FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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*  Foley Todd  (Last) (First) (Middle)						2. Issuer Name and Ticker or Trading Symbol RHYTHM PHARMACEUTICALS, INC. [ RYTM ]								of Reportin cable) or r (give title )	ng Pers	10% Ow Other (s below)	ner
500 BOYLSTON STREET, 11TH FLOOR						3. Date of Earliest Transaction (Month/Day/Year) 06/06/2018										·	
(Street) BOSTON MA 02116			4.	4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person					
(City)	(S	tate)	(Zip)										1 0130				
		Tab	le I - Non-De	erivativ	e Se	curities	s Ac	quired, Di	sposed	o b	f, or Be	neficia	ly Owne	t			
1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)					ear)	2A. Deemed Execution Date, if any (Month/Day/Year		3. Transaction Code (Instable)	on Dispo	4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 5)		ed (A) or etr. 3, 4 and	Benefic	es ially Following	Form (D) o	n: Direct r Indirect istr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
								Code V	Amou	ınt	(A) or (D)	Price	Transac (Instr. 3	tion(s)			(11150.4)
		-	Table II - Der (e.g					uired, Dis , options,	•	,		-	Owned			,	
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/Yea	Code (Ins				6. Date Exerc Expiration Da (Month/Day/\	ate	of Securities		ies g Security	8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s ally g	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership t (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	on	Title	Amount or Number of Shares					
Stock Option (right to	\$34.89	06/06/2018		A		10,000		(1)	06/05/20	28	Common Stock	10,000	\$0	10,00	00	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 S. Smith, attorney-

in-fact

\*\* Signature of Reporting Person

Date

06/08/2018

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.