
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. 2)*

RHYTHM PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

(CUSIP Number)

03/31/2026

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

SCHEDULE 13G

CUSIP No.

Names of Reporting Persons

1

Perceptive Advisors LLC

Check the appropriate box if a member of a Group (see instructions)

2

(a)

(b)

3

Sec Use Only

Citizenship or Place of Organization

4

DELAWARE

Number of Shares Beneficially Owned by Each Reporting Person With: 5 Sole Voting Power
0.00
6 Shared Voting Power
3,519,626.00
7 Sole Dispositive Power
0.00
8 Shared Dispositive Power
3,519,626.00

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,519,626.00
10 Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

11 Percent of class represented by amount in row (9)
5.1 %
12 Type of Reporting Person (See Instructions)
IA

SCHEDULE 13G

CUSIP No.

1 Names of Reporting Persons
Joseph Edelman
Check the appropriate box if a member of a Group (see instructions)
2 (a)
 (b)

3 Sec Use Only
4 Citizenship or Place of Organization

UNITED STATES
Sole Voting Power
5
0.00
Number of Shares Beneficially Owned by Each Reporting Person With: 6 Shared Voting Power
3,519,626.00
7 Sole Dispositive Power
0.00
8 Shared Dispositive Power
3,519,626.00

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,519,626.00
10 Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

11 Percent of class represented by amount in row (9)

5.1 %

Type of Reporting Person (See Instructions)

12

IN

SCHEDULE 13G

CUSIP No.

Names of Reporting Persons

1

Perceptive Life Sciences Master Fund, Ltd.

Check the appropriate box if a member of a Group (see instructions)

2

(a)

(b)

3

Sec Use Only

Citizenship or Place of Organization

4

CAYMAN ISLANDS

Sole Voting Power

5

0.00

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person
With:

Shared Voting Power

6

2,790,461.00

Sole Dispositive Power

7

0.00

Shared Dispositive

8

Power

2,790,461.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9

2,790,461.00

Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10

Percent of class represented by amount in row (9)

11

4.1 %

Type of Reporting Person (See Instructions)

12

CO

SCHEDULE 13G

CUSIP No.

Names of Reporting Persons

1

Perceptive Capital Solutions Holdings LP

2

Check the appropriate box if a member of a Group (see instructions)

(a)

(b)

3 Sec Use Only
Citizenship or Place of Organization

4 DELAWARE

Sole Voting Power

5
0.00

Number of
Shares

Shared Voting Power

Beneficially
Owned by

6
729,165.00

Each

Sole Dispositive Power

Reporting
Person

7
0.00

With:

Shared Dispositive

8
Power

729,165.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9
729,165.00

Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10

Percent of class represented by amount in row (9)

11
1.1 %

Type of Reporting Person (See Instructions)

12
PN

SCHEDULE 13G

Item 1.

Name of issuer:

(a) RHYTHM PHARMACEUTICALS, INC.

Address of issuer's principal executive offices:

(b) 222 BERKELEY STREET, 12TH FLOOR, BOSTON, MA 02116

Item 2.

Name of person filing:

(a) The names of the persons filing this report (collectively, the "Reporting Persons") with respect to shares of Common Stock, \$0.001 par value per share (the "Common Stock") of RHYTHM PHARMACEUTICALS, INC. (the "Issuer") are: (i) Perceptive Advisors LLC ("Perceptive Advisors") (ii) Joseph Edelman ("Mr. Edelman") (iii) Perceptive Life Sciences Master Fund, Ltd. (the "Master Fund") (iv) Perceptive Capital Solutions Holdings LP ("Capital Solutions Holdings")

Address or principal business office or, if none, residence:

(b) The address of the principal business office of each of the Reporting Persons is: 51 Astor Place, 10th Floor, New York, NY 10003

Citizenship:

(c) Perceptive Advisors is a Delaware limited liability company. Mr. Edelman is a United States citizen. The Master Fund is a Cayman Islands corporation. Capital Solutions Holdings is a Delaware Limited Liability Company.

Title of class of securities:

(d) Common Stock, \$0.001 par value per share

(e) CUSIP No.:

- Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:
- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
 - (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
 - (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
 - (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
 - (e) An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
 - (f) An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
 - (g) A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
 - (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
 - (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
 - A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:
 - (k) Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership

Amount beneficially owned:

The information required by this item with respect to each Reporting Person is set forth in Rows 5 through 9 of the cover pages to this Schedule 13G. The ownership percentages reported are based on 68,532,607 shares of Common Stock outstanding as of May 1, 2026, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 5, 2026, and give effect to the conversion of shares of the Issuer's Series A Convertible Preferred Stock, par value \$0.001 per share (the "Series A Convertible Preferred Stock"), held by the Reporting Persons at the current conversion rate of 20.8333 shares of Common Stock issuable upon the conversion of each \$1,000 of liquidation preference. The Master Fund directly holds 2,373,795 shares of Common Stock. The Master Fund holds Series A Convertible Preferred Stock convertible into 416,666 shares of Common Stock. Capital Solutions Holdings holds Series A Convertible Preferred Stock convertible into 729,165 shares of Common Stock. Perceptive Advisors serves as the investment manager to the Master Fund and may be deemed to beneficially own the shares held by the Master Fund. Perceptive Capital Solutions Advisors LP serves as the investment manager to Capital Solutions Holdings and may be deemed to beneficially own the shares held by Capital Solutions Holdings. Perceptive Capital Solutions GP LLC is the general partner of Capital Solutions Holdings and is managed by Perceptive Capital Solutions Advisors LP, a relying adviser of Perceptive Advisors. Mr. Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own the shares held by the Master Fund and Capital Solutions Holdings.

(a) Percent of class:

Perceptive Advisors: 5.1% Mr. Edelman: 5.1% Master Fund: 4.1% Capital Solutions Holdings: 1.1% %

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

Perceptive Advisors: 0 Mr. Edelman: 0 Master Fund: 0 Capital Solutions Holdings: 0

(ii) Shared power to vote or to direct the vote:

Perceptive Advisors: 3,519,626 Mr. Edelman: 3,519,626 Master Fund: 2,790,461 Capital Solutions Holdings: 729,165

(iii) Sole power to dispose or to direct the disposition of:

Perceptive Advisors: 0 Mr. Edelman: 0 Master Fund: 0 Capital Solutions Holdings: 0

(iv) Shared power to dispose or to direct the disposition of:

Perceptive Advisors: 3,519,626 Mr. Edelman: 3,519,626 Master Fund: 2,790,461 Capital Solutions Holdings: 729,165

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.

Not Applicable

- Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.
Not Applicable
- Item 8. Identification and Classification of Members of the Group.
Not Applicable
- Item 9. Notice of Dissolution of Group.
Not Applicable

Item 10. Certifications:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under ?? 240.14a-11.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Perceptive Advisors LLC

Signature: /s/ Joseph Edelman
Name/Title: Joseph Edelman, Managing Member
Date: 05/15/2026

Joseph Edelman

Signature: /s/ Joseph Edelman
Name/Title: Joseph Edelman
Date: 05/15/2026

Perceptive Life Sciences Master Fund, Ltd.

Signature: /s/ Joseph Edelman
Name/Title: Joseph Edelman, Managing Member
Date: 05/15/2026

Perceptive Capital Solutions Holdings LP

Signature: /s/ Joseph Edelman
Name/Title: Joseph Edelman, Managing Member
Date: 05/15/2026