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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No.)*

Bicara Therapeutics, Inc.

(Name of Issuer)

Common Stock, \$0.0001 par value per share

(Title of Class of Securities)

055477103

(CUSIP Number)

RA Capital Management, L.P.
200 Berkeley Street, 18th Floor
Boston, MA 02116
Attn: Peter Kolchinsky
Telephone: 617.778.2500

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

September 16, 2024

(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, L.P.

 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
Delaware

 7. Sole Voting Power
0

 8. Shared Voting Power
6,955,993

 9. Sole Dispositive Power
0

 10. Shared Dispositive Power
6,955,993

 11. Aggregate Amount Beneficially Owned by Each Reporting Person
6,955,993

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

 13. Percent of Class Represented by Amount in Row (11)
12.8%

 14. Type of Reporting Person (See Instructions)
IA, PN

-

1. Names of Reporting Persons

Peter Kolchinsky

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

United States

7. Sole Voting Power

0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power

6,955,993

9. Sole Dispositive Power.

0

10. Shared Dispositive Power

6,955,993

11. Aggregate Amount Beneficially Owned by Each Reporting Person

6,955,993

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

13. Percent of Class Represented by Amount in Row (11)

12.8%

14. Type of Reporting Person (See Instructions)

HC, IN

1. Names of Reporting Persons

Rajeev Shah

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

United States

7. Sole Voting Power

0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power

6,955,993

9. Sole Dispositive Power

0

10. Shared Dispositive Power

6,955,993

11. Aggregate Amount Beneficially Owned by Each Reporting Person

6,955,993

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

13. Percent of Class Represented by Amount in Row (11)

12.8%

14. Type of Reporting Person (See Instructions)

HC, IN

1. Names of Reporting Persons

RA Capital Healthcare Fund, L.P.

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)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power

0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power

4,303,418

9. Sole Dispositive Power

0

10. Shared Dispositive Power

4,303,418

11. Aggregate Amount Beneficially Owned by Each Reporting Person

4,303,418

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

13. Percent of Class Represented by Amount in Row (11)

7.9%

14. Type of Reporting Person (See Instructions)

PN

Item 1. Security and Issuer

This Schedule 13D relates to the shares of common stock, par value \$0.0001 per share ("Common Stock"), of Bicara Therapeutics, Inc., a Delaware corporation (the "Issuer"), which has its principal executive offices at 116 Huntington Avenue, Suite 703, Boston, MA 02116.

Item 2. Identity and Background

- (a) This Schedule 13D is being filed on behalf of RA Capital Management, L.P. ("RA Capital"), Peter Kolchinsky, Rajeev Shah and RA Capital Healthcare Fund, L.P. (the "Fund"). RA Capital, Dr. Kolchinsky, Mr. Shah and the Fund are collectively referred to herein as the "Reporting Persons." The agreement among the Reporting Persons to file this Schedule 13D jointly in accordance with Rule 13d-1(k) of the Securities Exchange Act of 1934, as amended, (the "Act"), is attached hereto as Exhibit 1.

The Reporting Persons' beneficial ownership of the Issuer's Common Stock consists of (i) 4,303,418 shares of Common Stock directly held by the Fund; and (ii) 2,652,575 shares of Common Stock directly held by RA Capital Nexus Fund III, L.P. (the "Nexus Fund III").

RA Capital Healthcare Fund GP, LLC is the general partner of the Fund and RA Capital Nexus Fund III GP, LLC is the general partner of the Nexus Fund III. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adviser for each of the Fund and the Nexus Fund III and may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer held by the Fund or the Nexus Fund III. Each of the Fund and the Nexus Fund III has delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in its portfolio, including the shares of the Issuer's Common Stock reported herein. Because each of the Fund and the Nexus Fund III has divested itself of voting and investment power over the reported securities it holds and may not revoke that delegation on less than 61 days' notice, each of the Fund and the Nexus Fund III disclaims beneficial ownership of the securities it holds for purposes of Section 13(d) of the Act and therefore disclaims any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managers of RA Capital, Dr. Kolchinsky and Mr. Shah may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by RA Capital. RA Capital, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of the securities reported in this Schedule 13D other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of this Schedule 13D shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is the beneficial owner of such securities for any other purpose.

