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): June 17, 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:

 \square Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

 \square 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 ⊠

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.

On June 17, 2020, Rhythm Pharmaceuticals, Inc. (the "Company") held its Annual Meeting of Stockholders. A total of 39,346,184 shares of common stock were present online or represented by proxy at the meeting, representing approximately 89% percent of the Company's outstanding common stock as of the April 20, 2020 record date. The following are the voting results for the proposals considered and voted upon at the meeting, all of which were described in the Company's definitive proxy statement filed with the Securities and Exchange Commission on April 29, 2020.

Item 1 — Election of two Class III Directors to serve until the 2023 Annual Meeting of Stockholders, and until their respective successors have been duly elected and qualified.

NOMINEE	Votes FOR	Votes WITHHELD	Broker Non-Votes
David W. J. McGirr	34,150,993	3,361,398	1,833,793
David P. Meeker, M.D.	31,315,315	6,197,076	1,833,793

Item 2 — Ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the year ending December 31, 2020.

Votes FOR	Votes AGAINST	Votes ABSTAINED	Broker Non-Votes
39,309,170	2,285	34,729	0

Based on the foregoing votes, David W. J. McGirr and David P. Meeker, M.D. were elected as Class III Directors and Item 2 was approved.

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: June 18, 2020 By: /s/ Hunter Smith

Hunter Smith

Interim President and Chief Executive Officer and Chief Financial

Officer