

OMB APPROVAL	
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**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

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

1. Name and Address of Reporting Person* <u>Mathers Edward T</u>			2. Issuer Name and Ticker or Trading Symbol <u>RHYTHM PHARMACEUTICALS, INC. [RYTM]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>06/18/2024</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
<u>104 5TH AVE</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street)	<u>NEW YORK</u>	<u>NY</u>	<u>10011</u>			Rule 10b5-1(c) Transaction Indication <input type="checkbox"/> Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.		
(City)	(State)	(Zip)						

**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	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (right to buy)	\$41.39	06/18/2024		A		14,000		(1)	06/17/2034	Common Stock	14,000	\$0	14,000	D	
Restricted Stock Units	(2)	06/18/2024		A		4,000		(3)	(3)	Common Stock	4,000	\$0	4,000	D	

**Explanation of Responses:**

- The options fully vest upon the earlier of (i) June 18, 2025 or (ii) the date of the Issuer's annual meeting of the stockholders to be held in 2025, subject to the Reporting Person's continued service on such vesting date.
- Each restricted stock unit represents a contingent right to receive one share of Issuer common stock.
- The restricted stock units fully vest upon the earlier of (i) June 18, 2025 or (ii) the date of the Issuer's annual meeting of the stockholders to be held in 2025, subject to the Reporting Person's continued service on such vesting date. The restricted stock units have no expiration date.

/s/ Zachary Bambach, attorney-in-fact 06/20/2024

\*\* 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.

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Zachary Bambach, Nicole Hatcher and Stephanie Brecher, and each of them, with full power to act without the others, his or her true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his or her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, including, without limitation, Forms 3, 4 and 5 and Schedules 13D and 13G (and any amendments thereto), and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission (the "SEC"), including, but not limited to, signing a Form ID for and on behalf of the undersigned and filing such Form ID with the SEC, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he or she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his or her substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney is perpetual, unless revoked by the undersigned in a signed writing delivered to each of the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 29th day of February, 2024.

/s/ Peter J. Barris  
Peter J. Barris

/s/ Forest Baskett  
Forest Baskett

/s/ Ali Behbahani  
Ali Behbahani

/s/ Ronald D. Bernal  
Ronald D. Bernal

/s/ Ann Bordetsky  
Ann Bordetsky

/s/ Carmen Chang  
Carmen Chang

/s/ Philip Chopin  
Philip Chopin

/s/ Anthony A. Florence, Jr.  
Anthony A. Florence, Jr.

/s/ Jonathan Golden  
Jonathan Golden

/s/ Scott Gottlieb

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Scott Gottlieb

/s/ Mark Hawkins  
Mark Hawkins

/s/ Jeffrey R. Immelt  
Jeffrey R. Immelt

/s/ Aaron Jacobson  
Aaron Jacobson

/s/ Patrick J. Kerins  
Patrick J. Kerins

/s/ Hilarie Koplow-McAdams  
Hilarie Koplow-McAdams

/s/ Vanessa Larco  
Vanessa Larco

/s/ Julio C. Lopez  
Julio C. Lopez

/s/ Tiffany Le  
Tiffany Le

/s/ Mohamad H. Makhzoumi  
Mohamad H. Makhzoumi

/s/ Edward T. Mathers  
Edward T. Mathers

/s/ Gregory Papadopoulos  
Gregory Papadopoulos

/s/ Kavita Patel  
Kavita Patel

/s/ Scott D. Sandell  
Scott D. Sandell

/s/ A. Brooke Seawell  
A. Brooke Seawell

/s/ Peter Sonsini  
Peter Sonsini

/s/ Melissa Taunton  
Melissa Taunton

/s/ Paul E. Walker

Paul E. Walker

/s/ Rick Yang  
Rick Yang