- (b) The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18th Floor, Boston, MA 02116.
- (c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund and the Nexus Fund III. The principal occupation of each of Dr. Kolchinsky and Mr. Shah is investment management.
- (d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Reporting Persons has 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 of 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.
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Item 3. Source and Amount of Funds or Other Consideration

Prior to the Issuer's initial public offering (the "IPO"), (i) the Fund purchased an aggregate of 18,409,755 shares of Series B Preferred Stock and 5,835,024 shares of Series C Preferred Stock; and (ii) the Nexus Fund III purchased an aggregate of 12,273,169 shares of Series B Preferred Stock and 10,836,474 shares of Series C Preferred Stock. The aggregate purchase price of the foregoing was \$54,449,995.77.

On September 5, 2024, the Issuer effected a 1-for-9.2435 reverse stock split of its common stock and a proportional adjustment to the existing conversion ratios of the Preferred Stock (the "Reverse Stock Split"). In connection with the closing of the IPO, on September 16, 2024, the Preferred Stock discussed above automatically converted into shares of Common Stock on a 1-for-9.2435 basis. The Fund and the Nexus Fund III also purchased 1,680,520 and 152,480 shares of Common Stock, respectively, from the underwriters of the IPO at the IPO price of \$18.00 per share, for an aggregate purchase price of \$32,994,000.

All purchases of the securities described herein were for cash and were funded by working capital of the Fund and the Nexus Fund III, as applicable.

Item 4. Purpose of Transaction

The Reporting Persons acquired the Common Stock reported herein for investment purposes and not with an intent, purpose or effect of changing control of the Issuer. Although the Reporting Persons currently have no plan or proposal to acquire any additional Issuer securities or to dispose of any of the Issuer securities reported herein, the Reporting Persons may, from time to time, acquire additional equity securities or debt securities of the Issuer, which debt securities may be convertible or non-convertible, secured or unsecured, and could involve the monetization of potential revenue streams deriving from development-stage or commercial programs of the Issuer, or dispose of Issuer securities they beneficially own, on the open market or in private transactions or otherwise (including by means of 10b5-1 programs), consistent with their investment purposes and in amounts, on such terms and at such times as to be determined by the Reporting Persons based upon a number of factors, including, without limitation, their ongoing assessment of the Issuer's business prospects, the availability of Issuer securities at prices that would make the purchase or sale of such securities desirable, prevailing market conditions, the availability of other investment opportunities, and/or other considerations.

In addition, consistent with their investment purpose, the Reporting Persons may engage in communications with persons associated with the Issuer, including stockholders of the Issuer, officers of the Issuer, members of the board of directors of the Issuer, and/or other third parties, to discuss matters regarding the Issuer, including but not limited to its operations, strategic direction, governance or capitalization, and potential business combinations or dispositions involving the Issuer or certain of its businesses. Dr. Jake Simson, a Partner at 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.

Neither Dr. Simson (other than in his capacity as a director) nor the Reporting Persons have any present plans or proposals that relate to, or could result in, any of the matters referred to in paragraphs (a) through (j), inclusive, of the instructions to Item 4 of Schedule 13D.

Depending on various factors including, without limitation, the Issuer's financial position, results and strategic direction, actions taken by the Issuer's management and Board, other investment opportunities available to RA Capital, the price levels of the Issuer securities, conditions in the securities markets and general economic and industry conditions, the Reporting Persons may change their purpose and formulate and implement plans or proposals with respect to the Issuer at any time and from time to time. Any such action may be made by the Reporting Persons alone or in conjunction with other stockholders, potential acquirers, financing sources and/or other third parties and could include one or more purposes, plans or proposals that relate to or would result in actions required to be reported herein in accordance with Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

- (a) The information set forth in rows 11 and 13 of the cover pages to this Schedule 13D is incorporated by reference. The percentage set forth in row 13 is based upon 54,385,925 shares of Common Stock outstanding as of September 16, 2024 upon the closing of the Issuer's initial public offering, as reported in the Issuer's Form 424(b)(4) prospectus filed with the Securities and Exchange Commission (the "SEC") on September 13, 2024.
 - (b) The information set forth in rows 7 through 10 of the cover pages to this Schedule 13D and Item 2 above is incorporated by reference.
 - (c) Except as set forth herein, none of the Reporting Persons has effected any transactions with respect to the securities of the Issuer during the past sixty days.
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- (d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock subject to this Schedule 13D.
- (e) Not applicable.

