

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

FORM S-3
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 Number)

15 Crosby Drive
Bedford, MA 01730
(781) 357-4000
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Antony Mattessich
President and Chief Executive Officer
Ocular Therapeutix, Inc.
15 Crosby Drive
Bedford, MA 01730
(781) 357-4000
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date hereof.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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.

PROSPECTUS

**43,219,517 SHARES OF COMMON STOCK**

This prospectus relates to the resale from time to time of up to 43,219,517 shares of common stock of Ocular Therapeutix, Inc. by the selling stockholders listed on page [8](#), including their respective donees, pledgees, assignees, transferees or other successors-in-interest, which shares include 10,805,957 shares of our common stock issuable upon the exercise of pre-funded warrants to purchase shares of our common stock at an exercise price of \$0.001 per share held by the selling stockholders. We are registering the resale of these shares on behalf of the selling stockholders, to be offered and sold by them from time to time. We will not receive any proceeds from the sale of the shares offered by this prospectus.

We have agreed, pursuant to a registration rights agreement that we have entered into with the selling stockholders, to bear all of the expenses incurred in connection with the registration of the resale of these shares. The selling stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers, dealer managers and securities industry professionals and similar expenses, if any, incurred for the sale of shares of our common stock.

The selling stockholders identified in this prospectus, or their respective donees, pledgees, assignees, transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the methods of sale that may be used by the selling stockholders, see the section entitled "Plan of Distribution" on page [14](#). For a list of the selling stockholders, see the section entitled "Selling Stockholders" on page [8](#).

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Our common stock is traded on The Nasdaq Global Market under the symbol "OCUL." On March 22, 2024, the closing sale price of the common stock on The Nasdaq Global Market was \$9.49 per share. You are urged to obtain current market quotations for the common stock.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page [4](#).

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 25, 2024.

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You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus may only be used where it is legal to offer and sell shares of our common stock. If it is against the law in any jurisdiction to make an offer to sell these shares, or to solicit an offer from someone to buy these shares, then this prospectus does not apply to any person in that jurisdiction, and no offer or solicitation is made by this prospectus to any such person. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since such date.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and in the documents we incorporate by reference. This summary does not contain all of the information you should consider before making an investment decision. You should read this entire prospectus carefully, especially the risks of investing in our common stock discussed under “Risk Factors” beginning on page 4 of this prospectus, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus.

Ocular Therapeutix, Inc.

We are a biopharmaceutical company committed to enhancing people’s vision and quality of life through the development and commercialization of innovative therapies for diseases and conditions of the eye, with a specific focus on retinal disease. Our program for retinal disease is led by AXPAXLI (axitinib intravitreal implant, also known as OTX-TKI), which is based on our ELUTYX proprietary bioresorbable hydrogel-based formulation technology. We are currently conducting a pivotal Phase 3 clinical trial to evaluate AXPAXLI for the treatment of wet age-related macular degeneration, or wet AMD, which we refer to as the SOL-1 trial, and a Phase 1 clinical trial for the treatment of non-proliferative diabetic retinopathy, or NPDR. Our clinical portfolio also includes PAXTRAVA (travoprost intracameral implant, also known as OTX-TIC), which is currently in Phase 2 clinical development for the treatment of primary open-angle glaucoma, or OAG, or ocular hypertension, or OHT.

Our expertise in the formulation, development and commercialization of innovative therapies and our ELUTYX platform supported the development and launch of our first commercial drug product, DEXTENZA, a corticosteroid approved by the U.S. Food and Drug Administration, or FDA, for the treatment of ocular inflammation and pain following ophthalmic surgery and ocular itching associated with allergic conjunctivitis. We are also developing two other clinical-stage assets, OTX-DED (dexamethasone intracanalicular insert) for the short-term treatment of the signs and symptoms of dry eye disease and OTX-CSI (cyclosporine intracanalicular insert) for the chronic treatment of dry eye disease, and several preclinical programs.

Corporate Information

We were incorporated under the laws of the State of Delaware in 2006. Our principal executive offices and research and development operations are located at 15 Crosby Drive, Bedford, MA 01730, and our telephone number is (781) 357-4000. Our manufacturing operations are located at 36 Crosby Drive, Bedford, MA 01730. Our website address is <http://www.ocutx.com>. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Unless the context otherwise indicates, references in this prospectus to the “Company,” “we,” “our” and “us” refer, collectively, to Ocular Therapeutix, Inc., a Delaware corporation, and its consolidated subsidiaries.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates was less than \$700 million as of our most recently completed second fiscal quarter and our annual revenue was less than \$100 million during our most recently completed fiscal year. We would cease to be a smaller reporting company if we have (i) a non-affiliate public float in excess of \$250 million and annual revenues in excess of \$100 million during our last fiscal year, or (ii) a non-affiliate public float in excess of \$700 million, in each case determined on an annual basis as of the last business day of our second quarter. For so long as we remain a smaller reporting company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not smaller reporting companies.

Private Placement

In February 2024, we sold 32,413,560 shares of our common stock at \$7.52 per share to the selling stockholders and, in lieu of common stock to certain selling stockholders, pre-funded warrants to purchase

up to an aggregate of 10,805,957 shares of our common stock at a price of \$7.519 per pre-funded warrant for aggregate gross proceeds of approximately \$325.0 million, before deducting placement agent fees and other offering expenses, or the Private Placement, pursuant to a securities purchase agreement we entered into with the selling stockholders. Each pre-funded warrant has an exercise price of \$0.001 per share, is currently exercisable and will remain exercisable until exercised in full.

