As filed with the Securities and Exchange Commission on August 3, 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

OCULAR THERAPEUTIX, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)	**20-5560161** (I.R.S. Employer Identification No.)
14 Crosby Drive, 3rd Floor **Bedford, MA** (Address of Principal Executive Offices)	**01730** (Zip Code)

2021 Stock Incentive Plan, as amended
(Full Title of the Plan)

Pravin U. Dugel, M.D.
Executive Chairman, President and Chief Executive Officer
Ocular Therapeutix, Inc.
14 Crosby Drive, 3rd Floor
Bedford, MA 01730
(Name and Address of Agent for Service)

(781) 357-4000
(Telephone Number, Including Area Code, of Agent for Service)

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, relating to 10,000,000 shares of the common stock, $0.0001 par value per share, issuable under the 2021 Stock Incentive Plan, as amended (the "2021 Plan"), of Ocular Therapeutix, Inc. (the "Registrant"), is being filed with the Securities and Exchange Commission (the "SEC") for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. Accordingly, this Registration Statement incorporates by reference the contents of (i) the Registration Statement on Form S-8 (File No. 333-258642) filed with the SEC on August 9, 2021, by the Registrant relating to the 2021 Plan; (ii) the Registration Statement on Form S-8 (File No. 333-266648) filed with the SEC on August 8, 2022, by the Registrant relating to the 2021 Plan; (iii) the Registration Statement on Form S-8 (File No. 333-273770) filed with the SEC on August 7, 2023, by the Registrant relating to the 2021 Plan; (iv) the Registration Statement on Form S-8 (File No. 333-280266) filed with the SEC on June 17, 2024, by the Registrant relating to the 2021 Plan; and (v) the Registration Statement on Form S-8 (File No. 333-287948) filed with the SEC on June 11, 2025, by the Registrant relating to the 2021 Plan and the Registrant's Amended and Restated 2014 Employee Stock Purchase Plan, in each case, except to the extent amended or superseded by the contents hereof.

Item 8. Exhibits.

The following exhibits are incorporated herein by reference.

Number	Description
4.1(1)	Restated Certificate of Incorporation of the Registrant, as amended
4.2(2)	Amended and Restated By-laws of the Registrant
4.3(3)	Registration Rights Agreement, dated as of February 21, 2024, by and among the Registrant and the other parties thereto
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
23.2	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (included on signature page)
99.1(4)	2021 Stock Incentive Plan, as amended
107	Filing Fee Table

(1) Previously filed with the Securities and Exchange Commission on November 4, 2025, as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36554) and incorporated herein by reference.

(2) Previously filed with the Securities and Exchange Commission on July 30, 2014, as Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-36554) and incorporated herein by reference.

(3) Previously filed with the Securities and Exchange Commission on February 22, 2024, as Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001-36554) and incorporated herein by reference.

(4) Previously filed with the Securities and Exchange Commission on August 3, 2026, as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-36554) and incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Bedford, Massachusetts, on this 3rd day of August, 2026.

OCULAR THERAPEUTIX, INC.

By: /s/ Pravin U. Dugel, M.D.
Pravin U. Dugel, M.D.
Executive Chairman, President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Ocular Therapeutix, Inc., hereby severally constitute and appoint Pravin U. Dugel, M.D., Jason S. Robins and Todd Anderman, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Ocular Therapeutix, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Pravin U. Dugel, M.D. Pravin U. Dugel, M.D.	Executive Chairman of the Board of Directors, President and Chief Executive Officer (Principal Executive Officer)	August 3, 2026
/s/ Jason S. Robins Jason S. Robins	Chief Financial Officer (Principal Financial and Accounting Officer)	August 3, 2026
/s/ Adrienne Graves, Ph.D. Adrienne Graves, Ph.D.	Director	August 3, 2026
/s/ Seung Suh Hong, Ph.D. Seung Suh Hong, Ph.D.	Director	August 3, 2026
/s/ Richard L. Lindstrom, M.D. Richard L. Lindstrom, M.D.	Director	August 3, 2026
/s/ Merilee Raines Merilee Raines	Director	August 3, 2026
/s/ Charles Warden Charles Warden	Director	August 3, 2026
/s/ Leslie Williams Leslie Williams	Director	August 3, 2026

Exhibit 5.1

WILMERHALE

August 3, 2026

+ 1 617 526 6000 (t)
+ 1 617 526 5000 (f)

Ocular Therapeutix, Inc.
14 Crosby Drive, 3rd Floor
Bedford, MA 01730

Re: 2021 Stock Incentive Plan, as amended

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 10,000,000 shares of common stock, $0.0001 par value per share (the "Shares"), of Ocular Therapeutix, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2021 Stock Incentive Plan, as amended (the "Plan").

We have examined the Certificate of Incorporation and By-laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the board of directors and stockholders of the Company, the Registration Statement, the Plan and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

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

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby 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 of the Commission.

Very truly yours,

/s/ Wilmer Cutler Pickering Hale and Dorr LLP
WILMER CUTLER PICKERING HALE AND DORR LLP

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Ocular Therapeutix, Inc. of our report dated February 5, 2026 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Ocular Therapeutix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
August 3, 2026

Calculation of Filing Fee Tables

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OCULAR THERAPEUTIX, 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	Common Stock, $0.0001 par value per share	Other	10,000,000	$ 8.40	$ 84,000,000.00	0.0001381	$ 11,600.40
			Total Offering Amounts:			$ 84,000,000.00		$ 11,600.40
			Total Fee Offsets:					$ 0.00
			Net Fee Due:					$ 11,600.40

Offering Note

1

In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions. The "Amount Registered" consists of 10,000,000 shares of common stock issuable under the 2021 Stock Incentive Plan, as amended. 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 are calculated on the basis of the average of the high and low sale prices of the registrant's common stock on the Nasdaq Global Market on July 30, 2026, in accordance with Rule 457(c) under the Securities Act.

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											