FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

/ashington	$D \subset$	205/19

**OMB APPROVAL** 

OMB Number:	3235-0287						
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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

1. Name and Address of Reporting Person* Foley Todd					RF	2. Issuer Name and Ticker or Trading Symbol RHYTHM PHARMACEUTICALS, INC. RYTM ]									ck all appl Direc	licable) tor	or 109		Owner	
	(First) (Middle) M ASSET MANAGEMENT					3. Date of Earliest Transaction (Month/Day/Year) 11/20/2019									Office below	er (give title v)	е	Othe belov	r (specify v)	
(Street)  CAMBRI  (City)		A 0	)2142 Zip)		_ 4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)								Line)	ndividual or Joint/Group Filing (Check Applicable e)  X Form filed by One Reporting Person  Form filed by More than One Reporting Person					
		Tab	le I - I	Non-Deri	vative	Sec	uritie	s A	cquii	red, D	isposed o	f, or B	enefici	ially	Owne	d				
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			Beneficially Owned Following		s ally following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership				
								Ì	Code	v	Amount	(A) or (D)	Price		Reported Transact (Instr. 3 a	ion(s)			(Instr. 4)	
Common S	Stock			11/20/2	019				S <sup>(1)</sup>		141,365 <sup>(2)</sup>	D	\$22.0	2 <sup>(3)</sup>	2,93	3,528	28 I See Footnote			
Common S	Stock			11/21/2	019				S <sup>(1)</sup>		59,466 <sup>(5)</sup>	D	\$20.5	(6)	2 874 062				See Footnote <sup>(7)</sup>	
Common S	Stock			11/21/2	019				S <sup>(1)</sup>		5,457 <sup>(8)</sup>	D	\$21.0	9 <sup>(9)</sup> 2,868,605 I See Footn					See Footnote <sup>(10)</sup>	
		Ta	able I								posed of, convertib				wned					
1. Title of Derivative Security (Instr. 3)  2. Conversio or Exercis Price of Derivative Security		3. Transaction Date (Month/Day/Year)	Execu	eemed ution Date, h/Day/Year)	4. Transa Code ( 8)		5. Nui of Derivi Secui Acqui (A) or Dispo of (D) (Instr. and 5	ative rities ired osed	Exp (Mc	piration I	(/Year)	7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)  Amount or Numb of Title Share:		int er		9. Numbe derivative Securitie Beneficia Owned Following Reported Transacti (Instr. 4)	e s ally g	10. Ownershi Form: Direct (D) or Indirect (I) (Instr. 4	Beneficial Ownership (Instr. 4)	

## **Explanation of Responses:**

- 1. The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person.
- 2. The shares were sold as follows: 136,079 by MPM BioVentures V, L.P. ("BV V") and 5,286 by MPM Asset Management Investors BV5 LLC ("AM BV5"). MPM BioVentures V GP LLC and MPM BioVentures V LLC ("BV LLC") are the direct and indirect general partners of BV V and BV LLC is the manager of AM BV5. Ansbert Gadicke, Luke Evnin and Todd Foley are the members of BV LLC. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- 3. The price in Column 4 is a weighted average sale price. The prices actually received ranged from \$21.59 to \$22.58. The Reporting Person will provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- 4. Shares are held as follows: 2,823,827 by BV V and 109,701 by AM BV5. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- 5. Shares were sold as follows: 57,242 by BV V and 2,224 by AM BV5.
- 6. The price in Column 4 is a weighted average sale price. The prices actually received ranged from \$20.00 to \$20.99. The Reporting Person will provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- 7. Shares are held as follows: 2,766,585 by BV V and 107,477 by AM BV5. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- 8. Shares were sold as follows: 5,253 by BV V and 204 by AM BV5.
- 9. The price in Column 4 is a weighted average sale price. The prices actually received ranged from \$21.00 to \$21.28. The Reporting Person will provide to the issuer, any security holder of the issuer, or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.
- 10. Shares are held as follows: 2,761,332 by BV V and 107,273 by AM BV5. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

## Remarks:

/s/ Todd Foley

11/22/2019

\*\* 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.