For a detailed description of the transactions contemplated by the securities purchase agreement with the selling stockholders and the securities issued pursuant thereto, see the section entitled “Selling Stockholders” in this prospectus. We filed the registration statement on Form S-3, of which this prospectus forms a part, to fulfill our contractual obligations under the registration rights agreement entered into concurrently with the securities purchase agreement with the selling stockholders to provide for the resale by the selling stockholders of the shares of common stock offered hereby.

THE OFFERING

Common stock offered by selling stockholders	43,219,517 shares, including 10,805,957 shares issuable upon the exercise of pre-funded warrants.
Use of proceeds	We will not receive any proceeds from the sale of shares in this offering.
Risk factors	You should read the “Risk Factors” section on page 4 of this prospectus, as well as those risk factors that are incorporated by reference in this prospectus, for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Nasdaq Global Market symbol	“OCUL”

RISK FACTORS

Investing in our common stock involves significant risks. You should carefully consider the risks and uncertainties described under the section captioned “Risk Factors” contained in our most recent Annual Report on Form 10-K and any subsequent Quarterly Report on Form 10-Q, together with all of the other information contained in this prospectus and in our other filings we make with the Securities and Exchange Commission, or the SEC, that are incorporated by reference herein, before making an investment decision pursuant to this prospectus. Our business, financial condition and results of operations could be materially and adversely affected by any or all of these risks or by additional risks and uncertainties not presently known to us or that we currently deem immaterial that may adversely affect us in the future.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus and the information incorporated by reference in this prospectus include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this prospectus and the information incorporated by reference herein, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “predict,” “project,” “target,” “potential,” “goals,” “will,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus and the information incorporated by reference in this prospectus include, among other things, statements about:

- our ongoing clinical trials, including the SOL-1 trial; our Phase 1 clinical trials of AXPAXLI for the treatment of wet AMD; our Phase 1 clinical trial of AXPAXLI for the treatment of NPDR, which we refer to as the HELIOS trial; our Phase 2 clinical trial of PAXTRAVA for the reduction of intraocular pressure, or IOP, in patients with primary OAG or OHT; our ongoing clinical trial of OTX-DED for the short-term treatment of the signs and symptoms of dry eye disease; our clinical trial to evaluate DEXTENZA in pediatric subjects following cataract surgery; and our planned clinical trials, including our planned second pivotal clinical trial of AXPAXLI for the treatment of wet AMD and our planned pivotal clinical trials of AXPAXLI for the treatment of NPDR;
- determining our next steps for PAXTRAVA for the treatment of patients with OAG or OHT, OTX-DED for the short-term treatment of the signs and symptoms of dry eye disease, and OTX-CSI for the chronic treatment of dry eye disease;
- our commercialization efforts for our product DEXTENZA;
- our plans to develop, seek regulatory approval for and commercialize AXPAXLI, PAXTRAVA, OTX-DED, OTX-CSI, and our other product candidates based on our proprietary bioresorbable hydrogel-based formulation technology ELUTYX;
- our ability to manufacture DEXTENZA and our product candidates in compliance with Current Good Manufacturing Practices and in sufficient quantities for our clinical trials and commercial use;
- the timing of and our ability to submit applications and obtain and maintain regulatory approvals for DEXTENZA and our product candidates;
- our estimates regarding future revenue; expenses; the sufficiency of our cash resources; our ability to fund our operating expenses, debt service obligations and capital expenditure requirements; and our needs for additional financing;
- our plans to raise additional capital, including through equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements, royalty agreements and marketing and distribution arrangements;
- the potential advantages of DEXTENZA and our product candidates;
- the rate and degree of market acceptance and clinical utility of our products;
- our ability to secure and maintain reimbursement for our products as well as the associated procedures to insert, implant or inject our products;
- our estimates regarding the market opportunity for DEXTENZA and our product candidates;
- our license agreement and collaboration with AffaMed Therapeutics Limited under which we are collaborating on the development and commercialization of DEXTENZA and our product candidate PAXTRAVA in mainland China, Taiwan, Hong Kong, Macau, South Korea, and the countries of the Association of Southeast Asian Nations;

- our capabilities and strategy, and the costs and timing of manufacturing, sales, marketing, distribution and other commercialization efforts with respect to DEXTENZA and any additional products for which we may obtain marketing approval in the future;
- our intellectual property position;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- the impact of government laws and regulations; and
- our competitive position.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. You are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties, and assumptions that are referenced in the section of any accompanying prospectus supplement entitled “Risk Factors.” You should also carefully review the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures, licensing agreements or investments we may make.

You should read this prospectus and the documents incorporated by reference in this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements included in this prospectus are made as of the date of this prospectus. We do not assume, and we expressly disclaim, any obligation or undertaking to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

This prospectus and the documents incorporated by reference in this prospectus include statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. All of the market data used in this prospectus and the documents incorporated by reference in this prospectus involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. While we believe that the information from these industry publications, surveys and studies is reliable, we have not independently verified such data. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of important factors, including those described in the section titled “Risk Factors” and in the risk factors described in the other documents we file from time to time with the SEC and that are incorporated by reference herein.

This prospectus and the documents incorporated by reference in this prospectus contain references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus and the documents incorporated by reference in this prospectus may appear herein or therein without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. AXPAXLI is a trade name which we use to refer to our OTX-TKI product candidate, and PAXTRAVA is a trade name which we use to refer to our OTX-TIC product candidate. The FDA has not approved either AXPAXLI or PAXTRAVA as product names.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus is a part to permit holders of the shares of our common stock described in the section entitled "Selling Stockholders" to resell such shares. We are not selling any securities under this prospectus, and we will not receive any proceeds from the sale of shares by the selling stockholders.

The selling stockholders will pay any discounts, commissions, fees of underwriters, selling brokers or dealer managers and securities industry professionals and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, printing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

On February 21, 2024, we entered into a securities purchase agreement, or the Purchase Agreement, with the selling stockholders, pursuant to which we issued and sold to the selling stockholders in a private placement an aggregate of 32,413,560 shares of our common stock at a price of \$7.52 per share and, to certain selling stockholders, in lieu of shares of our common stock, pre-funded warrants to purchase 10,805,957 shares of our common stock at a price of \$7.519 per pre-funded warrant. We refer to this transaction as the Private Placement. Each pre-funded warrant has an exercise price of \$0.001 per share, became exercisable immediately upon issuance and will be exercisable until the pre-funded warrant is exercised in full. The closing of the issuance and sale of these securities was consummated on February 26, 2024. The shares issuable upon exercise of the pre-funded warrants will only become eligible for sale by the selling stockholders under this prospectus when the pre-funded warrants have been exercised. We cannot predict when or whether any of the selling stockholders who hold pre-funded warrants will exercise their pre-funded warrants.

Under the terms of the pre-funded warrants, we may not effect the exercise of any such pre-funded warrant, and a holder will not be entitled to exercise any portion of any such pre-funded warrant, if, upon giving effect to such exercise, the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates, any other persons acting as a group together with the holder or any of the holder's affiliates, and any other persons whose beneficial ownership of our common stock would or could be aggregated with the holder's for purposes of Section 13(d) or Section 16 of the Exchange Act) would exceed 4.99% or 9.99%, as applicable, of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as specified in such pre-funded warrant and as such percentage ownership is determined in accordance with the terms of such pre-funded warrant, which percentage may be increased or decreased at the holder's election upon 61 days' notice to us subject to the terms of such pre-funded warrants, provided that such percentage may in no event exceed 19.99%. We refer to such percentage limitation as the Beneficial Ownership Limitation.

In connection with the Private Placement, we entered into a registration rights agreement with the selling stockholders, dated as of February 21, 2024, or the Registration Rights Agreement, pursuant to which we agreed to file a registration statement with the SEC covering the resale of the shares of common stock sold in the Private Placement and the shares of common stock issuable upon exercise of the pre-funded warrants sold in the Private Placement. We agreed to file such registration statement promptly but no later than 30 days following the closing of the Private Placement and to keep such registration statement effective until the earlier of (1) the date on which all of the shares covered by this prospectus have been sold, (2) the date on which all of the shares covered by this prospectus can be sold without restriction pursuant to Rule 144 and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereof) promulgated under the Securities Act, and (3) five years after the closing of the Private Placement. We have granted the selling stockholders customary indemnification rights in connection with the registration statement. The selling stockholders have also granted us customary indemnification rights in connection with the registration statement. The registration statement of which this prospectus is a part has been filed in accordance with the Registration Rights Agreement.

The foregoing summary descriptions of the Purchase Agreement, the pre-funded warrants and the Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of such documents, which were filed as exhibits to our [Current Report on Form 8-K filed on February 22, 2024](#), and are incorporated by reference herein.

This prospectus covers the sale or other disposition by the selling stockholders of up to the total number of shares of our common stock that were issued to the selling stockholders pursuant to the Purchase Agreement, plus the total number of shares of our common stock issuable upon exercise of the pre-funded warrants issued or issuable to the selling stockholders, without giving effect to the Beneficial Ownership Limitation described above. The table below sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholders as of March 6, 2024. The information in the table below with respect to the selling stockholders has been obtained from the selling stockholders. When we refer to the "selling stockholders" in this prospectus, we mean the selling stockholders listed in the table below as offering shares, as well as their respective donees, pledgees, assignees, transferees or other successors-in-interest. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholders, we are referring to the shares of our

common stock and the shares underlying the pre-funded warrants issued or issuable to the selling stockholders pursuant to the Purchase Agreement, without giving effect to the Beneficial Ownership Limitation described above. The selling stockholders may sell all, some or none of the shares of common stock subject to this prospectus. See “Plan of Distribution.”

