pursuant to which Ms. Desikan will be eligible to receive: (i) nine months of continued base salary; (ii) payment or reimbursement of continued healthcare premiums for up to nine months; (iii) acceleration of the restricted stock unit award granted to Ms. Desikan in June 2020; and (iv) extended exercisability of each non-qualified stock option held by Ms. Desikan until March 31, 2021 (or if earlier, the final expiration date of the option). The foregoing severance benefits are subject to Ms. Desikan's continued compliance with certain confidentiality obligations and restrictive covenants.

Item 8.01. Other Events.

On September 14, 2020, the Company announced the appointment of Yann Mazabraud as the Executive Vice President, Head of International of the Company, effective on October 5, 2020.

Forward-Looking Statements

This Current Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Current Report that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the Company's entry into a separation agreement with Ms. Desikan and the expected date of Ms. Desikan's termination of employment. Statements using words such as "expect", "anticipate", "believe", "may", "will" and similar terms are also forward-looking statements. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the important factors discussed under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020 and our other filings with the Securities and Exchange Commission. Except as required by law, we undertake no obligations to make any revisions to the forward-looking statements contained in this Current Report or to update them to reflect events or circumstances occurring after the date of this Current Report, whether as a result of new information, future developments or otherwise.

SIGNATURES

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

RHYTHM PHARMACEUTICALS, INC.

Date: September 16, 2020

By: /s/ Hunter Smith

Hunter Smith Chief Financial Officer