

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(Amendment No. 1)*

Rhythm Pharmaceuticals Inc

(Name of Issuer)

Common Stock

(Title of Class of Securities)

76243J105

(CUSIP Number)

09/30/2025

(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. 76243J105

Names of Reporting Persons

1The Vanguard Group

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

2☐ (a)

☐ (b)

3Sec Use Only

Citizenship or Place of Organization

4PENNSYLVANIA

Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power
		0.00
	6	Shared Voting Power
		408,441.00
	7	Sole Dispositive Power
		4,529,636.00
	8	Shared Dispositive Power
		466,791.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	
		4,996,427.00
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)	
	7.52 %	
12	Type of Reporting Person (See Instructions)	
	IA	

SCHEDULE 13G

Item 1.

Name of issuer:

(a)

Rhythm Pharmaceuticals Inc

Address of issuer's principal executive offices:

(b)

500 Boylston Street, 11th Floor, Boston, MA, 02116

Item 2.

Name of person filing:

(a)

The Vanguard Group

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

(b)

100 Vanguard Blvd., Malvern, PA 19355

Citizenship:

(c)

PA

Title of class of securities:

(d)

Common Stock

CUSIP No.:

(e)

76243J105

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);
- (j) ☐ 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:

- (a) 4996427
Percent of class:
- (b) 7.52 %
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote:
0
 - (ii) Shared power to vote or to direct the vote:
408441
 - (iii) Sole power to dispose or to direct the disposition of:
4529636
 - (iv) Shared power to dispose or to direct the disposition of:
466791

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

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

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than 5 percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

The Vanguard Group, Inc.'s clients, including investment companies registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the securities reported herein. No one other person's interest in the securities reported herein is more than 5%.

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 acquired and are held in the ordinary course of business and 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.

The Vanguard Group

Signature: Ashley Grim

Name/Title: Head of Global Fund Administration

Date: 10/30/2025