

OMB APPROVAL	
OMB Number:	3235-0104
Estimated average burden hours per response:	0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* <u>Lettmann Jason</u> (Last) (First) (Middle) C/O MORGENTHALER VENTURE PARTNERS IX, LP 3200 ALPINE ROAD (Street) PORTOLA VALLEY CA 94028 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 10/25/2016	3. Issuer Name and Ticker or Trading Symbol <u>Ra Pharmaceuticals, Inc. [RARX]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director Officer (give title below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	17,142	I ⁽¹⁾	See footnotes

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

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Warrants to Purchase Common Stock	(2)	04/01/2022	Common Stock	63,019	0.07	I	See footnotes ⁽¹⁾
Series A Preferred Stock	(3)	(3)	Common Stock	1,392,130	(3)	I	See footnotes ⁽¹⁾
Series B-1 Preferred Stock	(4)	(4)	Common Stock	523,438	(4)	I	See footnotes ⁽¹⁾
Series B-2 Preferred Stock	(5)	(5)	Common Stock	486,919	(5)	I	See footnotes ⁽¹⁾
Series B-1 Preferred Stock	(4)	(4)	Common Stock	542,702	(4)	I	See footnotes ⁽⁶⁾
Series B-1 Preferred Stock	(4)	(4)	Common Stock	73,945	(4)	I	See footnotes ⁽⁷⁾
Series B-2 Preferred Stock	(5)	(5)	Common Stock	504,839	(5)	I	See footnotes ⁽⁶⁾
Series B-2 Preferred Stock	(5)	(5)	Common Stock	68,786	(5)	I	See footnotes ⁽⁷⁾

Explanation of Responses:

- The securities are held by Morgenthaler Venture Partners IX, L.P. ("MVP IX"). The general partner of MVP IX is Morgenthaler Management Partners IX, LLC ("MMP IX"). MMP IX may be deemed to indirectly beneficially own the securities directly held by MVP IX. Jason Lettmann, a director of the Issuer, is a Member of MMP IX and as such, shares voting and investment power over the securities directly held by MVP IX. MMP IX and Jason Lettmann disclaim beneficial ownership of the securities held by MVP IX except to the extent of their respective pecuniary interests therein.
- The Warrants to Purchase Common Stock have a \$0.07 exercise price and are automatically exercised for shares of Common Stock on a net issuance basis upon consummation of the Issuer's initial public offering of Common Stock.
- Each share of the Series A Preferred Stock is convertible into Common Stock on a 1-for-7 basis automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- Each share of the Series B-1 Preferred Stock is convertible into Common Stock on a 1-for-7 basis automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- Each share of the Series B-2 Preferred Stock is convertible into Common Stock on a 1-for-7 basis automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- Shares held by Lightstone Ventures, L.P. LSV Associates, LLC, or LSV GP, is the General Partner of Lightstone Ventures, L.P. ("LSV"). LSV GP and the managing directors of LSV GP disclaim beneficial ownership of the shares held by LSV except to the extent of their pecuniary interest therein.
- Shares held by Lightstone Ventures (A), L.P. LSV GP is the General Partner of Lightstone Ventures (A), L.P. ("LSV-A"). LSV GP and the managing directors of LSV GP disclaim beneficial ownership of the shares held by LSV-A except to the extent of their pecuniary interest therein.

Remarks:

Exhibit 24.1: Limited Power of Attorney

/s/ Benjamin Piper, Attorney-in-Fact 10/25/2016

** 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 5 (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.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of Douglas A. Treco, David Charles Lubner, Kingsley L. Taft, Ryan Sansom and Benjamin Piper, signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Ra Pharmaceuticals, Inc. (the "**Company**"), (i) Form ID, including any attached documents, to effect the assignment of codes to the undersigned to be used in the transmission of information to the United States Securities and Exchange Commission using the EDGAR System, and (ii) Forms 3, 4 and 5 and amendments thereto in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder;
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 or 5 and amendments thereto and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended. The undersigned hereby agrees to indemnify the attorney-in-fact and the Company from and against any demand, damage, loss, cost or expense arising from any false or misleading information provided by the undersigned to the attorney-in-fact.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. This Power of Attorney may be filed with the United States Securities and Exchange Commission as a confirming statement of the authority granted herein. This Power of Attorney supersedes any prior power of attorney in connection with the undersigned's capacity as an officer and/or director of the Company. This Power of Attorney shall expire as to any individual attorney-in-fact if such attorney-in-fact ceases to be an executive officer of the Company.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of October 21, 2016.

/s/ Jason Lettmann
Jason Lettmann
