FORM 4

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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OMB Number:	3235-0287
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hours per response:	0.5

to Section 16. Fo obligations may 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		Estimated average burden hours per response: 0.5		
1. Name and Address of Reporting Person* Foley Todd (Last) (First) (Middle) C/O MPM ASSET MANAGEMENT 450 KENDALL STREET		(Middle)	 2. Issuer Name and Ticker or Trading Symbol <u>RHYTHM PHARMACEUTICALS, INC.</u> [RYTM] 3. Date of Earliest Transaction (Month/Day/Year) 06/05/2020 	(Check all applic X Director	able)	orting Person(s) to Issuer 10% Owner itle Other (specify below)	
(Street) CAMBRIDGE (City)	MA (State)	02142 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)		pint/Group Filing ed by One Repor ed by More than	rting Person	ble

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. Transa Code (8)		5)			6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership	
			Code	v	Amount	(A) or (D)	Price	- Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)
Common Stock	06/05/2020		S ⁽¹⁾		1,896 ⁽²⁾	D	\$20	2,024,893	Ι	See Footnote ⁽³⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

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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. Transa Code (8)		of		6. Date Exerc Expiration Da (Month/Day/Y	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)	Ownership Form: Direct (D)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

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: 1,825 by MPM BioVentures V, L.P. ("BV V") and 71 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. Shares are held as follows: 1,949,171 by BV V and 75,722 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

06/05/2020

** 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.