The number of shares of common stock beneficially owned prior to the offering for each selling stockholder includes all shares of our common stock beneficially held by such selling stockholder as of March 6, 2024, which includes (1) all shares of common stock purchased by such selling stockholder in the Private Placement and (2) all shares of common stock issuable upon exercise of the pre-funded warrants purchased by such selling stockholder in the Private Placement, subject to the Beneficial Ownership Limitation. The percentages of shares owned before and after the offering are based on 148,627,439 shares of common stock outstanding as of March 6, 2024, which includes the outstanding shares of common stock offered by this prospectus but does not include any shares of common stock offered by this prospectus that are issuable pursuant to pre-funded warrants and are deemed outstanding in the table below because they are beneficially owned by a person.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares. Generally, a person “beneficially owns” shares of our common stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights of shares of our common stock within 60 days. In computing the number of shares of our common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding the shares of common stock issuable upon the exercise of pre-funded warrants held by that selling stockholder described above up to the Beneficial Ownership Limitation because such shares are exercisable within 60 days of March 6, 2024. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated below, to our knowledge, each selling stockholder named in the table has sole voting and investment power with respect to the shares of common stock beneficially owned by it, except to the extent authority is shared by spouses under applicable law. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for any selling stockholder named below.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering		Number of Shares of Common Stock Being Offered ⁽¹⁾	Shares of Common Stock to be Beneficially Owned After Offering ⁽²⁾	
	Number	Percentage	Offered	Number	Percentage
Deep Track Biotechnology Master Fund, Ltd. ⁽³⁾	13,885,178	9.3%	4,654,409	9,230,769	6.2%
Entities affiliated with Summer Road LLC ⁽⁴⁾	14,360,633	9.3%	930,851	13,429,782	8.7%
Entities affiliated with Venrock Healthcare Capital Partners ⁽⁵⁾	13,760,200	9.1%	5,984,440	7,775,760	5.2%
Avoro Life Sciences Fund LLC ⁽⁶⁾	11,803,810	7.7%	11,303,810	500,000	*
Opaleye, L.P. ⁽⁷⁾	6,768,138	4.6%	698,138	6,070,000	4.1%
Logos Global Master Fund LP ⁽⁸⁾	5,811,436	3.9%	1,961,436	3,850,000	2.6%
TCG Crossover Fund II, L.P. ⁽⁹⁾	5,319,148	3.6%	5,319,148	—	—
Venrock Opportunities Fund, L.P. ⁽¹⁰⁾	3,989,627	2.6%	3,989,627	—	—
Perceptive Life Sciences Master Fund, Ltd. ⁽¹¹⁾	3,324,468	2.2%	3,324,468	—	—
Entities affiliated with Acuta Capital Partners, LLC ⁽¹²⁾	2,635,287	1.8%	1,329,787	1,305,500	*
Citadel CEMF Investments Ltd. ⁽¹³⁾	1,994,680	1.3%	1,994,680	—	—
Entities affiliated with Great Point Partners, LLC ⁽¹⁴⁾	1,728,723	1.2%	1,728,723	—	—

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- * Less than one percent.
- (1) The number of shares our common stock in the column “Number of Shares of Common Stock Being Offered” represents all of the shares of our common stock that a selling stockholder may offer and sell from time to time under this prospectus, including shares issuable upon the exercise of pre-funded warrants issued in the Private Placement, without giving effect to the Beneficial Ownership Limitation.
 - (2) We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders might not sell any or might sell all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders, including common stock issuable upon exercise of the pre-funded warrants sold in the Private Placement.
 - (3) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 12,721,460 shares of common stock and (ii) 1,163,718 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Deep Track Biotechnology Master Fund, Ltd. Deep Track Biotechnology Master Fund, Ltd. is prohibited from exercising such pre-funded warrants, if as a result of such exercise, Deep Track Biotechnology Master Fund, Ltd., its affiliates, and any other holder whose beneficial ownership could be attributed to Deep Track Biotechnology Master Fund, Ltd., would beneficially own more than 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise. The shares reported under “Number of Shares of Common Stock Being Offered” consist of (i) 3,490,691 shares of common stock and (ii) 1,163,718 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Deep Track Biotechnology Master Fund, Ltd. The investment manager of Deep Track Biotechnology Master Fund, Ltd. is Deep Track Capital, LP. The controlling person of Deep Track Capital, LP is David Kroin. Deep Track Capital, LP and David Kroin may be deemed to have shared voting and investment power of the securities held by Deep Track Biotechnology Master Fund, Ltd. The address of Deep Track Capital, LP and David Kroin is 200 Greenwich Ave, 3rd Floor, Greenwich, Connecticut 06830. The address of Deep Track Biotechnology Master Fund, Ltd. is c/o Walkers Corporate Limited, 190 Elgin Ave, George Town, KY1-9001, Cayman Islands.
 - (4) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 5,154,840 shares of common stock held by Cap 1 LLC, (ii) 3,436,561 shares of common stock held by East River Partners Ltd and (iii) 5,769,232 shares of common stock issuable upon conversion of the Convertible Notes (as defined below). The shares reported under “Number of Shares of Common Stock Being Offered” consist of (i) 558,510 shares of common stock held by Cap 1 LLC and (ii) 372,341 shares of common stock held by East River Partners Ltd. Pursuant to an investment management agreement between itself and each of Cap 1 LLC and East River Partners Ltd, two Family Clients (as defined under the Investment Advisers Act), Summer Road LLC may be deemed to have the power to exercise or to direct the exercise of such voting and/or dispositive power held by each of the Family Clients with respect to the common stock held by each of the Family Clients. The address for each of the entities listed above is 207 6th Street, West Palm Beach, FL 33401, Attention: Richard Silberberg.
 - (5) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 9,170,101 shares of common stock held by Venrock Healthcare Capital Partners EG, L.P., (ii) 1,452,408 shares of common stock held by Venrock Healthcare Capital Partners III, L.P., (iii) 145,272 shares of common stock held by VHCP Co-Investment Holdings III, LLC, (iv) 2,275,136 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Venrock Healthcare Capital Partners EG, L.P., (v) 652,048 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Venrock Healthcare Capital Partners III, L.P., and (vi) 65,235 shares of common stock which may be acquired upon exercise of pre-funded warrants held by VHCP Co-Investment Holdings III, LLC, and collectively with Venrock Healthcare Capital Partners EG, L.P. and Venrock Healthcare Capital Partners III, L.P., the Venrock Funds. The Venrock Funds are prohibited from exercising such pre-funded warrants, if as a result of such exercise, the

Venrock Funds, their affiliates, and any other holder whose beneficial ownership could be attributed to the Venrock Funds, would beneficially own more than 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise. The shares reported under “Number of Shares of Common Stock Being Offered” consist of (i) 2,274,834 shares of common stock held by Venrock Healthcare Capital Partners EG, L.P., (ii) 651,961 shares of common stock held by Venrock Healthcare Capital Partners III, L.P., (iii) 65,226 shares of common stock held by VHCP Co-Investment Holdings III, LLC, (iv) 2,275,136 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Venrock Healthcare Capital Partners EG, L.P., (v) 652,048 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Venrock Healthcare Capital Partners III, L.P., and (vi) 65,235 shares of common stock which may be acquired upon exercise of pre-funded warrants held by VHCP Co-Investment Holdings III, LLC. VHCP Management III, LLC, or VHCPM, is the sole general partner of Venrock Healthcare Capital Partners III, L.P. and the sole manager of VHCP Co-Investment Holdings III, LLC. VHCP Management EG, LLC, or VHCPM EG, is the sole general partner of Venrock Healthcare Capital Partners EG, L.P. Dr. Bong Koh and Nimish Shah are the voting members of VHCPM and VHCPM EG. The address of each of these persons and entities is 7 Bryant Park, 23rd Floor, New York, NY 10018.

- (6) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 7,148,936 shares of common stock and (ii) 4,654,874 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Avoro Life Sciences Fund LLC. Avoro Life Sciences Fund LLC is prohibited from exercising such pre-funded warrants, if as a result of such exercise, Avoro Life Sciences Fund LLC, its affiliates, and any other holder whose beneficial ownership could be attributed to Avoro Life Sciences Fund LLC, would beneficially own more than 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise. Avoro Capital Advisors LLC, or Avoro, is the investment advisor for Avoro Life Sciences Fund LLC. Behzad Aghazadeh serves as the portfolio manager and controlling person of Avoro and may be deemed to have investment discretion and voting power over the shares held by Avoro. Mr. Aghazadeh disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in such shares, if any. The address of Avoro Life Sciences Fund LLC is 110 Greene Street, Suite 800, New York, NY 10012.
- (7) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of 6,768,138 shares of common stock held by Opaley, L.P. Opaley Management Inc. is an investment manager of Opaley, L.P., and James Silverman is the President of Opaley Management Inc. The address for Mr. Silverman and each of the entities listed above is One Boston Place, 26th Floor, Boston, MA 02108, Attention: James Silverman.
- (8) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of 5,811,436 shares of common stock held by Logos Global Master Fund LP. Arsani William and Graham Walmsley are the managers of Logos GP LLC, the general partner of Logos Global Master Fund LP. Each disclaims beneficial ownership of securities held by the fund except to the extent of his pecuniary interest therein. The business address of these persons and entities is 1 Letterman Drive, C3-350, San Francisco, CA 94129.
- (9) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of 5,319,148 shares of common stock held by TCG Crossover Fund II, L.P. TCG Crossover GP II, LLC is the general partner of TCG Crossover Fund II, L.P. and may be deemed to have voting, investment and dispositive power with respect to these securities. Chen Yu is the sole managing member of the TCG Crossover GP II, LLC and may be deemed to share voting, investment and dispositive power with respect to these securities. The principal business address of these persons and entities is 705 High Street, Palo Alto, CA 94301.
- (10) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 1,994,681 shares of common stock and (ii) 1,994,946 shares of common stock which may be acquired upon exercise of pre-funded warrants held by Venrock Opportunities Fund, L.P. Venrock Opportunities Fund, L.P. is prohibited from exercising such pre-funded warrants, if as a result of such exercise, Venrock Opportunities Fund, L.P., its affiliates, and any other holder whose beneficial ownership could be attributed to Venrock Opportunities Fund, L.P. would beneficially own more than 4.99% of the number of shares of our common stock outstanding immediately after giving effect to

the exercise. Venrock Opportunities Management, LLC is the sole general partner of Venrock Opportunities Fund, L.P. The address of each of these entities is 3340 Hillview Avenue, Palo Alto, CA 94304.

- (11) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of 3,324,468 shares of common stock held by Perceptive Life Sciences Master Fund, Ltd. Joseph Edelman is the managing member of the Perceptive Life Sciences Master Fund Ltd. and in his capacity as Chief Executive Officer and Portfolio Manager has sole voting power over the securities. The business address of Perceptive Life Sciences Master Fund Ltd. is 51 Astor Place, 10th Floor, New York, NY 10003 Attn: James H. Mannix.
- (12) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of (i) 2,163,096 shares of common stock held by Acuta Capital Fund, LP and (ii) 472,191 shares of our Common Stock held by Acuta Opportunity Fund, LP. The shares reported under “Number of Shares of Common Stock Being Offered” consist of (i) 1,090,425 shares of common stock held by Acuta Capital Fund, LP and (ii) 239,362 shares of common stock held by Acuta Opportunity Fund, LP. The sole general partner of Acuta Capital Fund, LP and Acuta Opportunity Fund, LP is Acuta Capital Partners, LLC. Anupam Dalal is the managing member of Acuta Capital Partners, LLC. The principal business address of these persons and entities is 255 Shoreline Drive, Suite 515, Redwood City, CA 94065.
- (13) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” consist of 1,994,680 shares of common stock held by Citadel CEMF Investments Ltd. Citadel Advisors LLC is the portfolio manager of Citadel CEMF Investments Ltd. Citadel Advisors Holdings LP, or CAH, is the sole member of Citadel Advisors LLC. Citadel GP LLC, or CGP, is the general partner of CAH. Kenneth Griffin owns a controlling interest in CGP. Mr. Griffin, as the owner of a controlling interest in CGP, may be deemed to have shared power to vote or direct the vote of, and/or shared power to dispose or to direct the disposition over, the securities. This disclosure is not and shall not be construed as an admission that Mr. Griffin or any of the Citadel related entities listed above is the beneficial owner of any securities of the Company other than the securities actually owned by such person (if any). The address of Citadel CEMF Investments Ltd. is c/o Citadel Enterprise Americas LLC, Southeast Financial Center, 200 S. Biscayne Boulevard, Suite 3300, Miami, FL 33131.
- (14) The shares reported under “Shares of Common Stock Beneficially Owned Prior to the Offering” and “Number of Shares of Common Stock Being Offered” consist of (i) 954,255 shares of common stock held by Biomedical Value Fund, L.P., or BVF, (ii) 656,915 shares of common stock held by Biomedical Offshore Value Fund, LTD., or BOVF, and (iii) 117,553 shares of common stock held by Cheyne Select Master Fund ICAV — Cheyne Global Equity Fund, or CGEF, and, together with BVF and BOVF, the GPP Entities. Great Point Partners, LLC, or GPP LLC, is the investment manager of BVF and BOVF and the sub-advisor to CGEF, and by virtue of such status may be deemed to be the beneficial owner of the shares held by the GPP Entities. Each of Dr. Jeffrey R. Jay, M.D., as senior managing member of GPP LLC, and Mr. Ortav Yehudai, as managing director of GPP LLC, has voting and investment power with respect to shares held by the GPP Entities, and therefore may be deemed to be the beneficial owner of the shares held by the GPP Entities. Notwithstanding the above, GPP LLC, Dr. Jay and Mr. Yehudai disclaim beneficial ownership of the shares held by the GPP Entities except to the extent of their respective pecuniary interests. The principal business address of the GPP Entities is 165 Mason Street, 3rd Floor, Greenwich, CT 06830.

Relationship with Selling Stockholder

Private Placement of Convertible Debt

In March 2019, we issued \$37.5 million aggregate principal amount of issued and outstanding convertible notes, or the Convertible Notes, pursuant to a note purchase agreement, or the Note Purchase Agreement, with Cap 1 LLC, a selling stockholder under this prospectus. In August 2023, in connection with our entry into a credit and security agreement with Barings Finance LLC, as administrative agent, and the lenders party thereto, or our Credit Agreement, we amended the Convertible Notes such that the Convertible Notes mature on a date 91 days following the maturity of our indebtedness under the Credit Agreement, unless earlier converted, repurchased or redeemed pursuant to their terms. The holders of the Convertible Notes may convert all or part of the outstanding principal amount of their Convertible Notes into shares of

our common stock, par value \$0.0001 per share, prior to maturity and provided that no conversion results in a holder beneficially owning more than 19.99% of our issued and outstanding common stock. The conversion rate is initially 153.8462 shares of our common stock per \$1,000 principal amount of the Convertible Notes, which is equivalent to an initial conversion price is \$6.50 per share. The conversion rate is subject to adjustment in customary circumstances such as stock splits or similar changes to our capitalization. At our election, we may choose to make such conversion payment in cash, in shares of common stock, or in a combination thereof. Upon any conversion of any Convertible Note, we are obligated to make a cash payment to the holder of such Convertible Note for any interest accrued but unpaid on the principal amount converted. Upon the occurrence of a Corporate Transaction (as defined in the Convertible Notes), the holder of a Convertible Note is entitled, at such holder's option, to convert all of the outstanding principal amount of the Convertible Note in accordance with the foregoing and receive an additional, "make-whole" cash payment in accordance with a table set forth in each Convertible Note.

Upon the occurrence of a Corporate Transaction, each holder of a Convertible Note has the option to require us to repurchase all or part of the outstanding principal amount of such Convertible Note at a repurchase price equal to 100% of the outstanding principal amount of the Convertible Note to be repurchased, plus accrued and unpaid interest to, but excluding, the repurchase date.

If the last reported sale price of the common stock has been at least 130% of the conversion rate then in effect for twenty of the preceding thirty trading days (including the last trading day of such period), we are entitled, at our option, to redeem all or part of the outstanding principal amount of the Convertible Notes, on a pro rata basis, at an optional redemption price equal to 100% of the outstanding principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the optional redemption date.

The Note Purchase Agreement contains customary representations and warranties by us and the noteholder. The Note Purchase Agreement does not include any financial covenants. Our obligations under the Purchase Agreement and the Convertible Notes are subject to acceleration upon the occurrence of specified events of default, including a default or breach of certain contracts material to us and the delisting and deregistration of our common stock. The Credit Agreement and Convertible Notes also have cross-default provisions, pursuant to which a default under one instrument could cause a default in others.

In connection with the execution of the Note Purchase Agreement and the issuance and sale of the Convertible Notes thereunder, we and Cap 1 entered into a registration rights agreement, or the Note Registration Rights Agreement, in March 2019. Under the terms of the Note Registration Rights Agreement and subject to specified exceptions, we filed with the SEC a resale registration statement in April 2019 to register our common stock underlying the Convertible Notes and certain other registrable securities, and we are obligated to use commercially reasonable efforts to cause such registration statement to remain continuously effective until the earlier of the dates when all securities registrable under the Note Registration Rights Agreement (i) have been sold or (ii) may be sold without restriction, subject to certain conditions, pursuant to Rule 144 promulgated under the Securities Act.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes their respective donees, pledgees, assignees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales and settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending the list of selling stockholders to include the pledgee, assignee, transferee or other successors-in-interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the assignees, transferees, pledgees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not

receive any of the proceeds from this offering. Upon any exercise of the pre-funded warrants by payment of cash, however, we will receive the exercise price of the pre-funded warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are deemed “underwriters” within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealers or underwriters, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part to remain continuously effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with such registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2023 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at <http://www.ocutx.com>. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and the securities offered under this prospectus. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings and the exhibits attached thereto. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC's website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-36554) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

- [Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as filed on March 11, 2024](#);
- The information included in our [definitive proxy statement on Schedule 14A for the 2023 Annual Meeting of Stockholders, as filed with the SEC on May 1, 2023](#), to the extent incorporated by reference into Part III of the [Annual Report on Form 10-K for the fiscal year ended December 31, 2022](#);
- Current Reports on Form 8-K as filed on [January 25, 2024](#), and [February 22, 2024](#) (other than Item 2.02 thereof); and
- The description of our common stock contained in our Registration Statement on [Form 8-A as filed with the SEC on July 21, 2014](#), as the description therein has been updated and superseded by the description of our capital stock contained in [Exhibit 4.3](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as filed with the SEC on February 28, 2022, and including any amendments and reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or calling us at the following address or telephone number:

Ocular Therapeutix, Inc.
Attn: Chief Financial Officer
15 Crosby Drive
Bedford, MA 01730
(781) 357-4000



43,219,517 SHARES

COMMON STOCK

PROSPECTUS

March 25, 2024

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by Ocular Therapeutix, Inc. (except any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 60,539
Legal fees and expenses	\$ 50,000
Accounting fees and expenses	\$ 50,000
Miscellaneous fees and expenses	\$ 50,000
Total expenses	<u>\$210,539</u>

Item 15. Indemnification of Directors and Officers.

The following summary is qualified in its entirety by reference to the complete Delaware General Corporation Law (“DGCL”), our certificate of incorporation, and our by-laws.

Section 102(b)(7) of the DGCL provides, generally, that our certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director or officer to the corporation or its shareholders for monetary damages for breach of fiduciary duty as a director or officer, provided that such provision may not eliminate or limit the liability of (i) a director or officer for any breach of the director’s or officer’s duty of loyalty to the corporation or its shareholders, (ii) a director or officer for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) a director under section 174 of the DGCL, (iv) a director or officer for any transaction from which the director or officer derived an improper personal benefit or (v) an officer in any action by or in the right of the corporation. No such provision may eliminate or limit the liability of a director or officer for any act or omission occurring prior to the date when such provision became effective.

Section 145 of the DGCL provides, generally, that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (except actions by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A corporation may similarly indemnify such person for expenses actually and reasonably incurred by such person in connection with the defense or settlement of any action or suit by or in the right of the corporation, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in the case of claims, issues and matters as to which such person shall have been adjudged liable to the corporation, provided that a court shall have determined, upon application, that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper. As of March 6, 2024, our certificate of incorporation provides for the elimination or limitation of personal liability of our directors.

Our certificate of incorporation provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of us), by reason of the fact that he or she is or was, or has agreed to become, our director or officer, or is or was serving, or has

agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

Our certificate of incorporation also provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If we do not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with all of our directors and executive officers. In general, these agreements provide that we will indemnify the director or officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer of our company or in connection with their service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or officer.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the offering of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, our directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Insofar as the foregoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 16. Exhibits

Exhibit 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 February 21, 2024, by and among the Registrant and the other parties thereto
4.4 ⁽⁴⁾	Securities Purchase Agreement, dated February 21, 2024, by and among the Registrant and the other parties thereto
4.5 ⁽⁵⁾	Form of Pre-Funded Warrant

Exhibit Number	Description
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
23.1*	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm
23.2*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1 filed herewith)
24.1*	Power of Attorney (included on the signature page of this registration statement)
107*	Filing Fee Table

* Filed herewith

- (1) Previously filed with the Securities and Exchange Commission on August 9, 2021, 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 February 22, 2024, as Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-36554) and incorporated herein by reference.
- (5) Previously filed with the Securities and Exchange Commission on February 22, 2024, as Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-36554) and incorporated herein by reference.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended, or the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Tables" in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of this Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1) (i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in this Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the indemnification provisions described herein, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bedford, Commonwealth of Massachusetts, on March 25, 2024.

OCULAR THERAPEUTIX, INC.

By: /s/ Antony Mattessich

Name: Antony Mattessich

Title: President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Ocular Therapeutix, Inc. hereby severally constitute and appoint Antony Mattessich and Donald Notman, and each of them singly, our true and lawful attorneys-in-fact with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-3 filed herewith and any and all amendments (including post-effective amendments) to said Registration Statement, and any registration statement filed pursuant to Rule 462 under the Securities Act of 1933, as amended, in connection with said Registration Statement, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name 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 all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue hereof.

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Antony Mattessich</u> Antony Mattessich	President, Chief Executive Officer and Director (Principal Executive Officer)	March 25, 2024
<u>/s/ Donald Notman</u> Donald Notman	Chief Financial Officer (Principal Financial and Accounting Officer)	March 25, 2024
<u>/s/ Pravin Dugel, M.D.</u> Pravin Dugel, M.D.	Executive Chairman of the Board of Directors	March 25, 2024
<u>/s/ Adrienne Graves, Ph.D.</u> Adrienne Graves, Ph.D.	Director	March 25, 2024
<u>/s/ Seung Suh Hong, Ph.D.</u> Seung Suh Hong, Ph.D.	Director	March 25, 2024
<u>/s/ Richard L. Lindstrom, M.D.</u> Richard L. Lindstrom, M.D.	Director	March 25, 2024
<u>/s/ Merilee Raines</u> Merilee Raines	Director	March 25, 2024

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Charles Warden</u> Charles Warden	Director	March 25, 2024
<u>/s/ Leslie Williams</u> Leslie Williams	Director	March 25, 2024

March 25, 2024

WILMERHALE

+1 617 526 6000 (t)
+1 617 526 5000 (f)
wilmerhale.comOcular Therapeutix, Inc.
15 Crosby Drive
Bedford, MA 01730Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of an aggregate of 43,219,517 shares (the "Shares") of common stock, \$0.0001 par value per share (the "Common Stock"), of Ocular Therapeutix, Inc., a Delaware corporation (the "Company"). All of the Shares are being registered on behalf of certain stockholders of the Company (the "Selling Stockholders"). The Shares consist of (i) 32,413,560 outstanding shares of Common Stock (the "Outstanding Shares") that are held by the Selling Stockholders and (ii) 10,805,957 shares of Common Stock (the "Pre-Funded Warrant Shares") issuable upon the exercise of outstanding pre-funded warrants to purchase shares of Common Stock (the "Pre-Funded Warrants") that are held by the Selling Stockholders.

We are acting as counsel for the Company in connection with the registration for resale of the Shares. We have examined signed copies of the Registration Statement as filed with the Commission. We have also examined and relied upon minutes of meetings of the stockholders and the Board of Directors of the Company as provided to us by the Company, the Certificate of Incorporation and By-Laws of the Company, each as amended and/or restated to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

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 copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

Our opinion below, insofar as it relates to the Outstanding Shares being fully paid, is based solely on a certificate of the President and Chief Executive Officer and Chief Financial Officer of the Company confirming the Company's receipt of the consideration called for by the applicable resolutions authorizing the issuance of such Outstanding Shares.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

March 25, 2024

Page 2

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares by the Selling Stockholders, 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 and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that (i) the Outstanding Shares have been duly authorized for issuance and are validly issued, fully paid and nonassessable, and (ii) the Pre-Funded Warrant Shares have been duly authorized for issuance and, when issued, delivered and paid for in accordance with the terms of the Pre-Funded Warrants, including the payment of the exercise price therefor, will be validly issued, fully paid and nonassessable.

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. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related prospectus under the caption “Legal Matters.” 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

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Ocular Therapeutix, Inc. of our report dated March 11, 2024 relating to the financial statements, which appears in Ocular Therapeutix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
March 25, 2024

Calculation of Filing Fee Tables

Form S-3
(Form Type)OCULAR THERAPEUTIX, INC.
(Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common Stock, \$0.0001 par value per share	Other	43,219,517 (1)	\$9.49(2)	\$410,153,216.33(2)	\$0.00014760	\$60,538.62	—	—	—	—
Fees Previously Paid	—	—	—	—	—	—	—	—	—	—	—	—
Carry Forward Securities												
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—	—
Total Offering Amounts						\$410,153,216.33 (2)	—	\$60,538.62				
Total Fees Previously Paid								—				
Total Fee Offsets								—				
Net Fee Due								\$60,538.62				

- (1) The shares of common stock will be offered for resale by the selling stockholders. The registration statement registers the resale of an aggregate of 43,219,517 shares of the Registrant's common stock, which consists of (i) 32,413,560 outstanding shares of common stock and (ii) 10,805,957 shares of common stock issuable upon the exercise of outstanding pre-funded warrants. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also relates to an indeterminate number of additional shares of common stock to be issued as a result of stock splits, stock dividends or similar transactions.
- (2) This estimate is made pursuant to Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Registrant's common stock on March 19, 2024, as reported on the Nasdaq Global Market.