

☐ Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

☐ Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person * <u>Joshi Manher</u> (Last) (First) (Middle) <u>C/O RHYTHM PHARMACEUTICALS, INC.</u> <u>222 BERKELEY STREET, 12TH FLOOR</u> (Street) <u>BOSTON</u> <u>MA</u> <u>02116</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>RHYTHM PHARMACEUTICALS, INC.</u> [<u>RYTM</u>] Foreign Trading Symbol	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner ☒ Officer (give title below) Other (specify below) <u>Chief Medical Officer</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>08/17/2026</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	V	Date Exercisable	Expiration Date					
<u>Stock Options (Right to Buy)</u>	<u>\$115.44</u>	<u>08/17/2026</u>		<u>A</u>			<u>(1)</u>	<u>08/16/2036</u>	<u>Common Stock</u> <u>50,000</u>	<u>\$0</u>	<u>50,000</u>	<u>D</u>	
<u>Restricted Stock Units</u>	<u>\$0</u>	<u>08/17/2026</u>		<u>A</u>			<u>(2)</u>	<u>(3)</u>	<u>Common Stock</u> <u>25,000</u>	<u>\$0</u>	<u>25,000</u>	<u>D</u>	

Explanation of Responses:

1. The Stock Options vest and become exercisable as to 25% of the total number of shares subject to the option on the first anniversary of the grant date and as to 6.25% of the total number of shares subject to the option upon the Reporting Person's completion of each successive three months of service to the Corporation.
2. The Restricted Stock Units vest as to 25% of the Restricted Stock Units on September 1 of each of 2027, 2028, 2029, and 2030, such that the Restricted Stock Units shall be fully vested on September 1, 2030, subject to the Reporting Person continuing in service through each such vesting date.
3. The restricted stock units have no expiration date.

/s/ Stephen Vander Stoep,
attorney-in-fact for Manher 08/18/2026
Joshi

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.