

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

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SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. ___)*

Kala Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

483119103

(CUSIP Number)

RA Capital Management, LLC
20 Park Plaza, Suite 1200
Boston, MA 02116
Telephone: 617.778.2512
Attn: Peter Kolchinsky

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

July 25, 2017

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1 Names of Reporting Persons.
RA Capital Management, LLC

2 Check the Appropriate Box if a Member of a Group (See Instructions)
(a)
(b)

3 SEC Use Only

4 Source of Funds (See Instructions):
AF

5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):

6 Citizenship or Place of Organization. **Massachusetts**

Number of Shares Beneficially Owned by Each Reporting Person With	7 Sole Voting Power 0 shares
	8 Shared Voting Power 2,113,236 shares
	9 Sole Dispositive Power 0 shares
	10 Shared Dispositive Power 2,113,236 shares

11 Aggregate Amount Beneficially Owned by Each Reporting Person
2,113,236 shares

12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13 Percent of Class Represented by Amount in Row (11)
9.1%¹

14 Type of Reporting Person (See Instructions)
IA, OO (Limited Liability Company)

¹The reporting person is the beneficial owner of 2,113,236 shares of the Issuer's Common Stock which constitute approximately 9.08% of the class outstanding. The percentage calculation assumes that there are currently 23,283,399 outstanding shares of Common Stock of the Issuer, based upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on July 20, 2017.

1 Names of Reporting Persons.	
Peter Kolchinsky	
2 Check the Appropriate Box if a Member of a Group (See Instructions)	
(a) <input type="checkbox"/>	
(b) <input type="checkbox"/>	
3 SEC Use Only	
4 Source of Funds (See Instructions):	
AF	
5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e):	
<input type="checkbox"/>	
6 Citizenship or Place of Organization. United States	
Number of Shares Beneficially Owned by Each Reporting Person With	7 Sole Voting Power 0 shares
	8 Shared Voting Power 2,113,236 shares
	9 Sole Dispositive Power 0 shares
	10 Shared Dispositive Power 2,113,236 shares
11 Aggregate Amount Beneficially Owned by Each Reporting Person	
2,113,236 shares	
12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13 Percent of Class Represented by Amount in Row (11)	
9.1%²	
14 Type of Reporting Person (See Instructions)	
HC, IN	

² The reporting person is the beneficial owner of 2,113,236 shares of the Issuer's Common Stock which constitute approximately 9.08% of the class outstanding. The percentage calculation assumes that there are currently 23,283,399 outstanding shares of Common Stock of the Issuer, based upon the closing of the Issuer's initial public offering, as reported in the Issuer's prospectus filed with the Securities and Exchange Commission ("SEC") on July 20, 2017.

SCHEDULE 13D

Item 1. Security and Issuer

This Schedule 13D relates to common stock, par value \$0.001 per share (the “Common Stock”), of Kala Pharmaceuticals, Inc., a Delaware corporation (the “Issuer”). The address of the principal executive offices of the Issuer is: 100 Beaver Street, Suite 201, Waltham, MA 02453.

Item 2. Identity and Background

(a) This Schedule 13D is being filed on behalf of (i) RA Capital Management, LLC (“RA Capital”) and (ii) Peter Kolchinsky (together with RA Capital, the “Reporting Persons”).

The Common Stock reported herein for RA Capital represent shares reported for RA Capital Healthcare Fund, L.P. (the “Fund”) as well as shares held in a separately managed account (the “Account”). RA Capital is the general partner of the Fund and serves as investment adviser for the Account. Peter Kolchinsky is the manager of RA Capital. As the investment adviser to the Fund and the Account, RA Capital may be deemed a beneficial owner, for purposes of Section 13(d) of the Securities Exchange Act of 1934 (the “Act”), of any securities of the Issuer owned by the Fund or the Account. As the manager of RA Capital, Mr. Kolchinsky may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by RA Capital. RA Capital and Mr. Kolchinsky disclaim beneficial ownership of the securities reported in this Schedule 13D Statement (the “Statement”) other than for the purpose of determining their obligations under Section 13(d) of the Act, and neither the filing of the Statement nor the filing of this Amendment shall be deemed an admission that either RA Capital or Mr. Kolchinsky is or was the beneficial owner of such securities for any other purpose.

(b) The business address of each of the Reporting Persons is: 20 Park Plaza, Suite 1200, Boston, MA 02116.

