

**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): **October 10, 2017**

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)

500 Boylston Street, 11th Floor
Boston, MA 02116
(Address of principal executive offices, including 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))

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 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year

On October 10, 2017, Rhythm Pharmaceuticals, Inc.'s (the "Company") amended and restated certificate of incorporation (the "Certificate of Incorporation") filed with the Secretary of State of the State of Delaware and its bylaws (the "Bylaws") became effective in connection with the closing of the initial public offering of shares of the Company's common stock. As described in the Registration Statement on Form S-1 (File No. 333-220337), as amended, the Company's board of directors and stockholders previously approved the amendment and restatement of these documents to be effective immediately prior to the closing of the Company's initial public offering.

As amended and restated, the Certificate of Incorporation and the Bylaws contain provisions that, among other things:

- authorize 120,000,000 shares of common stock;
- delete all references to the various series of preferred stock that were previously authorized and instead create 10,000,000 shares of undesignated preferred stock with terms to be set by the board of directors, which rights could be senior to those of the common stock;

- do not provide for cumulative voting in the election of directors, which would otherwise allow less than a majority of stockholders to elect director candidates;
- require the advance notice of nominations for election to the board of directors or for proposing matters that can be acted upon at a stockholders' meeting;
- allow the board of directors to alter the bylaws without obtaining stockholder approval;
- eliminate the rights of stockholders to call a special meeting of stockholders and to take action by written consent in lieu of a meeting;
- require the approval of at least 75% of the shares entitled to vote to remove a director for cause;
- require the approval of at least 75% of the shares entitled to vote to adopt, amend or repeal the Bylaws or repeal the provisions of the Certificate of Incorporation regarding the election and removal of directors;
- designate the Court of Chancery of the State of Delaware to be the sole and exclusive forum for certain actions, including, but not limited to, derivative actions or proceedings brought on behalf of the Company or actions asserting claims of breach of a fiduciary duty owed by any of the Company's directors, officers or other employees to the Company or the Company's stockholders, unless the Company consents in writing to the selection of an alternative forum; and
- establish a classified board of directors, as a result of which the successors to the directors whose terms have expired will be elected to serve from the time of election and qualification until the third annual meeting following their election.

The foregoing description of the Certificate of Incorporation and the Bylaws is qualified in its entirety by reference to (1) the Certificate of Incorporation filed as Exhibit 3.1 hereto and (2) the Bylaws filed as Exhibit 3.2 hereto, each of which is incorporated herein by reference.

Item 8.01 Other Events.

On October 10, 2017, the Company completed its initial public offering of 8,107,500 shares of its common stock at a price to the public of \$17.00 per share, which includes the exercise in full by the underwriters of the offering of their option to purchase an additional 1,057,500 shares of the Company's common stock. A copy of the press release announcing the closing of the initial public offering is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

2

Item 9.01 Financial Statements and Exhibits.

| Exhibit No. | Description |
|-------------|---|
| 3.1 | Amended and Restated Certificate of Incorporation of Rhythm Pharmaceuticals, Inc., incorporated by reference to our Registration Statement on Form S-1 (Registration No. 333-220337). |
| 3.2 | Bylaws of Rhythm Pharmaceuticals, Inc., incorporated by reference to our Registration Statement on Form S-1 (Registration No. 333-220337). |
| 99.1 | Press release dated October 10, 2017, filed herewith. |

3

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.

RYHTHM PHARMACEUTICALS, INC.

Date: October 10, 2017

By: /s/ Hunter Smith
 Hunter Smith
 Chief Financial Officer

4



Rhythm Pharmaceuticals, Inc. Announces Closing of Initial Public Offering and Full Exercise of Underwriters' Option to Purchase Additional Shares

Boston, MA — October 10, 2017 — Rhythm Pharmaceuticals, Inc. (NASDAQ:RYTM), a biopharmaceutical company focused on the development and commercialization of peptide therapeutics for treatment of rare genetic deficiencies that result in life-threatening metabolic disorders, today announced the closing of its initial public offering of 8,107,500 shares of common stock at a public offering price of \$17.00 per share, which includes the exercise in full by the underwriters of their option to purchase up to an additional 1,057,500 shares of common stock. The aggregate gross proceeds to Rhythm from the offering were approximately \$138 million, before underwriting discounts, commissions and offering expenses. All of the shares in the offering were offered by Rhythm. The shares commenced trading on the NASDAQ Global Market on October 5, 2017 under the ticker symbol "RYTM."

Morgan Stanley, BofA Merrill Lynch and Cowen acted as the lead book-running managers for the offering and Needham & Company acted as the lead manager for the offering.

A registration statement relating to the securities sold in the offering was declared effective by the Securities and Exchange Commission on October 4, 2017. The offering was made only by means of a prospectus. Copies of the final prospectus relating to the offering may be obtained from: Morgan Stanley, Attention: Prospectus Department, 180 Varick Street, 2nd Floor, New York, New York 10014; BofA Merrill Lynch, Attention: Prospectus Department, NC1-004-03-43, 200 North College Street, 3rd floor, Charlotte, NC 28255-0001; or Cowen, Attention: Prospectus Department, c/o Broadridge Financial Services, 1155 Long Island Avenue, Edgewood, NY 11717.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About Rhythm

Rhythm is a biopharmaceutical company focused on the development and commercialization of peptide therapeutics for the treatment of rare genetic deficiencies that result in life-threatening metabolic disorders. Rhythm's lead peptide product candidate is setmelanotide, a first-in-class melanocortin-4 receptor (MC4R) agonist for the treatment of rare genetic disorders of obesity. Rhythm supports The Genetic Obesity Project (www.GeneticObesity.com), which is dedicated to improving the understanding of severe obesity that is caused by specific genetic defects. The company is based in Boston, MA.

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