FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPROVAL									
	OMB Number:	3235-0287								
	Estimated average burden									
- 1	hours nor roomanas	0.5								

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*  Mathers Edward T				2. Issuer Name and Ticker or Trading Symbol RHYTHM PHARMACEUTICALS, INC. [ RYTM ]								(Che	i. Relationship of Reporting Pe Check all applicable) X Director Officer (give title			10% Ov	vner		
(Last) (First) (Middle) 1954 GREENSPRING DRIVE SUITE 600			3. Date of Earliest Transaction (Month/Day/Year) 06/08/2022								below)	(give title		Other (s	вреспу 				
(Street) TIMONI (City)	UM M		21093 (Zip)		4. If	Ame	ndment, I	Date o	of Original F	iled	(Month/Da	ay/Year)		6. Inc Line)	Form fi	led by One	Repo	g (Check Ap orting Perso n One Repo	n
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)				Execution Date,		3. 4. Securities Acquired Disposed Of (D) (Instr. 5)			ed (A) tr. 3, 4	4 and Securitie Beneficia		es Formally (D) of Following (I) (II)		r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)				
								Code	v	Amount	(A) or (D) Pri		ice	Transact (Instr. 3 a	ction(s)			(1110411.4)	
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)	ivative Conversion Date Execution Date, urity or Exercise (Month/Day/Year) if any			Co	ransaction of ode (Instr. Derivative		ve es d ed nstr.	6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title an of Securit Underlyin Derivative (Instr. 3 an	ies g Secu	Derivative Security		9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
				Co	ode ,	v	(A)	(D)	Date Exercisabl		Expiration Date	Title	Amo or Num of Shar	ber					
Stock Option (right to buy)	\$4.15	06/08/2022			A		20,000		(1)	C	06/07/2032	Common Stock	20,	000	\$0.00	20,000	)	D	

## **Explanation of Responses:**

1. The options fully vest upon the earlier of (i) June 8, 2023 or (ii) the date of the Issuer's next annual meeting of the stockholders.

## Remarks:

/s/ Louis Citron, attorney-infact

\*\* Signature of Reporting Person

Date

06/10/2022

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

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.

 $<sup>^{\</sup>star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

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