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

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Avalo Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware45-0705648(State or other Jurisdiction of Incorporation or Organization)(I.R.S. employer

identification number)

540 Gaither Road, Suite 400 Rockville, Maryland 20850

(Address, including zip code, of registrant's principal executive offices)

Avalo Therapeutics, Inc. Third Amended and Restated 2016 Equity Incentive Plan
Avalo Therapeutics, Inc. 2016 Employee Stock Purchase Plan
(Full title of the plans)

Christopher Sullivan, Chief Financial Officer Avalo Therapeutics, Inc. 540 Gaither Road, Suite 400 Rockville, Maryland 20850 (410) 522-8707

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Andrew J. Gibbons, Esq. Alexander M. Donaldson, Esq. Wyrick Robbins Yates & Ponton LLP 4101 Lake Boone Trail, Suite 300 Raleigh, North Carolina 27607 (919) 781-4000

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 | (Do not check if smaller reporting company) | 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. \Box

EXPLANATORY NOTE

This Registration Statement is being filed to register:

- an additional 375,981 shares of common stock of Avalo Therapeutics, Inc. (the "Registrant") issuable pursuant to the Avalo Therapeutics, Inc. Third Amended and Restated 2016 Equity Incentive Plan (the "2016 Stock Plan"); and
- an additional 41,667 shares of common stock of the Registrant issuable pursuant to the Avalo Therapeutics, Inc. 2016 Employee Stock Purchase Plan (the "ESPP");

all of which are securities of the same class for which Registration Statements on Form S-8 are effective. Accordingly, the contents of the previous Registration Statements on Form S-8 filed by the Registrant with the Securities and Exchange Commission (the "Commission") on May 20, 2016 (File No. 333-211490), May 20, 2016 (File No. 333-211491), August 10, 2018 (File No. 333-226767), August 6, 2020 (File No. 333-241661), May 13, 2021 (File No. 333-256082) and May 13, 2021 (File No. 333-256083), including periodic and current reports filed after the previous Registration Statements on Form S-8 to maintain current information about the Registrant, are incorporated by reference into this Registration Statement pursuant to General Instruction E of Form S-8.

The additional shares are the result of the annual automatic increase provision of Section 3(a)(ii) of the 2016 Plan and Section 3(a) of the ESPP.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents previously filed by the Registrant with the Commission are incorporated herein by reference:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the Commission on March 2, 2022, pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including the information specifically incorporated by reference into the Annual Report on Form 10-K from our Definitive Proxy Statement for the 2022 Annual Meeting of Stockholders;
- (b) The Registrant's Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, June 30 and September 30, 2022, filed with the Commission on May 5, August 4 and November 7, 2022, respectively, pursuant to Section 13(a) of the Exchange Act;
- (c) The Registrant's Current Reports on Form 8-K filed pursuant to Section 13(a) of the Exchange Act on <u>January 6</u>, <u>February 8</u>, <u>February 18</u>, <u>March 16</u>, <u>March 18</u>, <u>May 24</u>, <u>June 14</u>, <u>July 7</u>, <u>August 11</u>, <u>August 11</u> and <u>August 16</u>, <u>2022</u>; and
- (d) The description of the Registrant's common stock contained in Exhibit 4.15 to the Registrant's Form 10-K for the fiscal year ended December 31, 2021, filed with the Commission on March 2, 2022, including any amendments or reports filed for the purpose of updating such description.

All documents or portions thereof filed, but not furnished, by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date hereof and prior to the filing of a post-effective amendment that indicates that all securities offered under this Registration Statement have been sold or which deregisters all securities then remaining unsold shall be considered incorporated by reference herein and to be a part hereof from the date the documents are filed. In no event, however, will any of the information, including exhibits, that we disclose under

Item 2.02 or Item 7.01 of any report on Form 8-K that has been or may be, from time to time, furnished to the Commission, be incorporated by reference into or otherwise become a part of this Registration Statement.

Any statement contained in a document incorporated or considered incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof to the extent that a statement contained herein (or in any other subsequently filed document that also is or is considered incorporated by reference herein) modifies or supersedes such statement. Any such statement so modified or superseded shall not be considered, except as so modified or superseded, to constitute a part hereof.