(c) The Fund is a private investment vehicle. RA Capital is a registered investment adviser and provides investment management services to the Fund and the Account. The principal occupation of Mr. Kolchinsky is investment management.

(d) None of the Reporting Persons has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) None of the Reporting Persons has, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) See Item 6 of the cover pages.

Item 3. Source and Amount of Funds or Other Consideration

The Reporting Persons acquired 1,579,903 of the shares of the Common Stock reported herein upon the automatic conversion of shares of Series B Preferred Stock and Series C Preferred Stock of the Issuer in connection with the initial public offering of the Common Stock of the Issuer (the “IPO”). In addition, the Reporting Persons acquired 533,333 of the shares of the Common Stock reported herein in the IPO, all of which were purchased for cash from the working capital of the Fund and the Account.

Item 4. Purpose of Transaction

Lock-Up Agreement

The Reporting Persons have entered into a standard lock-up agreement (the “Lock-Up Agreement”) with the Issuer and the underwriters of the IPO, prohibiting any sale of the Common Stock reported herein during the 180 days following the closing of the offering. The Reporting Persons may be released from lock-up prior to the expiration of the lock-up period at the sole discretion of the underwriters.

The foregoing description of the Lock-Up Agreement does not purport to be complete and is qualified in its entirety by reference to the Form of Lock-Up Agreement filed as an exhibit to this Schedule 13D, and incorporated herein by reference.

Director Position

Mr. Rajeev Shah, a portfolio manager and managing director of RA Capital, currently serves as a director of the Issuer and therefore will engage in regular discussions with the Issuer’s board of directors and management as part of his duties as a director.

General

The Reporting Persons acquired the securities described in this Schedule 13D for investment purposes and they intend to review their investments in the Issuer on a continuing basis. Any actions the Reporting Persons might undertake will be dependent upon the Reporting Persons’ review of numerous factors, including, but not limited to: an ongoing evaluation of the Issuer’s business, financial condition, operations and prospects; price levels of the Issuer’s securities; general market, industry and economic conditions; the relative attractiveness of alternative business and investment opportunities; and other future developments.

The Reporting Persons may, at any time and from time to time, acquire additional securities of the Issuer, or retain or sell all or a portion of the securities then held, in the open market or in privately negotiated transactions. In addition, the Reporting Persons and their designees to the board of directors may engage in discussions with management, the board of directors, and shareholders of the Issuer and other relevant parties or encourage such persons to consider or explore extraordinary corporate transactions, such as: a merger; sales or acquisitions of assets or businesses; changes to the capitalization or dividend policy of the Issuer; or other material changes to the Issuer’s business or corporate structure.

Other than as described above, none of the Reporting Persons currently has any plans or proposals that relate to, or would result in, any of the matters listed in Items 4(a)–(j) of Schedule 13D, although, depending on the factors discussed herein, the Reporting Persons may change their purpose or formulate different plans or proposals with respect thereto at any time.

CUSIP No. 483119103

Item 5. Interest in Securities of the Issuer

(a) and (b) See Items 7-11 of the cover pages and Item 2 above.

(c) The following table lists the Reporting Persons' transactions in Common Stock that were effected during the sixty day period prior to the filing of this Schedule 13D:

Transaction	Date	No. Shares	Price
Conversion	25-Jul-2017	1,300,057* and 279,846	(1)
Purchase	25-Jul-2017	427,043* and 106,290	\$15.00

(1) The Reporting Persons acquired Series B Preferred Stock and Series C Preferred Stock of the Issuer more than 60 days prior to the IPO. The Series B Preferred Stock and the Series C Preferred Stock converted into Common Stock on a 5.2083-for-1 basis upon the closing of the Issuer's initial public offering without payment of consideration.

Shares marked with an * were acquired by the Fund. The remaining shares were acquired for the Account.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 4 above summarizes certain provisions of the Lock-Up Agreement and is incorporated herein by reference. A copy of the Lock-Up Agreement is attached as an exhibit to this Schedule 13D, and incorporated herein by reference.

Except as set forth herein, none of the Reporting Persons has any contracts, arrangements, understandings or relationships (legal or otherwise) with any person with respect to any securities of the Issuer, including, but not limited to, any contracts, arrangements, understandings or relationships concerning the transfer or voting of such securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or losses, or the giving or withholding of proxies.

Item 7. Material to Be Filed as Exhibits

Exhibit 1 Joint Filing Agreement by and among the Reporting Persons.

