As filed with the Securities and Exchange Commission on August 11, 2026

Registration No. 333-

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

FORM S-8
REGISTRATION STATEMENT
Under
the Securities Act of 1933

BICARA THERAPEUTICS INC.
(Exact name of registrant as specified in its charter)

Delaware	**83-2903745**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

Bicara Therapeutics Inc.
116 Huntington Ave, Suite 703
Boston, MA 02116
(617) 468-4219
(Address, including zip code and telephone number, including area code, of Registrant's principal executive offices)
Bicara Therapeutics Inc. 2026 Inducement Plan
(Full title of the plans)
Claire Mazumdar, Ph.D.
Chief Executive Officer
116 Huntington Ave, Suite 703
Boston, MA 02116
(617) 468-4219
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Kingsley L. Taft, Esq. **Gabriela Morales-Rivera, Esq.** **Goodwin Procter LLP** **100 Northern Avenue** **Boston, MA 02210** **(617) 570-1000**	**David DesRosier, Esq.** **Vice President, Legal** **116 Huntington Ave, Suite 703** **Boston, MA 02116** **(617) 468-4219**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

EXPLANATORY NOTE

This Registration Statement on Form S-8 registers an additional 700,000 shares of common stock, par value $0.0001 per share, of Bicara Therapeutics Inc. (the "Registrant") to be issued under the Registrant's 2026 Inducement Plan, as amended (the "Inducement Plan"). The Inducement Plan was originally adopted by the Registrant's board of directors without stockholder approval pursuant to Rule 5635(c)(4) of the Marketplace Rules of the Nasdaq Stock Market. The additional shares are of the same class as the securities previously registered under the Registrant's Registration Statement on Form S-8 (File No. 333-294748), filed with the Securities and Exchange Commission on March 30, 2026, relating to the Inducement Plan. The information contained in the Registrant's Registration Statement on Form S-8 (Registration No. 333-294748) is hereby incorporated by reference pursuant to General Instruction E.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The exhibits to this Registration Statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

EXHIBIT INDEX

Exhibit No.	Description
4.1	Fifth Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-42271) filed on September 16, 2024).
4.2	Third Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Form 8-K (File No. 001-42271) filed on September 16, 2024).
4.3	Amended and Restated Investors' Rights Agreement among the Registrant and certain of its stockholders, dated December 6, 2023 (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1 (File No. 333-281722) filed on August 22, 2024).
4.4	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form S-1/A (File No. 333-281722) filed on September 6, 2024).
4.5	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K (File No. 001-42271) filed on February 26, 2026).
5.1*	Opinion of Goodwin Procter LLP.
23.1*	Consent of KPMG LLP, independent registered public accounting firm.
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page).
99.1	Bicara Therapeutics Inc. 2026 Inducement Plan, as amended, and form of award agreements thereunder (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-42271) filed on August 11, 2026).
107*	Filing Fee Table.

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston, State of Massachusetts, on this 11th day of August, 2026.

BICARA THERAPEUTICS INC.

By: /s/ Claire Mazumdar

Name: Claire Mazumdar, Ph.D.
Title: Chief Executive Officer (Principal Executive Officer)

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL BY THESE PRESENT, that each individual whose signature appears below hereby constitutes and appoints each of Claire Mazumdar, Ph.D. and Ryan Cohlhepp, Pharm.D. as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following person in the capacities and on the date indicated.

SIGNATURE	TITLE	DATE
/s/ Claire Mazumdar Claire Mazumdar, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	August 11, 2026
/s/ Ivan Hyep Ivan Hyep	Chief Financial Officer (Principal Financial Officer & Principal Accounting Officer)	August 11, 2026
/s/ Ryan Cohlhepp Ryan Cohlhepp, Pharm.D.	President, Chief Operating Officer and Director	August 11, 2026
/s/ Michael Powell Michael Powell, Ph.D.	Director, Chairperson	August 11, 2026
/s/ Jeremy Bender Jeremy Bender, Ph.D.	Director	August 11, 2026
/s/ Christopher Bowden Christopher Bowden, M.D.	Director	August 11, 2026
/s/ Kate Haviland Kate Haviland	Director	August 11, 2026
/s/ Carolyn Ng Carolyn Ng, Ph.D.	Director	August 11, 2026
/s/ Christy Oliger Christy Oliger	Director	August 11, 2026
/s/ Scott Robertson Scott Robertson	Director	August 11, 2026
/s/ Jake Simson Jake Simson, Ph.D.	Director	August 11, 2026

Calculation of Filing Fee Tables

S-8

Bicara Therapeutics Inc.

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
1	Equity	2026 Inducement Plan, Common Stock, par value $0.0001 per share	Other	700,000	$ 27.735	$ 19,414,500.00	0.0001381	$ 2,681.14
			Total Offering Amounts:			$ 19,414,500.00		$ 2,681.14
			Total Fee Offsets:					$ 0.00
			Net Fee Due:					$ 2,681.14

Offering Note

1

Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value $0.0001 per share ("Common Stock"), which become issuable under the Registrant's 2026 Inducement Plan, as amended (the "Inducement Plan") by reason of any stock dividend, stock split, recapitalization, or any other similar transaction effected without the receipt of consideration that results in an increase in the number of our outstanding shares of Common Stock. The proposed maximum offering price per unit and maximum aggregate offering price are estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act, and based on the average of the high and low price per share of the Registrant's Common Stock as reported on the Nasdaq Global Market on August 10, 2026. The amount registered consists of 700,000 shares issuable under the Inducement Plan.

Table 2: Fee Offset Claims and Sources ☑Not Applicable

	Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rule 457(p)											
Fee Offset Claims											
Fee Offset Sources											

Exhibit 5.1

August 11, 2026

Bicara Therapeutics Inc.
116 Huntington Avenue, Suite 703
Boston, Massachusetts 02116

Re: Securities Being Registered under Registration Statement on Form S-8

We have acted as your counsel in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to 700,000 shares (the "Shares") of Common Stock, par value $0.0001 per share ("Common Stock"), of Bicara Therapeutics Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2026 Inducement Plan, as amended (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

For purposes of the opinion set forth below, we have assumed that, at the time Shares are issued, the total number of then unissued Shares, when added to the number of shares of Common Stock issued, subscribed for, or otherwise committed to be issued, does not exceed the number of shares of Common Stock authorized by the Company's certificate of incorporation.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when delivered against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/S/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 30, 2026, with respect to the consolidated financial statements of Bicara Therapeutics Inc. and subsidiary, incorporated herein by reference.

/s/ KPMG LLP

Boston, Massachusetts
August 11, 2026