

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

<p>1. Name and Address of Reporting Person*</p> <p>PFIZER INC</p> <hr/> <p>(Last) (First) (Middle)</p> <p>235 EAST 42ND STREET</p> <hr/> <p>(Street)</p> <p>NEW YORK NY 10017</p> <hr/> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol</p> <p>RHYTHM PHARMACEUTICALS, INC. [RYTM]</p> <hr/> <p>3. Date of Earliest Transaction (Month/Day/Year)</p> <p>10/10/2017</p> <hr/> <p>4. If Amendment, Date of Original Filed (Month/Day/Year)</p>	<p>5. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p>Director <input checked="" type="checkbox"/> 10% Owner</p> <p>Officer (give title below) <input type="checkbox"/> Other (specify below)</p> <hr/> <p>6. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p><input type="checkbox"/> Form filed by More than One Reporting Person</p>
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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. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	10/10/2017		C		447,514	A	(1)	447,514	D	
Common Stock	10/10/2017		C		940,125	A	(1)	1,387,639	D	
Common Stock	10/10/2017		P		40,000	A	\$17	1,427,639	D	

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 Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		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)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Series A Convertible Preferred Stock	(1)	10/10/2017		C		447,514 ⁽²⁾		(1)	(1)	Common Stock	447,514 ⁽²⁾	\$0	0	D	
Series A-1 Junior Preferred Stock	(1)	10/10/2017		C		940,125 ⁽²⁾		(1)	(1)	Common Stock	940,125 ⁽²⁾	\$0	0	D	

Explanation of Responses:

- In connection with the closing of the Issuer's initial public offering, each share of the Issuer's series A convertible preferred stock (the "Series A Preferred") and series A-1 junior preferred stock (the "Series A-1 Preferred") converted into the Issuer's common stock on a 9.17-for-one basis without payment or consideration. The Series A Preferred and the Series A-1 Preferred had no expiration date.
- Reflects the number of shares of Series A Preferred and Series A-1 Preferred, as applicable, held by the Reporting Person on an as-converted to common stock basis.

/s/ Susan Grant, Assistant Secretary on behalf of Pfizer Inc. 10/10/2017

** 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.