Exhibit 2 Form of Lock-Up Agreement

CUSIP No. 483119103

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2018

RA CAPITAL MANAGEMENT, LLC

By: /s/ Peter Kolchinsky

Peter Kolchinsky

Manager

PETER KOLCHINSKY

/s/ Peter Kolchinsky

Exhibit 1

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of February 14, 2018, is by and among RA Capital Management, LLC and Peter Kolchinsky (the foregoing are collectively referred to herein as the "Filers").

Each of the Filers may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13G and/or 13D with respect to Common Stock, par value \$0.001 per share, of Kala Pharmaceuticals, Inc. beneficially owned by them from time to time.

Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, the Filers hereby agree to file a single statement on Schedule 13G and/or 13D (and any amendments thereto) on behalf of each of such parties, and hereby further agree to file this Joint Filing Agreement as an exhibit to such statement, as required by such rule.

This Joint Filing Agreement may be terminated by any of the Filers upon one week's prior written notice or such lesser period of notice as the Filers may mutually agree.

Executed and delivered as of the date first above written.

RA CAPITAL MANAGEMENT, LLC

By: /s/ Peter Kolchinsky
Peter Kolchinsky
Manager

PETER KOLCHINSKY

/s/ Peter Kolchinsky

Exhibit 2

LOCK-UP AGREEMENT

, 2017

J.P. MORGAN SECURITIES LLC
MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED

As Representatives of
the several Underwriters listed in
Schedule 1 to the Underwriting
Agreement referred to below

c/o J.P. Morgan Securities LLC
383 Madison Avenue
New York, NY 10179

c/o Merrill Lynch, Pierce, Fenner & Smith
Incorporated
One Bryant Park
New York, NY 10036

Re: Kala Pharmaceuticals, Inc. — Initial Public Offering

Ladies and Gentlemen:

The undersigned understands that you, as Representatives of the several Underwriters, propose to enter into an underwriting agreement (the “Underwriting Agreement”) with Kala Pharmaceuticals, Inc., a Delaware corporation (the “Company”), providing for the public offering (the “Public Offering”) by the several Underwriters named in Schedule 1 to the Underwriting Agreement (the “Underwriters”), of Common Stock, par value \$0.001 per share, of the Company (the “Securities”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriters’ agreement to purchase and make the Public Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the Underwriters, the undersigned will not, during the period commencing on the date hereof and ending 180 days after the date of the final prospectus relating to the Public Offering (the “Restricted Period”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock, \$0.001 per share par value, of the Company (the “Common Stock”) or any securities convertible into or exercisable or exchangeable for Common Stock (including without limitation, Common Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant) (those transactions described in this subsection (1) collectively referred to as a “Transaction”), or publicly disclose the intention to enter into any Transaction, (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or such other securities, whether any such transaction described in clause (1) or (2) is to be settled by delivery of Common Stock or such other securities, in cash or otherwise (collectively, a “Swap”) or (3) make any demand for or exercise any right with respect to the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock, in each case other than (A) the Securities, if any, to be sold by the undersigned pursuant to the Underwriting Agreement, (B) transfers of shares of Common Stock or such other securities as a bona fide gift or gifts, (C) transfers or dispositions of shares of Common Stock or such other securities to any trust for the direct or indirect benefit of the undersigned or one or more immediate family members of the undersigned in a transaction not involving a disposition for value, (D) transfers or dispositions of shares of Common Stock or such other securities by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned, (E) transfers or dispositions of the undersigned’s shares of Common Stock (or any security convertible into or exercisable or exchangeable for Common Stock) that occurs by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement, (F) distributions of shares of Common Stock or such other securities to partners, members or stockholders of the undersigned, (G) distributions of shares of Common Stock to any corporation, partnership, limited liability company, investment fund or other entity controlled or managed by, or under common control or management with, the undersigned or the immediate family of the undersigned in a transaction not involving a disposition for value, (H) transfers or dispositions of shares of Common Stock prior to the first public filing of a prospectus for the Public Offering, and (I) transfers of shares of Common Stock or such other securities in connection with the conversion of the Company’s outstanding preferred stock into shares of Common Stock in connection with the consummation of the Public Offering, it being understood that any such shares of Common Stock received by the undersigned upon such conversion shall be subject to the restrictions on transfer set forth in this Letter Agreement; provided that in the case of any transfer, disposition or distribution pursuant to clause (B), (C), (D), (E), (F), (G) or (H), each transferee, donee or distributee shall execute and deliver to the Representatives a lock-up letter in the form of this Letter Agreement; and provided, further, that in the case of any transfer, disposition or distribution pursuant to clause (B), (C), (D), (E), (F), (G) or (H), no filing by any party (donor, donee, transferor or transferee) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or other public announcement reporting a reduction in the beneficial ownership of Common Stock held by the undersigned shall be required or shall be made voluntarily in connection with such transfer, disposition or distribution (other than a filing on a Form 5 made after the expiration of the Restricted Period referred to above and any required Schedule 13G (or 13G/A) or 13F filing). For purposes of this Letter Agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

