

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

OPUS GENETICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or
organization)

11-3516358
(I.R.S. Employer Identification No.)

8 Davis Drive, Suite 220
Durham, NC 27713
(248) 957-9024
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Dr. George Magrath
Chief Executive Officer
Opus Genetics, Inc.
8 Davis Drive, Suite 220
Durham, NC 27713
(248) 957-9024
(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 this Registration Statement becomes effective.

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.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities or accept an offer to buy these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders named in this prospectus are not soliciting an offer to buy these securities in any state or jurisdiction where such offer or sale is not permitted.

Subject to Completion, Dated June 5, 2026

PROSPECTUS



OPUS GENETICS, INC.
Up to 2,678,570 Shares of Common Stock
Offered by the Selling Stockholders

This prospectus relates to the resale or other disposition, from time to time, by the selling stockholders named in this prospectus (the “selling stockholders”) of up to 2,678,570 shares of our common stock, par value \$0.0001 per share (“Common Stock”), consisting of (i) 1,116,070 shares of our Common Stock (the “Purchased Shares”) issued to the selling stockholders pursuant to that certain Stock Purchase and Conversion Agreement, dated as of April 2, 2026, amended by that certain Waiver and Omnibus Amendment of Note and Stock Agreements, dated as of April 13, 2026 (the “Amendment”) (the “Stock Purchase and Conversion Agreement”), and (ii) 1,562,500 shares of our Common Stock (the “Conversion Shares”) issuable upon the conversion of notes (the “Notes”) issued pursuant to that certain Note Purchase Agreement, dated as of April 2, 2026, as amended by the Amendment (the “Note Purchase Agreement”). The Purchased Shares and the Conversion Shares registered by this prospectus are collectively referred to herein as the “Shares.”

Under the Note Purchase Agreement, the selling stockholders have the right, at their election, to convert up to ten percent of the aggregate principal amount (including payment-in-kind interest capitalized thereon) of the Notes then outstanding into shares of our Common Stock at a price per share equal to \$6.72, as calculated in accordance with the Note Purchase Agreement (the “Conversion Price”). Each selling stockholder’s conversion right is subject to certain beneficial ownership limitations. The actual number of shares issuable upon conversion of the Notes may differ from the amount registered hereunder, depending on, among other things, the aggregate principal amount of Notes outstanding at the time of conversion and the actual amount of payment-in-kind interest capitalized thereon (which accrues at a floating rate). To the extent the actual number of shares issuable upon conversion of the Notes exceeds the number of Conversion Shares registered hereby, we will be required to file a post-effective amendment to this registration statement or a new registration statement to register such additional shares.

We are not selling any Shares under this prospectus and will not receive any of the proceeds from the sale or other disposition of Shares by the selling stockholders. Our registration of shares of Common Stock covered by this prospectus does not mean that the selling stockholders will offer or sell any such Shares.

We are registering the offer and resale of the Shares to satisfy a covenant set forth in the Stock Purchase and Conversion Agreement in which we agreed to register the resale of the Shares within a limited period of time following the date in which our Registration Statement on Form S-3 (File No. 333-294295) became effective.

Any shares of our Common Stock subject to resale hereunder will have been issued by us and received by the selling stockholders prior to any resale of such Shares pursuant to this prospectus.

The selling stockholders, or their donees, pledgees, transferees or other successors-in-interest, may sell the Shares on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, on the over-the-counter market, in one or more transactions otherwise than on these exchanges or systems, such as privately negotiated transactions, or using a combination of these methods, and at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. See the disclosure under the heading “Plan of Distribution” elsewhere in this prospectus for more information about how the selling stockholders may sell or otherwise dispose of their Shares hereunder.

Our Common Stock is listed on the Nasdaq Capital Market under the symbol “IRD”. On June 1, 2026, the last reported sale price of our Common Stock was \$4.12.

We are a “smaller reporting company” under federal securities laws and as such, have elected to comply with reduced public company reporting requirements for this prospectus and the documents incorporated by reference herein and may elect to comply with reduced public company reporting requirements in future filings. See “Prospectus Summary—Implications of Being a Smaller Reporting Company.”

Investing in our securities involves significant risks. We strongly recommend that you read carefully the risks we describe in this prospectus and in any accompanying prospectus supplement, as well as the risk factors that are incorporated by reference into this prospectus from our filings made with the Securities and Exchange Commission. See “Risk Factors” beginning on page 5 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”), using a “shelf” registration process. The selling stockholders named in this prospectus (the “selling stockholders”) may resell, from time to time, in one or more offerings, shares of our Common Stock (as defined below) offered by this prospectus. Information about the selling stockholders may change over time. When the selling stockholders sell shares of our Common Stock under this prospectus, we will, if necessary and required by law, provide a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add to, update, modify or replace information contained in this prospectus. If a prospectus supplement is provided and the description of the offering in the prospectus supplement varies from the information in this prospectus, you should rely on the information in the prospectus supplement. You should carefully read this prospectus and the accompanying prospectus supplement, if any, along with all of the information incorporated by reference herein and therein, before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus and any applicable prospectus supplement. We have not, and the selling stockholders have not, authorized any other person to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. This prospectus is not an offer to sell, nor are the selling stockholders seeking an offer to buy, the shares offered by this prospectus in any jurisdiction where the offer and sale is not permitted. No offers or sales of any of the shares of our Common Stock are to be made in any jurisdiction in which such an offer or sale is not permitted. You should assume that the information contained in this prospectus or any applicable prospectus supplement is accurate only as of the date on the front cover thereof or the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any applicable prospectus supplement or any sales of the shares of our Common Stock offered hereby or thereby.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus, any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus, as applicable, has not changed since the date of this prospectus or any prospectus supplement or any issuer free writing prospectus. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference herein or therein is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operation and prospects may have changed since that date.

The terms “Opus Genetics,” the “Company,” “our,” “us” and “we,” as used in this prospectus, refer to Opus Genetics, Inc., unless we state otherwise or the context indicates otherwise. This prospectus contains trade names, trademarks and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or TM symbols.

PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, any applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our consolidated financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Company Overview

Opus Genetics, Inc. (“Opus”, “we,” “us,” “our” or the “Company”) is a clinical-stage biopharmaceutical company developing gene therapies for the treatment of inherited retinal diseases (IRDs) and small molecule therapies for other ophthalmic disorders. Our pipeline is centered on adeno-associated virus (AAV) based gene therapy programs addressing genetically defined forms of IRD, including OPGx-LCA5, which is currently being evaluated for the treatment of Leber congenital amaurosis caused by mutations in the LCA5 gene, and OPGx-BEST1, which is currently being evaluated for retinal diseases associated with mutations in the BEST1 gene. In addition, we are advancing other gene therapy programs, including RDH12, MERTK, RHO, CNGB1 and NMNAT1, and research activities targeting additional monogenic retinal disorders. Apart from gene therapies, our pipeline also includes Phentolamine Ophthalmic Solution 0.75%, a non-selective alpha-1 and alpha-2 adrenergic antagonist to reduce pupil size.

Private Placement of Shares and Notes

On April 2, 2026, we entered into a Stock Purchase and Conversion Agreement (as amended by that certain Waiver and Omnibus Amendment of Note and Stock Agreements, dated April 13, 2026 (the “Amendment”), the “Stock Purchase and Conversion Agreement”), providing for the issuance and sale of an aggregate of 1,116,070 shares of our Common Stock at a purchase price of \$4.48 per share. On the same date, we entered into a Note Purchase Agreement (as amended by the Amendment, the “Note Purchase Agreement”), pursuant to which we agreed to issue and sell notes (the “Notes”) in an aggregate committed principal amount of up to \$105,000,000, in multiple tranches, at a purchase price equal to 100% of the principal amount thereof. Pursuant to the terms of the Note Purchase Agreement, the holders of the Notes have the right, at their election, to convert up to ten percent of the aggregate principal amount of Notes then outstanding (including payment-in-kind interest capitalized thereon) into shares of our Common Stock at a price per share equal to \$6.72, as calculated in accordance with the Note Purchase Agreement (the “Conversion Price”).

The closing of the issuance and sale of the 1,116,070 shares issued pursuant to the Stock Purchase and Conversion Agreement occurred on May 26, 2026. The first tranche of Notes in an aggregate principal amount of \$35,000,000 was issued on April 21, 2026. Additional tranches of Notes may be issued from time to time in accordance with the terms of the Note Purchase Agreement.

The Stock Purchase and Conversion Agreement and the Note Purchase Agreement contain customary representations, warranties and covenants of the Company and the selling stockholders, including representations and warranties relating to the Company’s organization, authorization, capitalization, compliance with laws, financial statements, intellectual property, regulatory matters and other customary matters. The representations, warranties and covenants contained in the Stock Purchase and Conversion Agreement and the Note Purchase Agreement were made only for purposes of such agreements and are made as of specific dates, are solely for the benefit of the parties thereto (except as specifically set forth therein), may be subject to qualifications and limitations agreed upon by the parties in connection with negotiating the terms of such agreements, and may be subject to standards of materiality and knowledge applicable to the contracting parties that differ from those applicable to investors generally. The selling stockholders should not rely on the representations, warranties and covenants or any description thereof as characterizations of the actual state of facts or condition of the Company.

Pursuant to the Stock Purchase and Conversion Agreement, we agreed to prepare and file with the SEC a shelf registration statement under the Securities Act of 1933, as amended (the “Securities Act”), covering the resale by the selling stockholders of (i) the shares issued pursuant to the Stock Purchase and Conversion Agreement and (ii) the shares issuable upon the conversion of Notes issued pursuant to the Note Purchase Agreement within a limited period of time following the date in which our Registration Statement on Form S-3 (File No. 333-294295) became effective. If the registration statement of which this prospectus forms a part is not declared effective by the earlier of (i) five days

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after receiving a “no review” notification from the SEC and (ii) 60 days after filing in the event of a “review” by the SEC, we will be obligated to pay liquidated damages to the selling stockholders as set forth in the Stock Purchase and Conversion Agreement.

We have also agreed, among other things, to indemnify each selling stockholder and each person controlling such selling stockholder within the meaning of Section 15 of the Securities Act against all claims, losses, damages and liabilities arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, or any amendment or supplement thereof, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and to reimburse each selling stockholder for reasonable and documented legal and other out-of-pocket expenses reasonably incurred in connection therewith. Each selling stockholder has severally, and not jointly, agreed to indemnify the Company, each of our directors and officers, and each person who controls the Company within the meaning of Section 15 of the Securities Act, against similar claims, losses, damages and liabilities, but only to the extent that such untrue statement or omission is made in reliance upon and in conformity with written information furnished to the Company by or on behalf of the applicable selling stockholder for use in the registration statement or prospectus.

The foregoing descriptions of the Stock Purchase and Conversion Agreement and the Note Purchase Agreement do not purport to be complete and are qualified in their entirety by reference to the full text thereof, copies of each of which have been filed as exhibits to our filings with the SEC.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting Common Stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting Common Stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Corporate Information

Our principal executive offices are located at 8 Davis Drive, Suite 220, Durham, NC 27713. Our telephone number is (248) 957-9024. Our website address is www.opusgtx.com. Additionally, our filings with the SEC are posted on our website at www.opusgtx.com. The information found on or accessible through our website is not part of this or any other report we file with or furnish to the SEC. The public can also obtain copies of these filings by accessing the SEC’s website at <http://www.sec.gov>.

THE OFFERING

Shares Offered by the Selling Stockholders	Up to 2,678,570 shares of our Common Stock (the “Shares”), consisting of (i) 1,116,070 shares issued to the selling stockholders pursuant to the Stock Purchase and Conversion Agreement and (ii) up to 1,562,500 shares issuable upon the conversion of Notes issued pursuant to the Note Purchase Agreement.
Shares Outstanding	82,565,835.
Selling Stockholders	All of the Shares are being offered by the selling stockholders. See “The Selling Stockholders” beginning on page 9 for additional information on the selling stockholders.
Use of Proceeds	We will not receive any proceeds from the sale of the Shares in this offering by the selling stockholders under this prospectus. The net proceeds from the sale of the Shares offered by this prospectus will be received by the selling stockholders. See “Use of Proceeds” beginning on page 8 for additional information on the use of proceeds.
Plan of Distribution	The selling stockholders, or their pledgees, donees, transferees, distributees, beneficiaries or other successors-in-interest, may offer or sell the Shares offered under this prospectus from time to time through public or private transactions at our prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders may also resell the Shares offered under this prospectus to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions. See “Plan of Distribution” beginning on page 11 for additional information on the methods of sale that may be used by the selling stockholders.
Risk Factors	Investing in our securities involves risk. You should carefully read and consider the information beginning on page 5 of this prospectus set forth under the heading “Risk Factors” and all other information set forth in this prospectus and the documents incorporated herein and therein by reference before deciding to invest in our Common Stock.
Nasdaq symbol for our Common Stock	“IRD”

The number of shares of Common Stock shown above to be outstanding is based on 82,565,835 shares outstanding as of May 31, 2026 and excludes:

- 21,154,753 shares of Common Stock issuable upon the exercise of warrants outstanding as of May 31, 2026, with a weighted-average exercise price of \$1.33 per share;
- 16,009,928 shares of Common Stock issuable upon the exercise of pre-funded warrants outstanding as of May 31, 2026, with a weighted-average exercise price of \$0.0001 per share;
- 7,889,109 shares of Common Stock issuable upon the exercise of stock options outstanding as of May 31, 2026, under our 2018 Equity Incentive Plan, 2020 Equity Incentive Plan and 2021 Inducement Plan, with a weighted-average exercise price of \$2.41 per share;
- 793,503 shares of Common Stock reserved for future issuance under our 2020 Equity Incentive Plan and 2021 Inducement Plan outstanding as of May 31, 2026;

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- 4,297,924 unvested restricted stock awards as of May 31, 2026; and
- any shares issuable upon the conversion of Notes issued pursuant to the Note Purchase Agreement.

Unless we specifically state otherwise, this prospectus reflects and assumes no exercise of outstanding options, warrants or restricted stock units.

RISK FACTORS

Investing in our securities involves risk. You should carefully consider the specific risks discussed or incorporated by reference into this prospectus or any applicable prospectus supplement, together with all the other information contained or incorporated by reference in this prospectus or any applicable prospectus supplement. You should also consider the risks, uncertainties and assumptions discussed under the caption "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2025 and in subsequent filings, which are incorporated by reference into this prospectus. These risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future or by a prospectus supplement relating to a particular offering of our securities. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment.

The sale of a substantial number of shares of our Common Stock in the public market, including resale of the Shares issued to the selling stockholders, could adversely affect the prevailing market price for our Common Stock.

We are registering for resale up to 2,678,570 Shares issued to the selling stockholders to fulfill our contractual obligations under the Stock Purchase and Conversion Agreement. Sales of substantial amounts of shares of our Common Stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our Common Stock. We cannot predict if and when the selling stockholders may sell such Shares in the public markets. Furthermore, in the future, we may issue additional shares of Common Stock or other equity or debt securities exercisable for, or convertible into, shares of Common Stock. Any such issuances could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the safe harbor provisions of Section 27A of the Securities Act, and Section 21E of the Exchange Act. These forward-looking statements relate to us, our business prospects and our results of operations and are subject to certain risks and uncertainties posed by many factors and events that could cause our actual business, prospects and results of operations to differ materially from those anticipated by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, statements concerning our strategic business plans, the applications of our product candidates, ongoing discussions with the U.S. Food and Drug Administration (the “FDA”) regarding various of our drug products, and continued drug development and commercialization under our agreement with Viatriis, Inc. and those described under the heading “Risk Factors” included in this prospectus. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. In some cases, you can identify forward-looking statements by the following words: “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “ongoing,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. We undertake no obligation to revise any forward-looking statements in order to reflect events or circumstances that might subsequently arise. Readers are urged to carefully review and consider the various disclosures made by us in this prospectus and in our other reports filed with the SEC that advise interested parties of the risks and factors that may affect our business.

These forward-looking statements reflect our management’s beliefs and views with respect to future events and are subject to risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from those in these forward-looking statements, including, without limitation:

- our gene therapy product candidates are based on a novel technology that is difficult to develop and manufacture, which may result in delays and difficulties in obtaining regulatory approval;
- our planned clinical trials may face substantial delays, result in failure, or provide inconclusive or adverse results that may not satisfy FDA requirements to further develop our therapeutic products;
- delays or difficulties associated with patient enrollment in clinical trials may affect our ability to conduct and complete those clinical trials and obtain necessary regulatory approvals;
- changes in regulatory requirements could result in increased costs or delays in development timelines;
- we depend heavily on the success of our product pipeline; if we fail to find strategic partners or fail to adequately develop or commercialize our pipeline products, our business will be materially harmed;
- others may discover, develop, or commercialize products similar to those in our pipeline before or more successfully than we do or develop generic variants of our products even while our product patents remain active, thereby reducing our market share and potential revenue from product sales;
- we do not currently have any sales or marketing infrastructure in place and we have limited drug research and discovery capabilities;
- the future commercial success of our products could significantly depend upon several uncertain factors, including third-party reimbursement practices and the existence of competitors with similar products;
- product liability lawsuits against us or our suppliers or manufacturers could cause us to incur substantial liabilities and could limit commercialization of any product candidate that we may develop;
- failure to comply with health and safety laws and regulations could lead to material fines;
- we have not generated significant revenue from sales of any products and expect to incur losses for the foreseeable future;
- our future viability is difficult to assess due to our short operating history and our future need for substantial additional capital, access to which could be limited by any adverse developments that affect the financial markets;
- raising additional capital may cause our stockholders to be diluted, among other adverse effects;