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

Lock-up Agreements

The holders of substantially all of the Issuer's pre-IPO capital stock, including the Fund, the Nexus Fund III, and each of the Issuer's directors, entered into lock-up agreements (the "Lock-Up Agreements") with the representatives of the underwriters of the Issuer's IPO. Pursuant to the Lock-Up Agreements, neither the Fund nor the Nexus Fund III is permitted, with limited exceptions, for a period of 180 days from September 16, 2024, to offer, sell, or otherwise transfer or dispose of any of the Issuer's securities, without the consent of Morgan Stanley & Co. LLC and TD Securities (USA) LLC.

The description of the Lock-Up Agreements contained in this Item 6 is qualified in its entirety by reference to the full text of the form of Lock-up Agreement filed as Exhibit 2 to this Schedule 13D and incorporated by reference herein.

Investors' Rights Agreement

On December 6, 2023, the Issuer, the Fund, the Nexus Fund III and certain other parties entered into an amended and restated investors' rights agreement (the "Investors' Rights Agreement"). The Investors' Rights Agreement provides the Fund, the Nexus Fund III and other parties thereto with certain demand registration rights, including shelf registration rights, in respect of the shares of Common Stock issued to it upon conversion of the convertible preferred stock, subject to certain conditions. In addition, in the event that the Issuer registers additional shares of Common Stock for its own account or for the account of other holders of its securities, the Fund, the Nexus Fund III and certain other parties are entitled to include their shares in the registration, subject to certain limitations. The registration rights will expire four years following the closing of the Issuer's IPO.

The Investors' Rights Agreement contains customary cross-indemnification provisions, pursuant to which the Issuer is obligated to indemnify the Fund, the Nexus Fund III and other parties in the event of material misstatements or omissions in the registration statement attributable to the Issuer or any violation or alleged violation whether by action or inaction by the Issuer under certain securities laws and each of the Fund and the Nexus Fund III is obligated to indemnify the Issuer for material misstatements or omissions in the registration statement attributable to it, subject to certain limitations.

The description of the Investors' Rights Agreement contained in this Item 6 is qualified in its entirety by reference to the full text of the Investors' Rights Agreement filed as Exhibit 3 to this Schedule 13D and incorporated by reference herein.

Equity Awards

Dr. Jake Simson, a Partner at RA Capital, is a member of the Board of Directors of the Issuer. From time to time, Dr. Simson may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Pursuant to an agreement with RA Capital, Dr. Simson is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to RA Capital.

On September 12, 2024 Dr. Simson received an option representing the right to purchase a total of 23,746 shares of the Issuer's Common Stock, which shall vest upon the earlier of (i) August 16, 2025 and (ii) the date of the next Annual Meeting of Stockholders of the Issuer, subject to Dr. Simson's continued service to the Issuer through such vesting date. These options have an exercise price of \$18.00.

Item 7. Material to be Filed as Exhibits

[Exhibit 1](#) [Joint Filing Agreement](#)

[Exhibit 2](#) [Form of Lock-up Agreement \(incorporated by reference to Exhibit A to the Form of Underwriting Agreement filed as Exhibit 1.1 to the Issuer's Registration Statement on Form S-1, as amended \(Registration No. 333 281722\), filed with the SEC on September 6, 2024\).](#)

[Exhibit 3](#) [Amended and Restated Investors' Rights Agreement, dated December 6, 2023. \(incorporated by reference to Exhibit 4.2 to the Issuer's Registration Statement on Form S-1, as amended \(Registration No. 333-281722\), filed with the SEC on August 22, 2024\).](#)

SIGNATURES

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.

Dated: September 23, 2024

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of September 23, 2024, is by and among RA Capital Management, L.P., Peter Kolchinsky, Rajeev Shah and RA Capital Healthcare Fund, L.P. (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 \$0.0001 per share of Bicara Therapeutics, 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, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager
