FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D	.C. 20549
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL									
OMB Number: 3235-028									
Estimated average burden									
hours per response:	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

(Street) BOSTON MA 02116					3. E 06/	2. Issuer Name and Ticker or Trading Symbol RHYTHM PHARMACEUTICALS, INC. [ RYTM ]  3. Date of Earliest Transaction (Month/Day/Year) 06/17/2020  4. If Amendment, Date of Original Filed (Month/Day/Year)							6. [	Officer (give title				10% Ov Other (s below)	pecify
(5.9)	(City) (State) (Zip)  Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3)  2. Transac Date (Month/Da						Execution Date,			3. Transac Code (I 8)		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 5)			or 5. Amou Securitie Benefici		es Fori ally (D) ( Following (I) (I d tion(s)		: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 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)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution I if any (Month/Day	Date, T	1. Fransa Code (I		of Ex		6. Date Exercisa Expiration Date (Month/Day/Year		of Securitie		ies g Security	De	Price of erivative ecurity nstr. 5)	9. Numbe derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	Ow For Oir Oir (I)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	v	(A)		Date Exercisabl		xpiration ate	Title	Amount or Number of Shares						
Stock Option (right to buy)	\$21.37	06/17/2020			A		18,500		(1)	0	6/16/2030	Common Stock	18,500		\$0	18,50	0	D	

## **Explanation of Responses:**

1. The options fully vest upon the earlier of (i) 1 year from the date of grant or (ii) the date of the Issuer's next annual meeting of the stockholders.

/s/ Hunter Smith, attorney-infact

\*\* Signature of Reporting Person

Date

06/18/2020

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

- $^{\star}$  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.

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