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- instability and operational disruptions at government agencies, such as the FDA, may adversely impact our development and commercialization plans by causing delays and requiring the use of additional, unforeseen resources to obtain regulatory approval for trials or products in our pipeline;
- we operate in a highly regulated industry and face many challenges adapting to sudden changes in legislative reform or the regulatory environment, including due to government shutdowns and disruptions at government agencies, which cause delays, require the use of additional, unforeseen resources, affect our pipeline stability, and could impair our ability to compete in international markets;
- we may not receive regulatory approval to market our developed product candidates within or outside of the U.S.;
- with respect to any of our product candidates that receive marketing approval, we may be subject to substantial penalties if we fail to comply with applicable regulatory requirements;
- our potential relationships with healthcare providers and third-party payors will be subject to certain healthcare laws and regulations, which could expose us to extensive potential liabilities;
- we rely on third parties for material aspects of our business, such as conducting our nonclinical and clinical trials and supplying and manufacturing bulk drug substances, which exposes us to certain risks;
- we may be unsuccessful in entering into or maintaining licensing arrangements or establishing strategic alliances on favorable terms, which could harm our business;
- inadequate patent protection for our product candidates may result in our competitors developing similar or identical products or technology, which would adversely affect our ability to successfully commercialize;
- we may be unable to obtain full protection for our intellectual property rights under U.S. or foreign laws;
- we may become involved in lawsuits for a variety of reasons associated with our intellectual property rights, including alleged infringement suits initiated by third parties;
- we are dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy;
- as we grow, we may not be able to operate internationally or adequately develop and expand our sales, marketing, distribution, and other corporate functions, which could disrupt our operations;
- the market price of our Common Stock is expected to be volatile and if we fail to comply with the continued listing standards of Nasdaq Capital Market (the “Nasdaq”), our Common Stock may be delisted;
- factors out of our control related to our securities, such as securities litigation or actions of activist stockholders, could adversely affect our business and stock price and cause us to incur significant expenses; and
- other risks, uncertainties and factors, including those set forth under “Risk Factors”.

We discuss many of these risks in greater detail under Part I, Item 1A, “Risk Factors”, in our Annual Report on Form 10-K for the year ended December 31, 2025 and subsequent reports filed with or furnished to the SEC. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on any forward-looking statements made by us, which speak only as of the date they were made. We undertake no obligation to publicly update any forward-looking statements after the date of this prospectus supplement, whether as a result of new information, future events or otherwise, except as required by law.

You should read this prospectus, any prospectus supplement, documents we have filed with the SEC that are incorporated by reference herein and therein and any free writing prospectus that we may authorize for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

We will not receive any proceeds from the sale of Shares by the selling stockholders. Any proceeds from the sale by the selling stockholders of the Common Stock offered by this prospectus will be received by the selling stockholders. See “Selling Stockholders.”

We will bear the costs, fees and expenses in effecting the registration of the Shares covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

THE SELLING STOCKHOLDERS

This prospectus covers the resale or other disposition from time to time by the selling stockholders identified in the table below of up to an aggregate of 2,678,570 shares of our Common Stock. The selling stockholders may from time to time offer and sell any or all of the Shares set forth below pursuant to this prospectus and any accompanying prospectus supplement.

On April 2, 2026, we entered into the Stock Purchase and Conversion Agreement, as amended by that certain Waiver and Omnibus Amendment of Note and Stock Agreements, dated as of April 13, 2026 (the “Amendment”) (the “Stock Purchase and Conversion Agreement”), providing for the issuance and sale of an aggregate of 1,116,070 shares of our Common Stock (the “Purchased Shares”) at a purchase price of \$4.48 per share. On the same date, we entered into the Note Purchase Agreement (as amended by the Amendment, the “Note Purchase Agreement”), pursuant to which we agreed to issue and sell notes (the “Notes”) in an aggregate committed principal amount of up to \$105,000,000, in multiple tranches, at a purchase price equal to 100% of the principal amount thereof. Under the Note Purchase Agreement, the selling stockholders (or their designated holders) have the right, at their election, to convert up to ten percent (10%) of the aggregate principal amount (including payment-in-kind interest capitalized thereon) of the Notes then outstanding into shares of Common Stock (the “Conversion Shares”) at a price per share equal to \$6.72, as calculated in accordance with the Note Purchase Agreement (the “Conversion Price”). Each selling stockholder’s conversion right is subject to certain beneficial ownership limitations. The Purchased Shares and the Conversion Shares are collectively referred to herein as the “Shares.”

The actual number of shares issuable upon conversion of the Notes may differ from the amount registered hereunder depending on, among other things, the aggregate principal amount of Notes outstanding at the time of conversion and the actual amount of payment-in-kind interest capitalized thereon (which accrues at a floating rate). To the extent the actual number of shares issuable upon conversion of the Notes exceeds the number of Conversion Shares registered hereby, we will be required to file a post-effective amendment to this registration statement or a new registration statement to register such additional shares.

This prospectus covers the resale or other disposition by the selling stockholders or their pledgees, donees, transferees or other successors-in-interest that receive their shares after the date of this prospectus of up to (i) 1,116,070 Purchased Shares and (ii) up to 1,562,500 Conversion Shares. Throughout this prospectus, when we refer to the “selling stockholders,” we are referring to the investors under the Stock Purchase and Conversion Agreement listed in the table below.

We are registering the Shares to satisfy a covenant set forth in the Stock Purchase and Conversion Agreement in which we agreed to register the resale of the Shares within a limited period of time following the date in which our Registration Statement on Form S-3 (File No. 333-294295) became effective, and to permit the selling stockholders and their pledgees, donees, transferees or other successors-in-interest that receive their shares after the date of this prospectus to resell or otherwise dispose of the shares in the manner contemplated under “Plan of Distribution” herein.

Except as otherwise disclosed herein, the selling stockholders do not have, and within the past three years have not had, any position, office or other material relationship with us.

The following table sets forth the number and percentage of shares of our Common Stock beneficially owned by the selling stockholders as of May 31, 2026, taking into account the number of Shares that may be offered under this prospectus and the number and percentage of our Common Stock beneficially owned by the selling stockholders assuming all of the Shares offered under this prospectus are sold. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares of our Common Stock. 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 within sixty days.

The selling stockholders may sell some, all or none of their Shares. We do not know how long the selling stockholders will hold the Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale or other disposition of any of the Shares, other than as contemplated by the Stock Purchase and Conversion Agreement. The Shares covered hereby may be offered from time to time by the selling stockholders, provided that Conversion Shares may only be offered after they have been issued upon conversion of the Notes in accordance with the terms of the Note Purchase Agreement.

The information set forth below is based upon information obtained from the selling stockholders and upon information in our possession regarding the issuance of the Purchased Shares and the Conversion Shares in connection with the Stock Purchase and Conversion Agreement and the Note Purchase Agreement. The percentages of Common

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Stock owned after the offering by each selling stockholder below are based on 82,565,835 shares of Common Stock outstanding as of May 31, 2026, and assumes the conversion of the Notes. The numbers of shares of Common Stock beneficially owned before and after the offering presented in the table below do not give effect to any beneficial ownership limitations with respect to the Conversion Shares.

Name of Selling Stockholders ⁽¹⁾	Common Stock Beneficially Owned Before Offering ⁽²⁾	Common Stock that May Be Offered Pursuant to Prospectus	Common Stock Beneficially Owned After Offering ⁽²⁾	
			Number	Percentage (%)
TPC Investments Solutions LP ⁽³⁾	659,496	1,581,371	0	*
TPC Investments Solutions Co-Invest LP ⁽⁴⁾	456,574	1,097,199	0	*

* Less than 1%

- (1) To our knowledge, unless otherwise indicated, all persons named in the table above have sole voting and investment power with respect to their shares of Common Stock.
- (2) "Beneficial ownership" is a term broadly defined by the SEC in Rule 13d-3 under the Exchange Act, and includes more than the typical form of stock ownership, that is, stock held in the person's name. The term also includes what is referred to as "indirect ownership," meaning ownership of shares as to which a person has or shares investment power. Notwithstanding the foregoing, the beneficial ownership amounts assume the sale of all Common Stock that may be offered pursuant to this prospectus without taking into account certain limitations, including that a holder of Conversion Shares is prohibited from converting Notes into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than 4.9% of the Common Stock outstanding immediately after giving effect to such conversion (or such higher or lower amount as such holder may specify with at least 61 days' written notice to the Company, but which in no event may exceed 19.9% of the Common Stock outstanding immediately after giving effect to such conversion).
- (3) Consists of (i) 659,496 Purchased Shares issued pursuant to the Stock Purchase and Conversion Agreement and (ii) 921,875 Conversion Shares issuable upon conversion of the Notes pursuant to the Note Purchase Agreement. TPC Investments Solutions LP is managed by Oberland Capital Management LLC. The address of the foregoing entities is c/o Oberland Capital Management LLC, 1700 Broadway, 41st Floor, New York, NY 10019. The Common Stock held by TPC Investments Solutions LP issuable upon conversion of the Notes is subject to a beneficial ownership limitation of 4.9% (which may be increased up to 19.9% upon at least 61 days' prior written notice to the Company).
- (4) Consists of (i) 456,574 Purchased Shares issued pursuant to the Stock Purchase and Conversion Agreement and (ii) 640,625 Conversion Shares issuable upon conversion of the Notes pursuant to the Note Purchase Agreement. TPC Investments Solutions Co-Invest LP is managed by Oberland Capital Management LLC. The address of the foregoing entities is c/o Oberland Capital Management LLC, 1700 Broadway, 41st Floor, New York, NY 10019. The Common Stock held by TPC Investments Solutions Co-Invest LP issuable upon conversion of the Notes is subject to a beneficial ownership limitation of 4.9% (which may be increased up to 19.9% upon at least 61 days' prior written notice to the Company).

PLAN OF DISTRIBUTION

We are registering the Shares issued to the selling stockholders to permit the sale, transfer or other disposition of these shares by the selling stockholders or their donees, pledgees, transferees or other successors-in-interest from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the Shares. We will, or will procure to, bear all fees and expenses incident to our obligation to register the Shares.

The selling stockholders may sell all or a portion of the Shares beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents, and in the case of the Conversion Shares, such shares may only be offered after they have been issued upon conversion of the Notes in accordance with the terms of the Note Purchase Agreement. If the Shares are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts (it being understood that the selling stockholders shall not be deemed to be underwriters solely as a result of their participation in this offering) or commissions or agents' commissions. The Shares may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions that may involve crosses or block transactions. The selling stockholders may use any one or more of the following methods when selling Shares:

- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- block trades in which a 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;
- "at the market" transactions or through market makers or into an existing market for the shares;
- 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, after the effective date of the registration statement of which this prospectus is a part;
- through the distribution of the shares by any selling stockholder to its partners, members or stockholders;
- through broker-dealers that agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through one or more underwritten offerings on a firm commitment or best efforts basis;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders also may resell all or a portion of the Shares in open market transactions in reliance upon Rule 144, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria for, and conform to, the requirements of those provisions.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling Shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121, and in the case of a principal transaction, a markup or markdown in compliance with FINRA IM-2121.01.

In connection with sales of the Shares or otherwise, 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 Shares in the course of hedging in positions they assume. The selling stockholders may also sell Shares short and if such short sale takes place

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after the date that the registration statement of which this prospectus forms a part is declared effective by the SEC, the selling stockholders may deliver Shares covered by this prospectus to close out short positions and to return borrowed Shares in connection with such short sales. The selling stockholders may also loan or pledge Shares to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. 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 that 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). Notwithstanding the foregoing, the selling stockholders have been advised that they may not use Shares the resale of which has been registered on this registration statement to cover short sales of our Common Stock made prior to the date the registration statement, of which this prospectus forms a part, has been declared effective by the SEC.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the Shares 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 from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successor-in-interest as a selling stockholder under this prospectus. The selling stockholders also may transfer or donate the Shares in other circumstances, in which case the transferees, donees, pledgees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer or agent participating in the distribution of the Shares may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act, including Rule 172 thereunder and may be subject to certain statutory liabilities, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling stockholder has informed the Company that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Shares. Upon the Company being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of Common Stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of Shares involved, (iii) the price at which such Shares were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out in this prospectus, and (vi) other facts material to the transaction.

Under the securities laws of some U.S. states, the Shares may be sold in such states only through registered or licensed brokers or dealers. In addition, in some U.S. states the Shares may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and complied with.

There can be no assurance that any selling stockholder will sell any or all of the Shares registered pursuant to the shelf registration statement, of which this prospectus forms a part.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Shares by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the Shares to engage in market-making activities with respect to the Shares. All of the foregoing may affect the marketability of the Shares and the ability of any person or entity to engage in market-making activities with respect to the Shares.

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We will pay all expenses of the registration of the Shares pursuant to the Stock Purchase and Conversion Agreement, including, without limitation, SEC filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that each selling stockholder will pay all underwriting discounts and selling commissions, if any, and any related legal expenses incurred by such selling stockholder. We will indemnify the selling stockholders against certain liabilities, including liabilities under the Securities Act, in accordance with the Stock Purchase and Conversion Agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against certain civil liabilities, including liabilities under the Securities Act, to the extent such liabilities arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the Stock Purchase and Conversion Agreement, or we may be entitled to contribution.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Sidley Austin LLP, New York, New York.

EXPERTS

The consolidated financial statements of Opus Genetics, Inc. appearing in Opus Genetics, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2025, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act, with respect to the securities offered by this prospectus and any applicable prospectus supplement. This prospectus and any applicable prospectus supplement do not contain all of the information set forth in the registration statement and its exhibits and schedules in accordance with SEC rules and regulations. For further information with respect to us and the securities being offered by this prospectus and any applicable prospectus supplement, you should read the registration statement, including its exhibits and schedules. Statements contained in this prospectus and any applicable prospectus supplement, including documents that we have incorporated by reference, as to the contents of any contract or other document referred to are not necessarily complete, and, with respect to any contract or other document filed as an exhibit to the registration statement or any other such document, each such statement is qualified in all respects by reference to the corresponding exhibit. You should review the complete contract or other document to evaluate these statements. You may obtain copies of the registration statement and its exhibits via the SEC's website at <http://www.sec.gov>.

We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, including us, that file electronically with the SEC. You may obtain documents that we file with the SEC at <http://www.sec.gov>. We also make these documents available on our website at www.opusgtx.com. Our website and the information contained or accessible through our website is not incorporated by reference in this prospectus or any prospectus supplement, and you should not consider it part of this prospectus or any prospectus supplement.

INFORMATION INCORPORATED BY REFERENCE

SEC rules permit us to incorporate information by reference in this prospectus and any applicable prospectus supplement. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus and any applicable prospectus supplement, except for information superseded by information contained in this prospectus or any applicable prospectus supplement itself or in any subsequently filed incorporated document. This prospectus and any applicable prospectus supplement incorporate by reference the documents set forth below that we have previously filed with the SEC (Commission File No. 001-34079), other than information in such documents that is deemed to be furnished and not filed. These documents contain important information about us and our business and financial condition.

- Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on [March 12, 2026](#);
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2026 filed with the SEC on [May 12, 2026](#);
- The information contained in our Definitive Proxy Statement on Schedule 14A, filed with the SEC on [March 23, 2026](#), that is incorporated by reference in the 2025 Annual Report;
- Current Reports on Form 8-K, filed with the SEC on [February 19, 2026](#), [April 7, 2026](#) (excluding Item 7.01 and the related exhibits), [April 7, 2026](#), [April 22, 2026](#) and [April 24, 2026](#); and
- The description of our Common Stock contained in our Registration Statement on [Form 8-A](#), filed with the SEC on June 7, 2019, including any amendments or reports filed for the purpose of updating such description, including [Exhibit 4.13](#) to the Annual Report on Form 10-K for the year ended December 31, 2025.

All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, and any previously filed documents. All documents that we file (but not those that we furnish) pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and prior to the termination of the offering of any of the securities covered under this prospectus shall be deemed to be incorporated by reference into this prospectus and will automatically update and supersede the information in this prospectus, the applicable prospectus supplement and any previously filed documents.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference in this prospectus or any applicable prospectus supplement shall be deemed to be modified or superseded for purposes of this prospectus and such applicable prospectus supplement to the extent that a statement contained in this prospectus or such applicable prospectus supplement, or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus and such applicable prospectus supplement, modifies or supersedes such earlier statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or such applicable prospectus supplement.

You can obtain any of the filings incorporated by reference into this prospectus or any applicable prospectus supplement through us or from the SEC through the SEC's website at <http://www.sec.gov>. Upon written or oral request, we will provide, without charge, a copy of any or all of the reports and documents referred to above which have been incorporated by reference into this prospectus or any applicable prospectus supplement. Prospective and current investors may obtain documents incorporated by reference in this prospectus or any applicable prospectus supplement by requesting them in writing or by telephone from us at our executive offices at:

Opus Genetics, Inc.
8 Davis Drive, Suite 220
Durham, NC 27713
(248) 957-9024

Attn: Dr. George Magrath, Chief Executive Officer

Our reports and documents incorporated by reference herein may also be found in the "Investor Relations" section of our website at www.opusgtx.com. The content of our website and any information that is linked to or accessible from our website (other than our filings with the SEC that are incorporated by reference, as set forth above) is not incorporated by reference into this prospectus or any applicable prospectus supplement and you should not consider it a part of this prospectus, any applicable prospectus supplement, or the registration statement.



**Up to 2,678,570 Shares of Common Stock
Offered by the Selling Stockholders**

, 2026

PROSPECTUS

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any securities in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The expenses payable by us in connection with the issuance and distribution of the securities being registered hereunder on Form S-3 (other than underwriting discounts and commissions, if any) are set forth below. The selling stockholders will not bear any portion of such expenses. Each item listed is estimated, except for the SEC registration fee:

SEC registration fee	\$1,579.52
Printing and engraving	10,000
Legal fees and expenses	40,000
Accounting fees and expenses	15,000
Total	\$ 66,579

Discounts, concessions, commissions and similar selling expenses attributable to the sale of Shares covered by this prospectus will be borne by the selling stockholders. We will pay all expenses (other than discounts, concessions, commissions and similar selling expenses) relating to the registration of the shares with the SEC, as estimated in the table above.

Item 15. Indemnification of Directors and Officers.

Delaware General Corporation Law

No director of the Company shall be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL, as it presently exists or may hereafter be amended from time to time. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

The Company shall indemnify its directors and officers to the fullest extent authorized or permitted by the DGCL, as now or hereafter in effect, and such right to indemnification shall continue as to a person who has ceased to be a director or officer of the Company and shall inure to the benefit of such person's heirs, executors and personal and legal representatives. A director's or officer's right to indemnification shall include the right to be paid by the Company the expenses incurred in defending or otherwise participating in any proceeding in advance of its final disposition, provided that such director or officer presents to the Company a written undertaking to repay such amount if it shall ultimately be determined that such director or officer is not entitled to be indemnified by the Company. Notwithstanding the foregoing, except for proceedings to enforce any director's or officer's rights to indemnification or rights to advancement of expenses, the Company shall not be obligated to indemnify any director or officer, or advance expenses of any director or officer, (or such director's or officer's heirs, executors or personal or legal representatives) in connection with any proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized by the Board.

Certificate of Incorporation and Bylaws

We have adopted provisions in our bylaws that provide for indemnification of our officers and directors to the maximum extent permitted under the DGCL. As authorized by the DGCL, our Certificate of Incorporation limits the liability of our directors for monetary damages. The effect of this provision is to eliminate our rights and that of our stockholders to recover monetary damages against a director for breach of the fiduciary duty of care as a director except in certain limited situations. This provision does not limit or eliminate our rights or that of any stockholder to seek non-monetary relief such as an injunction or rescission in the event of a breach of a director's duty of care. These provisions will not alter the liability of directors under federal securities laws.

Indemnification Agreements

We have entered into indemnification agreements with each of our current directors and officers. These agreements will require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

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Insurance Policy

We have purchased an insurance policy that purports to insure our officers and directors against certain liabilities incurred by them in the discharge of their functions as such officers and directors.

The foregoing summaries are not intended to be exhaustive and are qualified in their entirety by reference to the complete text of the statute, the Certificate of Incorporation, and the agreements referred to above and are qualified in their entirety by reference thereto.

See the undertakings set forth in response to Item 17 herein.

Item 16. Exhibits.

Exhibit No.	Description
<u>3.1*</u>	Restated Certificate of Incorporation of Ocuphire Pharma, Inc., dated as of June 12, 2024 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q, filed on August 13, 2024).
<u>3.2*</u>	Certificate of Amendment to the Restated Certificate of Incorporation of the Company, effective as of October 23, 2024 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed on October 22, 2024).
<u>3.3*</u>	Certificate of Amendment to the Restated Certificate of Incorporation of the Company, filed on April 20, 2026 (incorporated by reference to Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q, filed on May 12, 2026).
<u>3.4*</u>	Certificate of Designation of Series A Non-Voting Convertible Preferred Stock, effective as of October 22, 2024 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on October 22, 2024).
<u>3.5*</u>	Certificate of Designation of Series B Non-Voting Convertible Preferred Stock, effective as of February 18, 2026 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on February 19, 2026).
<u>3.6*</u>	Amended and Restated Bylaws, dated as of March 19, 2025 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed on March 20, 2025).
<u>5.1**</u>	Opinion of Sidley Austin LLP.
<u>23.1**</u>	Consent of Ernst & Young LLP, independent registered public accounting firm.
<u>23.2**</u>	Consent of Sidley Austin LLP (included in Exhibit 5.1).
<u>24.1**</u>	Power of Attorney
<u>107**</u>	Filing Fee Table

* Previously filed.

** Filed herewith.

Item 17. Undertakings.

- (a) 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;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the 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 the 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 SEC 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 Registration Fee" table in the effective registration statement; and

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- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above 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 SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the 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 that 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 the 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 the 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.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) 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 Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to

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Section 15(d) of the Exchange Act that is incorporated by reference in the 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.

- (c) 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 foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC 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, 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 Durham, North Carolina, on the 5th day of June, 2026.

OPUS GENETICS, INC.

By: /s/ Dr. George Magrath
Dr. George Magrath
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each of the undersigned officers and directors of Opus Genetics, Inc. does hereby severally constitute and appoint Dr. George Magrath, Robert Gagnon, and Amy Rabourn, and each of them acting alone, as his or her true and lawful attorneys-in-fact, proxy and agents, with full power of substitution and resubstitution in each of them for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC and any applicable securities exchange or securities self-regulatory body, granting unto said attorneys-in-fact, proxies and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, proxies and agents or any of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, 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/ Dr. George Magrath</u> Dr. George Magrath	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	June 5, 2026
<u>/s/ Robert Gagnon</u> Robert Gagnon	Chief Financial Officer <i>(Principal Financial Officer and Principal Accounting Officer)</i>	June 5, 2026
<u>/s/ Sean Ainsworth</u> Sean Ainsworth	Director	June 5, 2026
<u>/s/ Dr. Jean Bennett</u> Dr. Jean Bennett	Director	June 5, 2026
<u>/s/ Susan K. Benton</u> Susan K. Benton	Director	June 5, 2026
<u>/s/ Cam Gallagher</u> Cam Gallagher	Director	June 5, 2026
<u>/s/ Adrienne Graves</u> Dr. Adrienne Graves	Director	June 5, 2026

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ James S. Manuso</u> Dr. James S. Manuso	Director	June 5, 2026
<u>/s/ Richard J. Rodgers</u> Richard J. Rodgers	Director	June 5, 2026
<u>/s/ Dr. Benjamin R. Yerxa</u> Dr. Benjamin R. Yerxa	President and Director	June 5, 2026

June 5, 2026

Opus Genetics, Inc.
8 Davis Drive, Suite 220
Durham, NC 27713

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-3 (the "Registration Statement") filed on the date hereof by Opus Genetics, Inc., a Delaware corporation formerly known as Ocuphire Pharma, Inc. (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act of up to 2,678,570 shares (the "Shares") of common stock, par value \$0.0001 per share ("Common Stock"), consisting of (i) 1,116,070 shares of Common Stock (the "Issued Shares") issued to the selling stockholders pursuant to that certain Stock Purchase and Conversion Agreement, dated as of April 2, 2026, (as amended, the "Stock Purchase Agreement") between the Company and the purchasers named therein and (ii) 1,562,500 shares of Common Stock (the "Conversion Shares") issuable upon the conversion of notes (the "Notes") issued pursuant to that certain Note Purchase Agreement, dated as of April 2, 2026 (as amended, the "Note Purchase Agreement") between the Company and the purchasers named therein.

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

We have examined the Registration Statement, the Stock Purchase Agreement, the Note Purchase Agreement, the Company's Restated Certificate of Incorporation (as amended, the "Certificate of Incorporation"), and the resolutions adopted by the board of directors of the Company relating to the Registration Statement and the issuance of the Issued Shares, the Notes and, upon conversion thereof, the Conversion Shares. We have also examined originals, or copies of originals certified to our satisfaction, of such agreements, documents, certificates and statements of the Company and other corporate documents and instruments, and have examined such questions of law, as we have considered relevant and necessary as a basis for this opinion letter. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures, the legal capacity of all persons and the conformity with the original documents of any copies thereof submitted to us for examination. As to facts relevant to the opinions expressed herein, we have relied without independent investigation or verification upon, and assumed the accuracy and completeness of, certificates, letters and oral and written statements and representations of public officials and officers and other representatives of the Company.

Based on and subject to the foregoing and the other limitations, qualifications and assumptions set forth herein, including that the Registration Statement, as finally amended (including any necessary post-effective amendments), shall have become effective under the Securities Act, we are of the opinion that the Issued Shares have been duly authorized and validly issued and are fully paid and non-assessable, and that the Conversion Shares have been duly authorized and reserved for issuance, and, when the Conversion Shares have been duly converted into shares of Common Stock in accordance with the terms of the Note Purchase Agreement and when the Company's books reflect the issuance of such Conversion Shares to the holders of the Notes, the Conversion Shares will be validly issued, fully paid and non-assessable.

For the purposes of this opinion letter, we have assumed that, at the time of the issuance and delivery of the Shares: (i) the authorization thereof by the Company will not have been modified or rescinded, and there will not have occurred any change in law affecting the validity thereof; (ii) the Certificate of Incorporation and the Company's Amended and Restated Bylaws, as currently in effect, will not have been modified or amended and will be in full force and effect; and (iii) the Company will have sufficient authorized and unissued shares of Common Stock from which to issue the Conversion Shares.

This opinion letter is limited to the General Corporation Law of the State of Delaware. We express no opinion as to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America or any state securities or blue sky laws.

We hereby consent to the filing of this opinion letter as an Exhibit to the Registration Statement and to all references to our firm included in or made a part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Sidley Austin LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Opus Genetics, Inc. for the registration of up to 2,678,570 shares of its common stock and to the incorporation by reference therein of our report dated March 12, 2026, with respect to the consolidated financial statements of Opus Genetics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2025, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
June 5, 2026

CALCULATION OF FILING FEE TABLE

Form S-3
(Form Type)Opus Genetics, 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 ⁽¹⁾	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	Rule 457(c)	1,116,070	\$4.270 ⁽³⁾	\$4,765,618.90	0.0001381	\$658.13				
Fees to Be Paid	Equity	Common stock, \$0.0001 par value per share, issuable upon conversion of notes ⁽²⁾	Rule 457(c)	1,562,500 ⁽²⁾	\$4.270 ⁽³⁾	\$6,671,875.00	0.0001381	\$921.39				
Fees Previously Paid	N/A	—	—	—	—	—	—	—				
Carry Forward Securities												
Carry Forward Securities	N/A	—	—	—	—	—	—	—	—	—	—	—
	Total Offering Amounts					\$11,437,493.90		\$1,579.52				
	Total Fees Previously Paid							—				
	Total Fee Offsets							—				
	Net Fee Due							\$1,579.52				

(1) In the event of a stock split, stock dividend or other similar transaction involving shares of the common stock, par value \$0.0001 per share (“common stock”), of Opus Genetics, Inc. (the “Registrant”), in order to prevent dilution, the number of shares of common stock registered hereby shall be automatically increased to cover the additional shares of common stock in accordance with Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”).

(2) Represents 1,562,500 shares of the Registrant’s common stock issuable upon the conversion of the Registrant’s notes issued pursuant to that certain Note Purchase Agreement, dated as of April 2, 2026, as amended by that certain Waiver and Omnibus Amendment of Note and Stock Agreements, dated as of April 13, 2026.

(3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act. The price per share and aggregate offering price are based on the average of the high and low prices of the Registrant’s common stock on June 1, 2026, as reported on the Nasdaq Capital Market.