Selected Financial Data

On July 7, 2022, the Company effected a 1-for-12 reverse stock split (the "Reverse Stock Split"). As a result of the Reverse Stock Split, for every twelve (12) outstanding shares of common stock before the Reverse Stock Split represents one (1) share of common stock after the reverse stock split. On a pre-split basis, we had 112,794,203 and 75,004,127 common shares issued and outstanding as of December 31, 2021 and 2020, respectively. On a post-split basis, we had 9,399,517 and 6,250,344 common shares issued and outstanding as of December 31, 2021 and 2020, respectively. As of December 31, 2020, we had 1,257,143 preferred shares issued and outstanding both on a pre- and post-split basis. In April 2021, the preferred stock outstanding was converted to shares of common stock on an approximately 1-for-0.42 ratio (ratio adjusted for the Reverse Stock Split).

The following selected financial data is based on the common and preferred stock and per share data from our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and is retrospectively adjusted to reflect the Reverse Stock Split. Our latest interim financial information, which was contained in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, reflects the effects of the Reverse Stock Split and is incorporated herein by reference.

| | Year Ended December 31, | | | | |
|---|-------------------------|-----------|------|-----------|--|
| | | 2021 | 2020 | | |
| Net loss | \$ | (84,376) | \$ | (63,500) | |
| Net loss per share of common stock, basic and diluted | \$ | (9.95) | \$ | (10.38) | |
| Net loss per share of preferred stock, basic and diluted | \$ | (4.15) | \$ | (4.32) | |
| Weighted average shares used in computing common basic and diluted net loss per share | | 8,324,038 | | 5,557,372 | |
| Weighted average shares used in computing preferred basic and diluted net loss per share: | | 361,644 | | 1,356,597 | |

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 Rockville, State of Maryland, on the 7th day of November, 2022.

Avalo Therapeutics, Inc.

By: /s/ Christopher Sullivan

Christopher Sullivan Chief Financial Officer

Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

| Exhibit No. | Exhibit Description | | | | | | |
|-------------|---|--|--|--|--|--|--|
| | | | | | | | |
| 4.1 | Amended and Restated Certificate of Incorporation of Avalo Therapeutics, Inc. (incorporated by reference to Exhibit 3.1.2 to the Current Report on Form 8-K filed on May 17, 2018). | | | | | | |
| 4.2 | Certificate of Amendment to Amended and Restated Certificate of Incorporation of Avalo Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on August 26, 2021. | | | | | | |
| 4.3 | Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Avalo Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on July 7, 2022. | | | | | | |
| 4.4 | Avalo Therapeutics, Inc. Third Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the Commission on August 26, 2021. | | | | | | |
| 5.1* | Opinion of Wyrick Robbins Yates & Ponton LLP. | | | | | | |
| 10.1 | Avalo Therapeutics, Inc. Third Amended and Restated 2016 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on June 18, 2020). | | | | | | |
| 10.2 | Avalo Therapeutics, Inc. 2016 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on May 20,2016). | | | | | | |
| 23.1* | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm. | | | | | | |
| 23.2* | Consent of Wyrick Robbins Yates & Ponton LLP (included in Exhibit 5.1) | | | | | | |
| 24.1* | Power of Attorney (included on signature page to this Registration Statement on Form S-8). | | | | | | |
| 107* | Filing Fee Table. | | | | | | |

^{*} Filed herewith.

[THE NEXT PAGE IS THE SIGNATURE PAGE]

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Garry A. Neil and Christopher Sullivan, and each of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto 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 he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, 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 persons in the capacities and on the dates indicated.

| Signature | Capacity | Date | | |
|---------------------------------|--|------------------|--|--|
| /s/ Garry A. Neil, M.D. | Chief Executive Officer, Director and Chairman | November 7, 2022 | | |
| Garry A. Neil, M.D. | (Principal Executive Officer) | | | |
| /s/ Christopher Sullivan | Chief Financial Officer | November 7, 2022 | | |
| Christopher Sullivan | (Principal Financial and Accounting Officer) | | | |
| /s/ June Almenoff, M.D., Ph.D. | Director | November 7, 2022 | | |
| June Almenoff, M.D., Ph.D. | | | | |
| /s/ Mitchell Chan | Director | November 7, 2022 | | |
| Mitchell Chan | | | | |
| /s/ Gilla Kaplan, Ph.D. | Director | November 7, 2022 | | |
| Gilla Kaplan, Ph.D. | | | | |
| /s/ Magnus Persson, M.D., Ph.D. | Director | November 7, 2022 | | |
| Magnus Persson, M.D., Ph.D. | | | | |

Wyrick Robbins Yates & Ponton LLP

4101 Lake Boone Trail, Suite 300 Raleigh, North Carolina 27607-7506

November 7, 2022

Avalo Therapeutics, Inc. 540 Gaither Road, Suite 400 Rockville, Maryland 20850

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 filed on or about the date hereof by Avalo Therapeutics, Inc., a Delaware corporation (the "Registrant"), with the Securities and Exchange Commission (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended, of an aggregate of 417,648 shares of the Registrant's common stock, \$0.001 par value per share (the "Shares"). We understand that 375,981 of the Shares are to be issued pursuant to the Registrant's Third Amended and Restated 2016 Equity Incentive Plan (the "Plan") and that 41,667 Shares are to be issued pursuant to the Registrant's 2016 Employee Stock Purchase Plan (together, the "Plans"). In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the original of all documents submitted to us as copies thereof.

As the Registrant's legal counsel, we have examined the proceedings taken, and are familiar with the proceedings proposed to be taken, in connection with the sale of the Shares pursuant to the Plans.

It is our opinion that, upon completion of the proceedings being taken or contemplated by us, as the Registrant's counsel, to be taken prior to the issuance of the Shares, the Shares when issued in the manner referred to in the Registration Statement and in accordance with the Plans, will be validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement, including the Prospectus constituting a part thereof, and any amendments thereto.

Very truly yours,

/s/ WYRICK ROBBINS YATES & PONTON LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Avalo Therapeutics, Inc. 2016 Employee Stock Purchase Plan and the Avalo Therapeutics, Inc. Third Amended and Restated Equity Incentive Plan of our report dated March 2, 2022, with respect to the consolidated financial statements of Avalo Therapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young, LLP

Tysons, Virginia November 7, 2022

Calculation of Filing Fee Table

Form S-8 (Form Type)

Avalo Therapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

| Security Type | Security Class Title | Fee Calculation Rule | Amount Registered ⁽¹⁾⁽²⁾ | Proposed Maximum Offering Price Per Share ⁽³⁾ | Maximum Aggregate fering Price ⁽³⁾ | Fee Rate | R | Amount of egistration Fee |
|---------------|---|----------------------------|--|---|---|-----------------|----|---------------------------|
| Equity | Common Stock, \$0.001 par value per share | Rules 457(c) and 457(h)(1) | 417,648 | \$ 6.35 | \$ 2,652,065 | \$ 0.0001102 | \$ | 292 |
| | Total Offering Amou | unts | | | | | \$ | 292 |
| | Total Fee Offsets | S | | | | | \$ | 0 |
| | Net Fee Due | | | | | | \$ | 292 |

- (1) Consists of (i) 375,981 additional shares reserved for issuance under the Avalo Therapeutics, Inc. Third Amended and Restated 2016 Equity Incentive Plan (the "2016 Stock Plan") and (ii) 41,667 additional shares reserved for issuance under the Avalo Therapeutics, Inc. 2016 Employee Stock Purchase Plan (the "ESPP"). An aggregate of 1,234,632 shares issuable under the 2016 Plan and an aggregate of 188,242 shares issuable under the ESPP had been previously registered pursuant to Registration Statement No. 333-211490, Registration Statement No. 333-211491, Registration Statement No. 333-226082 and Registration Statement No. 333-256083.
- 2) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional shares of Registrant's common stock that become issuable under the 2016 Stock Plan by reason of any stock dividend, stock split, recapitalization, or other similar transaction that results in an increase in the number of outstanding shares of the Registrant's common stock.
- (3) Estimated in accordance with Rules 457(c) and 457(h)(1) of the Securities Act solely for the purpose of calculating the registration fee based upon the average of the high and low prices of the Registrant's common stock on the NASDAQ Capital Market on November 1, 2022.