Furthermore, notwithstanding the restrictions imposed by this Letter Agreement, the undersigned may, without the prior written consent of the Representatives, (i) exercise an option to purchase shares of Common Stock granted under any stock incentive plan or stock purchase plan of the Company existing as of the date hereof and described in the prospectus and the registration statement relating to the Public Offering, it being understood that any shares of Common Stock received by the undersigned upon such exercise shall be subject to the restrictions on transfer set forth in this Letter Agreement, (ii) exercise (whether for cash, cashless, or net exercise) warrants to purchase shares of Common Stock (or any security convertible into or exercisable or exchangeable for Common Stock) outstanding as of the date hereof and described in the prospectus and the registration statement relating to the Public Offering, provided that the underlying shares (securities received upon exercise) shall continue to be subject to the restrictions on transfer set forth in this Letter Agreement and provided further that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with such exercise during the Restricted Period, (iii) transfer the undersigned's Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to the Company (1) pursuant to any contractual arrangement in effect on the date of this Letter Agreement that provides for the repurchase of the undersigned's Common Stock or such other securities by the Company, (2) pursuant to the terms of any stock incentive plan or stock purchase plan of the Company solely to satisfy tax withholding obligations or (3) in connection with the termination of the undersigned's employment with the Company, (iv) establish a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Common Stock, provided that such plan does not provide for any transfers of Common Stock, and no filing under the Exchange Act or other public announcement shall be required or voluntarily made by the undersigned or any other person in connection therewith without the permission of the Representatives, in each case during the Restricted Period referred to above, (v) transfer or dispose (including by entering into a Transaction or Swap) of Securities acquired in the Public Offering (other than any Company-directed Securities purchased in the Public Offering by an officer or director of the Company) or acquired on the open market following the Public Offering, provided that no filing by any party under the Exchange Act or other public announcement reporting a reduction in the beneficial ownership of Common Stock held by the undersigned shall be required or shall be made voluntarily in connection with such transfer or disposition (other than a filing on a Form 5 made after the expiration of the Restricted Period referred to above and any required Schedule 13G (or 13G/A) or 13F filing) or (vi) transfer shares of Common Stock (or any security convertible into or exercisable or exchangeable for Common Stock) pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of the Common Stock involving a change of control of the ownership of the Company (including, without limitation, entering into any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of Common Stock or such other securities in connection with any such transaction, or vote any securities in favor of any such transaction) provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Common Stock (or any security convertible into or exercisable or exchangeable for Common Stock) owned by the undersigned shall remain subject to the restrictions contained in this Letter Agreement. For purposes of this Letter Agreement, "change of control" shall mean the consummation of any bona fide third party tender offer, merger, consolidation or other similar transaction the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of 50% of total voting power of the voting stock of the Company. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any Company-directed Securities the undersigned may purchase in the Public Offering.

If the undersigned is an officer or director of the Company, (i) J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the Underwriters agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the Underwriters will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the Underwriters hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this Letter Agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the registration or transfer of the securities described herein, are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Letter Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Letter Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that, if (A) either the Company, on the one hand, or the Representatives on behalf of the Underwriters, on the other hand, advises the other in writing, prior to the execution of the Underwriting Agreement, that they have determined not to proceed with the Public Offering, (B) the Underwriting Agreement does not become effective by November 30, 2017, (C) if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder or (D) the registration statement filed with the Securities and Exchange Commission in connection with the Public Offering is withdrawn, the undersigned shall be released from all obligations under this Letter Agreement. The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Letter Agreement.

This Letter Agreement and any claim, controversy or dispute arising under or related to this Letter Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.

Very truly yours,

By:

Name:

Title:
