

As filed with the Securities and Exchange Commission on July 13, 2026

Registration No. 333-296957

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

**PRE-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Gyre Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

56-2020050
(I.R.S. Employer
Identification Number)

12730 High Bluff Drive
Suite 250
San Diego, CA 92130
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Joshua Bergmann
General Counsel and Corporate Secretary
Gyre Therapeutics, Inc.
12730 High Bluff Drive
Suite 250
San Diego, CA 92130
(858) 284-0115
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
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One Embarcadero Center, Suite 2600
San Francisco, CA 94111-3715
(415) 393-8200

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

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

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

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 that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

This registration statement is a pre-effective amendment to the registration statement on Form S-3 (File No. 333-296957) of Gyre Therapeutics, Inc. (“Company”) filed with the Securities and Exchange Commission, or the SEC, on June 23, 2026 (the “Registration Statement”). The Company previously registered 30,221,531 shares of common stock pursuant to the Registration Statement for resale by the selling stockholders named herein. This pre-effective amendment to the Registration Statement is being filed for the purpose of (i) registering additional shares of common stock for resale by the selling stockholders for an aggregate of 31,302,863 shares of common stock (including 1,081,332 shares of common stock registered hereby) and (ii) filing additional exhibits to the Registration Statement. A prospectus to be used by the selling stockholders in connection with the resale of the shares of Company common stock is included in this Registration Statement.

The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission (the “SEC”) is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JULY 13, 2026

PROSPECTUS



Gyre Therapeutics, Inc.

**31,302,863 Shares of Common Stock
Offered by the Selling Stockholders**

This prospectus relates to the proposed resale or other disposition by the selling stockholders identified herein (the “Selling Stockholders”) of up to (i) 11,735,356 shares (“Merger Common Shares”) of our common stock, par value \$0.001 per share (“Common Stock”), (ii) 18,486,175 shares of Common Stock (“Conversion Series B Shares”) issuable upon the conversion of 3,697,235 shares (“Series B Preferred Shares”) of our Series B Preferred Stock, par value \$0.001 per share (“Series B Preferred Stock”), (iii) 540,666 shares (the “PIPE Common Shares” and together with the Merger Common Shares, the “Common Shares”) of Common Stock issued upon conversion of 811 shares of Series X Convertible Preferred Stock, par value \$0.001 per share (the “Series X Preferred Stock”), effective January 23, 2024, previously issued to GNI USA, Inc., a Delaware corporation (“GNI USA”) and (iv) 540,666 shares of Common Stock issuable upon the conversion of 811 shares of Series X Preferred Stock, issuable pursuant to the exercise of a warrant (the “Warrant”) issued to GNI USA. Subject to certain beneficial ownership limitations set by each preferred stockholder, each share of Series B Preferred Stock may, at the option of the holder, convert into five shares of Common Stock. The shares of Common Stock registered by this prospectus are referred to herein as the “Resale Shares.”

The Merger Common Shares and Series B Preferred Shares were issued and sold to former stockholders of Cullgen Inc., a Delaware corporation (“Cullgen”), in connection with our merger with Cullgen. The PIPE Common Shares and Warrant were issued and sold to GNI USA pursuant to that certain Securities Purchase Agreement, dated October 27, 2023 (the “Securities Purchase Agreement”), by and between the Company and GNI USA. We are not offering or selling any Resale Shares under this prospectus and will not receive any of the proceeds from the sale or other disposition of Resale Shares by the Selling Stockholders. However, upon any cash exercise of the Warrant by GNI USA, we will receive cash proceeds per share equal to the exercise price of the Warrant. If the Warrant is exercised in a cashless exercise, we will not receive any proceeds from the exercise of the Warrant.

The Selling Stockholders may sell the Resale 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 Resale Shares hereunder.

The Selling Stockholders may sell any, all or none of the securities offered by this prospectus and we do not know when or in what amount the Selling Stockholders may sell their Resale Shares hereunder following the effective date of the registration statement of which this prospectus forms a part.

You should carefully read this prospectus and any applicable prospectus supplement, as well as any documents incorporated by reference herein or therein, before you invest in any of the securities being offered.

A significant portion of our business is operated through our indirectly majority-owned subsidiary in the People’s Republic of China (the “PRC”), Beijing Continent Pharmaceutical Co., Ltd. (d/b/a Gyre Pharmaceuticals Co., Ltd.) (“Gyre Pharmaceuticals”). Such structure involves unique legal and operational risks to investors in our Common Stock. In particular, the PRC government has significant authority to exert influence on the ability of a company with substantive operations in the PRC, such as us, to conduct its business, accept foreign investments or list on a U.S. or other foreign exchanges. For example, we face risks associated with regulatory approvals of offshore offerings, anti-monopoly regulatory actions, oversight on cybersecurity and data privacy. Such risks could result in a material change in our operations and/or the value of our Common Stock or could significantly limit or completely hinder our ability to offer or continue to offer our Common Stock to investors and cause the value of such Common Stock to significantly decline or become worthless. As we are a company with substantive business operations in the PRC, you should pay special attention to disclosures included in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus and risk factors included herein.

In addition, our auditor is headquartered in mainland China, a jurisdiction where the Public Company Accounting Oversight Board (“PCAOB”) has been unable to conduct inspections without the approval of the PRC authorities. Trading in our Common Stock on Nasdaq or over-the-counter may be prohibited, and as a result, our Common Stock may be delisted under the Holding Foreign Companies Accountable Act (“HFCAA”) if the PCAOB determines that it has been unable to inspect or investigate completely our auditor located in the PRC for two consecutive years. On December 16, 2021, the PCAOB issued the HFCAA determination report to notify the SEC of its determinations that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, including our auditor. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. As a result, we were not identified as a “Commission-Identified Issuer” under the HFCAA upon filing of our Annual Report on Form 10-K for the year ended December 31, 2025. However, whether the PCAOB will continue to be able to satisfactorily conduct inspections and investigations of PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong is subject to uncertainty and depends on a number of factors out of our, and our auditor’s, control, including positions taken by authorities of the PRC.

The PCAOB is expected to continue to demand complete access to inspections and investigations against accounting firms headquartered in mainland China and Hong Kong in the future. The PCAOB is required under the HFCAA to make its determination on an annual basis with regards to its ability to inspect and investigate completely accounting firms based in the mainland China and Hong Kong. The possibility of being a “Commission-Identified Issuer” and risk of delisting could continue to adversely affect the trading price of our securities. If the PCAOB determines in the future that it no longer has full access to inspect and investigate accounting firms headquartered in mainland China and Hong Kong and we continue to use such accounting firm to conduct audit work, we would be identified as a “Commission-Identified Issuer” under the HFCAA following the filing of the annual report for the relevant fiscal year, and if we were so identified for two consecutive years, trading in our securities on U.S. markets would be prohibited under the HFCAA.

The PRC government has oversight over the conduct of our business and its laws, regulations and policies may affect our operations. The PRC government has recently published new policies that affected certain industries with respect to matters such as cybersecurity, data privacy, antitrust and competition, foreign investments, and overseas listings, and we cannot rule out the possibility that it will in the future release regulations or policies regarding our industry that could adversely affect our business, financial condition and results of operations. Furthermore, the PRC regulatory authorities have recently issued new laws and regulations to exert more oversight and control over overseas securities offerings and other capital markets activities and foreign investment in PRC-based companies. Any such action, once taken by the PRC regulatory authorities, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or in extreme cases, become worthless. For additional information, see “Risk Factors—Risks Related to Our Business Operations in the PRC” in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus.

Our shares of Common Stock are listed on The Nasdaq Capital Market (“Nasdaq”) under the symbol “GYRE.” The last reported sale price of our Common Stock on Nasdaq on July 10, 2026 was \$6.52 per share.

An investment in our securities involves a high degree of risk. You should carefully consider the information under the heading “Risk Factors” beginning on page 10 of this prospectus and any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

Neither the SEC 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 securities are not being offered in any jurisdiction where the offer is not permitted.

The date of this prospectus is _____, 2026

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC using a “shelf” registration process. Under this shelf registration process, the Selling Stockholders may, from time to time, offer and sell the securities described in this prospectus in one or more offerings. Information about the Selling Stockholders may change over time.

This prospectus provides you with a general description of the securities the Selling Stockholders may offer. Each time the Selling Stockholders sell shares of Common Stock using this prospectus, to the extent necessary and required by law, we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the number of shares of Common Stock being offered, the manner of distribution, the identity of any underwriters or other counterparties and other specific terms related to the offering. The prospectus supplement may also add, update or change information contained in this prospectus. To the extent that any statement made in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in the prospectus supplement. You should read this prospectus, any applicable prospectus supplement and the information incorporated by reference in this prospectus before making an investment in shares of our Common Stock. See “Where You Can Find More Information” for more information.

This prospectus contains and incorporates by reference information that you should consider when making your investment decision. Neither we nor the Selling Stockholders have authorized anyone to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. The Selling Stockholders are offering to sell, and seeking offers to buy, our securities only in jurisdictions where it is lawful to do so. We have not authorized anyone to provide you with different information. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in any accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference herein and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

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.

For investors outside of the United States, neither we nor the Selling Stockholders have done anything that would permit the offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to the offering and the distribution of this prospectus outside of the United States.

In this prospectus, unless otherwise indicated or the context otherwise requires, the terms “Company,” “we,” “us” and “our” refer to Gyre Therapeutics, Inc. and, where appropriate, our subsidiaries.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). All statements, other than statements of historical facts contained in this prospectus, including statements concerning our plans, objectives, goals, strategies, future events, future revenues or performance, financing needs, business trends and other information referred to in the section entitled “Risk Factors” in this prospectus and the sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2025, which is incorporated by reference herein, are forward-looking statements. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “design,” “estimate,” “predict,” “potential,” “plan,” “anticipate,” “target,” “forecast,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. Forward-looking statements are not historical facts and reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

There are a number of risks, uncertainties and other important factors that could cause our actual results to differ materially from the forward-looking statements contained in this prospectus. Such risks, uncertainties and other important factors include, among others, the risks, uncertainties and factors set forth in “Risk Factors,” and the following risks, uncertainties and factors:

- our ability to conduct extensive clinical trials to demonstrate safety and efficacy of our product candidates;
- our ability to develop a pipeline of product candidates to address unmet needs in the treatment of organ fibrosis and other inflammatory diseases;
- the timing, progress and results of clinical trials for: (i) F351 (hydronidone) from the Phase 2 trial in the United States for the treatment of metabolic dysfunction-associated steatohepatitis (“MASH”) associated liver fibrosis; (ii) ETUARY™ from the Phase 3 clinical trial in the PRC for pneumoconiosis (“PD”); (iii) ETUARY™ from an adaptive Phase 2/3 trial in the PRC for radiation-induced lung injury (“RILI”) with or without immune-related pneumonitis; (iv) F573 from the Phase 2 clinical trial in the PRC for the treatment of acute/acute-on-chronic liver failure (“ALF/ACLF”); (v) F230 from the Phase 1 clinical trial in the PRC for the treatment of pulmonary arterial hypertension (“PAH”); and (vi) other product candidates we may develop, including F528, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the studies or trials will become available and research and development programs;
- the timing, scope and likelihood of U.S., PRC and comparable foreign regulatory filings and approvals, including timing of investigational new drug (“IND”) applications and final U.S. Food and Drug Administration (“FDA”) and National Medical Products Administration (“NMPA”) approval of F351 for the treatment of liver fibrosis associated with MASH and chronic hepatitis B (“CHB”), respectively, ETUARY™ for the treatment of PD and RILI, F528 for the treatment of chronic obstructive pulmonary disease (“COPD”), F230 for the treatment of PAH, and any other future product candidates;
- our expectations regarding the future pursuit of product development efforts, including whether we will pursue such efforts, estimates regarding the expenses, future revenue, timing of any future revenue, capital requirements and need for additional financing related to such efforts, the timing of and our ability to pursue such efforts and our plans to develop and, if approved, subsequently commercialize any product candidates resulting from such efforts;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash and investments;
- our ability to develop and advance current product candidates and programs into, and successfully complete, clinical studies;
- our manufacturing, commercialization and marketing capabilities and strategy;
- our product candidates, if approved, including the geographic areas of focus and sales strategy;

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- the need to hire additional personnel and our ability to attract and retain such personnel;
- the size of the market opportunity for our product candidates, including estimates of the number of patients who suffer from the diseases we are targeting;
- expectations regarding the approval and use of our product candidates in combination with other drugs;
- expectations regarding the potential for accelerated approval or other expedited regulatory designation;
- our competitive position and the success of competing therapies that are or may become available;
- estimates of the number of patients that we will enroll in our clinical trials;
- the beneficial characteristics and the potential safety, efficacy and therapeutic effects of our product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates and our expectations regarding particular lines of therapy;
- plans relating to the further development of our product candidates, including additional indications we may pursue;
- existing regulations and regulatory developments in the PRC, the United States, Europe, and other jurisdictions;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering ETUARY™, Etores™ (nintedanib ethanesulfonate soft capsules), Contiva™ (avatrombopag maleate tablets), F351, F573, F528, and F230, and other product candidates we may develop, including the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;
- our continued reliance on third parties to conduct additional clinical trials of our product candidates and for the manufacture of our product candidates for clinical trials;
- our relationships with patient advocacy groups, key opinion leaders, regulators, the research community and payors;
- our ability to obtain and negotiate favorable terms of, any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize our product candidates;
- the pricing of, reimbursement of, and potential impact of the PRC's national centralized drug procurement policy on ETUARY™, Etores™, Contiva™, F351, F573, F528, and F230, and other product candidates we may develop, if approved and commercialized;
- the rate and degree of market acceptance and clinical utility of F351, and other product candidates we may develop;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- global economic conditions, including new or increased tariffs imposed by the U.S. government and potential retaliatory measures by foreign governments and other barriers to trade, trade and other international disputes, inflation and fluctuating interest rates, slower growth or recession, tighter credit, volatility in financial markets, high unemployment, labor availability constraints, public health crises, significant natural disasters, including as a result of climate change, changes to fiscal and monetary policy or government budget dynamics, particularly in the pharmaceutical and biotech areas, government shutdowns, political and military conflict;
- the period over which we estimate our existing cash will be sufficient to fund our planned operating expenses and capital expenditure requirements;
- expectations about the continued listing of our Common Stock on Nasdaq;
- the impact of laws and regulations; and

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- the outcome of any legal proceedings that may be instituted against us, Cullgen, or any of each company's respective directors or officers related to the Merger Agreement (as defined herein) or the transactions contemplated thereby.

There may be other factors that may cause our actual results to differ materially from the forward-looking statements, including factors disclosed in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent annual report on Form 10-K and subsequent quarterly reports on Form 10-Q, which are incorporated by reference herein. You should evaluate all forward-looking statements made in this prospectus in the context of these risks and uncertainties.

These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this prospectus, any accompanying prospectus supplement, information incorporated by reference herein or therein, and any related free-writing prospectus. In addition, we cannot assure you that we will realize the results, benefits or developments that we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our business in the way expected. All forward-looking statements contained in this prospectus are made as of the date hereof and we undertake no obligation to publicly update or review any forward-looking statements to reflect subsequent events or circumstances.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our Common Stock. You should read the entire prospectus, including the information incorporated by reference herein, carefully, including the section titled “Risk Factors” contained in this prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, and our financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2025, and in our subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference herein, before making an investment decision. Some of the statements in this summary constitute forward-looking statements; see “Cautionary Statement Concerning Forward-Looking Statements.”

Company Overview

We are a commercial-stage biopharmaceutical company focused on the development and commercialization of small-molecule therapies for the treatment of organ fibrosis and inflammatory diseases. We operate through our majority indirectly owned subsidiary, Gyre Pharmaceuticals, in the PRC, and through our U.S. operations headquartered in San Diego, California.

As described under “Recent Developments—Merger with Cullgen,” we entered into the Merger Agreement with Cullgen and Merger Sub (as defined herein). The Merger (as defined herein) closed on May 4, 2026. Following the closing of the Merger, the new combined entity is a fully integrated biopharmaceutical company with U.S.- and China-based capabilities spanning from discovery to manufacturing and commercialization and covering multiple therapeutic areas including inflammatory diseases, cancers and pain.

Cullgen is a clinical-stage biopharmaceutical company focused on the discovery and development of targeted protein degrader and degrader-antibody conjugates therapies designed to improve the lives of patients suffering from critical conditions such as pain, cancer and inflammatory diseases. Cullgen has created a portfolio of highly selective targeted protein degrader product candidates designed to potently and efficiently eliminate therapeutically relevant proteins in patients. By leveraging its expertise in targeted protein degraders, Cullgen believes its product candidates have many distinct advantages over other therapeutic modalities, including higher selectivity, improved therapeutic profile and avoidance of known toxicities.

We are reviewing our programs and evaluating our pipeline and clinical development strategy, including in connection with the Cullgen acquisition, to optimize capital allocation and prioritize programs across the organization. As a result of the Cullgen acquisition, we intend to leverage Cullgen’s capabilities in the PRC for the development and early-stage clinical trials of various product candidates.

Cullgen faces various risks and uncertainties related to doing business in the PRC. A significant portion of Cullgen’s business is operated through Cullgen’s wholly owned subsidiary, Cullgen (Shanghai), Inc. (“Cullgen Shanghai”), a company organized under the laws of the PRC.

Applicable PRC laws and regulations may be tightened, and new laws or regulations may be introduced to impose additional government approval, license, and permit requirements. If Cullgen or Cullgen Shanghai fail to obtain and maintain such approvals, licenses, or permits required for its business, inadvertently conclude that such approval is not required, or respond to changes in the regulatory environment Cullgen or Cullgen Shanghai could be subject to liabilities, penalties, and operational disruption, which may materially and adversely affect its business, operating results, financial condition and the value of Common Stock following the Merger, significantly limit or completely hinder our ability to offer or continue to offer securities to investors, or cause such securities to significantly decline in value or become worthless.

Generally, cash is transferred through Cullgen’s organization in the following manner: (i) funds are transferred to Cullgen Shanghai from Cullgen, in the form of capital contributions or shareholder loans; and (ii) dividends or other distributions may be paid by Cullgen Shanghai to Cullgen.

Cullgen may not be able to transfer funds out of Cullgen Shanghai, or Cullgen might face difficulties in transferring funds from investors in the PRC should Cullgen decide to solicit investments from investors in the PRC, in a timely manner due to restrictions imposed by the PRC authorities.

Under PRC laws and regulations, Cullgen’s operating subsidiary in the PRC, Cullgen Shanghai, as a wholly foreign-owned enterprise in the PRC, may pay dividends only out of their accumulated profits as determined in

accordance with PRC accounting standards and regulations. In addition, a wholly foreign-owned enterprise, such as Cullgen Shanghai, is required to set aside at least 10% of its accumulated after-tax profits after making up the previous year's accumulated losses each year, if any, to fund statutory reserve funds, until the aggregate amount of such fund reaches 50% of its registered capital. It may allocate a portion of its after-tax profits based on PRC accounting standards to discretionary reserve funds according to its shareholder's decision. These statutory reserve funds and discretionary reserve funds are not distributable as cash dividends except in the event of a solvent liquidation of the enterprise.

In addition, the PRC Enterprise Income Tax Law, and its implementation rules provide that withholding tax rate of 10% will be applicable to dividends payable by PRC companies to non-PRC-resident enterprises unless otherwise exempted or reduced according to treaties or arrangements between the PRC central government and governments of other countries or regions where the non-PRC-resident enterprises are incorporated.

Any limitation on the ability of Cullgen Shanghai to pay dividends or make other distributions to Cullgen could materially and adversely limit Cullgen's ability to grow, make investments or acquisitions that could be beneficial to Cullgen's business, pay dividends, or otherwise fund and conduct its business.

Since Cullgen's inception to the date of this prospectus, there were no transfers, dividends, or distributions between Cullgen Shanghai and Cullgen, or to investors (excluding shareholder capital contributions). In addition, since Cullgen Shanghai's inception, Cullgen Shanghai has not paid a dividend to Cullgen. Cullgen intends to retain all available funds and any future earnings for use in the operation of its business and does not anticipate paying any cash dividends on its capital stock in the foreseeable future. Notwithstanding the foregoing, any determination to pay cash dividends subsequent to the Merger will be at the discretion of our board of directors (the "Board") and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors the Board deems relevant.

Our Operations in the PRC

A significant portion of our business is operated through Gyre Pharmaceuticals. Such structure involves unique legal and operational risks to investors in our Common Stock. In particular, the PRC government has significant authority to exert influence on the ability of a company with substantive operations in the PRC, such as us, to conduct its business, accept foreign investments or list on a U.S. or other foreign exchanges. For example, we face risks associated with regulatory approvals of offshore offerings, anti-monopoly regulatory actions, oversight on cybersecurity and data privacy. Such risks could result in a material change in our operations and/or the value of our Common Stock or could significantly limit or completely hinder our ability to offer or continue to offer our Common Stock to investors and cause the value of such Common Stock to significantly decline or become worthless. As we are a company with substantive business operations in the PRC, you should pay special attention to disclosures included in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus and risk factors included herein.

In addition, our auditor is headquartered in mainland China, a jurisdiction where the PCAOB was unable to conduct inspections without the approval of the Chinese authorities. Trading in our Common Stock on Nasdaq or over-the-counter may be prohibited, and as a result, our Common Stock may be delisted under the HFCAA if the PCAOB determines that it has been unable to inspect or investigate completely our auditor located in the PRC for two consecutive years. On December 16, 2021, the PCAOB issued the HFCAA Determination Report to notify the SEC of its determinations that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, including our auditor. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. As a result, we were not identified as a "Commission-Identified Issuer" under the HFCAA upon filing of our Annual Report on Form 10-K for the year ended December 31, 2025. However, whether the PCAOB will continue to be able to satisfactorily conduct inspections and investigations of PCAOB-registered public accounting firms headquartered in mainland China and Hong Kong is subject to uncertainty and depends on a number of factors out of our, and our auditor's, control, including positions taken by authorities of the PRC.

The PCAOB is expected to continue to demand complete access to inspections and investigations against accounting firms headquartered in mainland China and Hong Kong in the future. The PCAOB is required under the HFCAA to make its determination on an annual basis with regards to its ability to inspect and investigate completely accounting firms based in the mainland China and Hong Kong. The possibility of being a "Commission-Identified Issuer" and risk of delisting could continue to adversely affect the trading price of our securities. If the PCAOB

determines in the future that it no longer has full access to inspect and investigate accounting firms headquartered in mainland China and Hong Kong and we continue to use such accounting firm to conduct audit work, we would be identified as a “Commission-Identified Issuer” under the HFCAA following the filing of the annual report for the relevant fiscal year, and if we were so identified for two consecutive years, trading in our securities on U.S. markets would be prohibited under the HFCAA.

The PRC government has oversight over the conduct of our business and its laws, regulations and policies may affect our operations. The PRC government has recently published new policies that affected certain industries with respect to matters such as cybersecurity, data privacy, antitrust and competition, foreign investments, and overseas listings, and we cannot rule out the possibility that it will in the future release regulations or policies regarding our industry that could adversely affect our business, financial condition and results of operations. Furthermore, the PRC regulatory authorities have recently issued new laws and regulations to exert more oversight and control over overseas securities offerings and other capital markets activities and foreign investment in PRC-based companies. Any such action, once taken by the PRC regulatory authorities, could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or in extreme cases, become worthless. For additional information, see “Risk Factors—Risks Related to Our Business Operations in the PRC” in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus.

Recent Developments

Overview

On May 4, 2026 (the “Merger Closing Date”), we consummated the acquisition of Cullgen in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated March 2, 2026 (the “Merger Agreement”), by and among the Company, Cullgen and Helix Merger Sub Corp., a Delaware corporation and wholly owned subsidiary of the Company (“Merger Sub”). Pursuant to the Merger Agreement, among other matters, Merger Sub merged with and into Cullgen, with Cullgen continuing as a wholly owned subsidiary of the Company and the surviving corporation of the merger (the “Merger”). The Merger is intended to qualify for federal income tax purposes as a tax-free reorganization under the provisions of Section 368(a) of the Internal Revenue Code of 1986, as amended.

Merger with Cullgen

Under the terms of the Merger Agreement, we acquired Cullgen in an all-stock transaction that valued Cullgen at approximately \$300 million. At the effective time of the Merger (the “Effective Time”), each then outstanding share of Cullgen capital stock (the “Cullgen Capital Stock”), excluding shares of Cullgen Capital Stock held as treasury stock immediately prior to the Effective Time and any dissenting shares, was converted into (1) with respect to shares of Cullgen Capital Stock held by certain designated holders, (i) for each share of Cullgen common stock (“Cullgen Common Stock”) held by such holders, a number of shares of the Series B Preferred Stock equal to (x) 0.4753 (the “Exchange Ratio”) divided by five, and (ii) for each share of Cullgen preferred stock (“Cullgen Preferred Stock”) held by such designated holders, a number of shares of Series B Preferred Stock equal to (x) the number of shares of Cullgen Common Stock issuable upon conversion of each share of Cullgen Preferred Stock, multiplied by the Exchange Ratio, and divided by five, and (2) with respect to shares of Cullgen Capital Stock held by each other holder, (i) for each share of Cullgen Common Stock held by such holders, a number of shares of Common Stock equal to the Exchange Ratio, and (ii) for each share of Cullgen Preferred Stock held by such holders, a number of shares of Common Stock equal to the number of shares of Cullgen Common Stock issuable upon conversion of each share of Cullgen Preferred Stock, multiplied by the Exchange Ratio. Each share of Series B Preferred Stock received in the Merger is convertible into five shares of Common Stock.

On June 10, 2026, our stockholders approved, among other things, the issuance of shares of Common Stock upon conversion of the Series B Preferred Stock. For more information on the Series B Preferred Stock, please refer to the Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (the “Series B Certificate of Designation”), which is incorporated by reference herein and attached as Exhibit 3.6 to this registration statement.

Registration Rights Agreement

In connection with the closing of the Merger, we entered into a Registration Rights Agreement (the “Registration Rights Agreement”) with Cullgen and certain holders of shares of Cullgen Capital Stock signatory thereto (the “Cullgen Holders”). Pursuant to the Registration Rights Agreement, we are required to prepare and file a resale

registration statement with the SEC within 45 calendar days following the Merger Closing Date with respect to the Merger Common Shares and Conversion Series B Shares. We shall use reasonable best efforts to cause this registration statement to be declared effective by the SEC within 90 business days of the Merger Closing Date (or, in the event of a “full review” by the SEC, within 120 calendar days of the Merger Closing Date). We are filing this registration statement, of which this prospectus forms a part, to satisfy our obligations under the Registration Rights Agreement.

For more information about the Merger, you should refer to our Current Reports on Form 8-K filed with the SEC on March 2, 2026 and May 4, 2026, which are incorporated by reference herein.

Corporation Information

We were incorporated in Delaware in 1997 as a wholly-owned subsidiary of R.J. Reynolds Tobacco Company. In August 2000, we became an independent company when we issued and sold stock to venture capital investors. On August 20, 2015, pursuant to the merger agreement between Targacept, Inc. and Catalyst Biosciences, Inc. (“Private Catalyst”), we acquired Private Catalyst and on August 20, 2015, we changed our name from Targacept, Inc. to Catalyst Biosciences, Inc. On October 30, 2023, we consummated a business combination pursuant to which we acquired an indirect controlling interest in Gyre Pharmaceuticals. At the closing, we changed our name from Catalyst Biosciences, Inc. to Gyre Therapeutics, Inc. Our principal executive offices are located at 12730 High Bluff Drive, Suite 250, San Diego, CA 92130, and our telephone number is (858) 284-0115. Our website address is www.gyretx.com. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

THE OFFERING

Common Stock offered by the Selling Stockholders	31,302,863 shares of Common Stock.
Use of Proceeds	We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of the Resale Shares covered hereby. The net proceeds from the sale of the Resale Shares offered by this prospectus will be received by the Selling Stockholders. See “ <i>Use of Proceeds</i> ” and “ <i>Selling Stockholders</i> .”
Plan of Distribution	Each Selling Stockholder of the securities and any of their pledgees, assignees, donees, transferees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their securities covered hereby on the principal trading market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. See “ <i>Plan of Distribution</i> .”

RISK FACTORS

Investing in our securities involves risks. You should carefully consider the risks, uncertainties and other factors described in our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we have filed or will file with the SEC, and in other documents which are incorporated by reference into this prospectus, as well as the risk factors and other information contained below or incorporated by reference into any accompanying prospectus supplement before investing in any of our securities. Our business, financial condition, results of operations, cash flows or prospects could be materially and adversely affected by any of these risks. The risks and uncertainties described in the documents incorporated by reference herein are not the only risks and uncertainties that you may face.

For more information about our SEC filings, please see “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

The sale of a substantial amount of our Common Stock could adversely affect the prevailing market price of our Common Stock.

We are registering for resale 31,302,863 shares of Common Stock held by the Selling Stockholders. Sales of substantial amounts of our shares of Common Stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our Common Stock. We cannot predict if and when Selling Stockholders may sell such shares in the public markets. Furthermore, in the future, we may issue additional shares of Common Stock. Any such issuance could result in substantial dilution to our existing stockholders and could cause our share price to decline.

The PRC government may exert influence over Gyre Pharmaceuticals’ operations, which could result in an adverse change in our operations.

We have extensive business operations in the PRC, including manufacturing, sales and marketing, research and development and other business operations. Accordingly, the PRC government has some oversight and discretion over the conduct of our business in the PRC and may exert influence over our operations. The PRC government has recently published new policies that significantly affected certain industries, and we cannot rule out the possibility that it will in the future do the same regarding our industry, including policies that could require us to seek permission from the PRC authorities to continue to operate our business in the PRC.

In February 2023, the China Securities Regulatory Commission (the “CSRC”) released the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Enterprises (the “Trial Measures”), which came into effect on March 31, 2023. The Trial Measures comprehensively improve and reform the existing regulatory regime for overseas offering and listing of PRC domestic companies’ securities and regulate both direct and indirect overseas offering and listing of PRC domestic companies’ securities by adopting a filing-based regulatory regime.

In February 2023, the CSRC and other PRC governmental authorities jointly issued the Provisions on Strengthening the Confidentiality and Archives Administration of Overseas Securities Offering and Listing by Domestic Companies (the “Confidentiality Provisions”), which came into effect on March 31, 2023. According to the Confidentiality Provisions, PRC domestic companies that directly or indirectly conduct overseas offerings and listings shall strictly abide by the laws and regulations on confidentiality when providing or publicly disclosing, whether directly or through their overseas listed entities, materials to securities services providers. In the event such materials contain state secrets or working secrets of government agencies, PRC domestic companies shall first obtain approval from authorities, and file with the secrecy administrative department at the same level with the approving authority; in the event that such materials, if divulged, will jeopardize national security or public interest, PRC domestic companies shall comply with procedures stipulated by national regulations.

If (i) we mistakenly conclude that certain regulatory filings, permissions and approvals are not required, (ii) applicable laws, regulations, or interpretations change, or (iii) we are required to obtain such filings, permissions or approvals in the future, we may be unable to obtain them in a timely manner, or at all, and such filings, permissions or approvals may be denied or rescinded even if obtained. We may face adverse actions or sanctions by the CSRC or other PRC regulatory agencies if we are unable to comply with such requirements, which may result in fines and penalties, restrictions on our operations, having to delist from a stock exchange outside of China, the halting of securities offerings to foreign investors and/or other actions that could materially and adversely affect our operations.

Any such actions or sanctions, once taken by the PRC government, could significantly limit, delay or hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.

The enacted “Holding Foreign Companies Accountable Act” and the “Accelerating Holding Foreign Companies Accountable Act” call for additional and more stringent criteria to be applied to emerging market companies upon assessing the qualification of their auditors, especially the non-U.S. auditors who are not inspected by the PCAOB. These developments could add uncertainties to the market for our Common Stock.

The HFCAA requires certain issuers of securities to establish that they are not owned or controlled by a foreign government. Specifically, an issuer must make this certification if the PCAOB is unable to audit specified reports because the issuer has retained a foreign public accounting firm not subject to inspection by the PCAOB. Furthermore, if the PCAOB is unable to inspect the issuer’s public accounting firm for three consecutive years, the issuer’s securities are banned from trading on a national exchange or through other methods. In December 2022, the Accelerating Holding Foreign Companies Accountable Act amended the HFCAA by decreasing the number of non-inspection years from three to two, thus reducing the time period before our Common Stock may be prohibited from trading or delisted if the PCAOB were to determine that it could not inspect our auditor.

In March 2021, the SEC adopted interim final amendments to implement congressionally mandated submission and disclosure requirements of the HFCAA. The interim final amendments will apply to registrants that the SEC identifies as having filed an annual report on Forms 10-K, 20-F, 40-F or N-CSR with an audit report issued by a registered public accounting firm that is located in a foreign jurisdiction and that the PCAOB has determined it is unable to inspect or investigate completely because of a position taken by an authority in that jurisdiction. In December 2021, the SEC adopted amendments finalizing such rules to require that any such identified registrant is required to submit documentation to the SEC establishing that it is not owned or controlled by a governmental entity in that foreign jurisdiction, and is also required to disclose in the registrant’s annual report the audit arrangements of, and governmental influence on, such a registrant.

In December 2021, the PCAOB issued a Determination Report which found that the PCAOB was then unable to inspect or investigate completely registered public accounting firms headquartered in: (1) mainland China of the PRC, because of a position taken by one or more authorities in mainland China; and (2) Hong Kong, a Special Administrative Region and dependency of the PRC, because of a position taken by one or more authorities in Hong Kong. The PCAOB has made such designations as mandated under the HFCAA. Pursuant to each annual determination by the PCAOB, the SEC will, on an annual basis, identify issuers that have used non-inspected audit firms and thus are at risk of such suspensions in the future.

In August 2022, the CSRC, the Ministry of Finance of the PRC, and the PCAOB signed a Statement of Protocol (the “Protocol”), governing inspections and investigations of audit firms based in mainland China and Hong Kong. Pursuant to the Protocol, the PCAOB shall have independent discretion to select any issuer audits for inspection or investigation and has the unfettered ability to transfer information to the SEC. In December 2022, the PCAOB determined that the PCAOB was able to secure complete access to inspect and investigate registered public accounting firms headquartered in mainland China and Hong Kong and voted to vacate its previous determinations to the contrary. While vacating those determinations, the PCAOB noted that, should it encounter any impediment to conducting an inspection or investigation of auditors in mainland China or Hong Kong as a result of a position taken by any authority there, the PCAOB will consider the need to issue a new determination. Notwithstanding the foregoing, if the PCAOB is not able to inspect and investigate completely our auditor’s work papers in China, you may be deprived of the benefits of such inspection which could result in limitation or restriction to our access to the U.S. capital markets and trading of our securities may be prohibited under the HFCAA.

Our auditor, Grant Thornton Zhitong Certified Public Accountants LLP, an independent public accounting firm registered with the PCAOB, and an auditor of publicly traded companies in the U.S., is subject to laws in the U.S. pursuant to which the PCAOB conducts regular inspections to assess its compliance with the applicable professional standards. Our auditor is headquartered in mainland China and was inspected by the PCAOB for the first time in July 2024 and was identified as a firm subject to the determinations announced by the PCAOB in December 2021. Should the PCAOB be unable to fully conduct inspection of our auditor’s work papers in mainland China, it will make it difficult to evaluate the effectiveness of our auditor’s audit procedures or equity control procedures. Investors may consequently lose confidence in our reported financial information and procedures or quality of the financial statements, which would adversely affect us and our securities. Moreover, if trading in our securities is prohibited under the HFCAA in the future because the PCAOB determines that it cannot inspect or fully investigate our auditor at such future time, if our securities were then traded on an exchange, that exchange may determine to delist our securities.

USE OF PROCEEDS

We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of the Resale Shares covered hereby. The net proceeds from the sale of the Resale Shares offered by this prospectus will be received by the Selling Stockholders. However, upon any cash exercise of the Warrant by GNI USA, we will receive cash proceeds per share equal to the exercise price of the Warrant. The Warrant has a per-share exercise price equal to \$4,915.00. If the Warrant is exercised in a cashless exercise, we will not receive any proceeds from the exercise of the Warrant.

Subject to limited exceptions, the Selling Stockholders will pay 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 any of the Resale Shares. We will bear the costs, fees and expenses incurred in effecting the registration of the Resale 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.

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 31,302,863 shares of Common Stock, which represents the total number of Merger Common Shares and Common Stock issuable upon the conversion of the Series B Preferred Stock issued to the Selling Stockholders pursuant to the Merger Agreement and PIPE Common Shares and Common Stock issuable upon the conversion of Series X Preferred Stock issuable pursuant to the exercise of the Warrant issued to GNI USA pursuant to the Securities Purchase Agreement. The Selling Stockholders may from time to time offer and sell any or all of the Resale Shares set forth below pursuant to this prospectus and any accompanying prospectus supplement.

On May 4, 2026, we consummated the Merger with Cullgen and Merger Sub, pursuant to which we issued an aggregate of 14,450,527 shares of Common Stock and 3,697,235 shares of Series B Preferred Stock, which are convertible into 18,486,175 shares of Common Stock pursuant to the Series B Certificate of Designation, to certain of the Selling Stockholders.

On October 27, 2023, we entered into a Securities Purchase Agreement pursuant to which we issued an aggregate of 540,666 shares of Common Stock issued upon conversion of 811 shares of Series X Preferred Stock, effective January 23, 2024, and 540,666 shares of Common Stock issuable upon the conversion of 811 shares of Series X Preferred Stock, issuable pursuant to the exercise of the Warrant, to GNI USA.

We are registering the Resale Shares 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 names of the Selling Stockholders, the number of shares of our Common Stock owned by the Selling Stockholders, the number of shares of our Common Stock that may be offered under this prospectus and the number of shares of our Common Stock that will be owned after this offering by the Selling Stockholders assuming all of the shares registered for resale hereby are sold.

The Selling Stockholders may sell some, all or none of their Resale Shares. We do not know how long the Selling Stockholders will hold the Resale 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 Resale Shares, except for lock-up agreements with certain executive officers, directors and stockholders of the Company and Cullgen, pursuant to which, subject to specified exceptions, they have agreed not to transfer their shares of Common Stock (or shares convertible for Common Stock) for (a) with respect to one-third of the shares of Common Stock held by them, the 180-day period following the Merger Closing Date, (b) with respect to one-third of the shares of Common Stock held by them, the 12-month period following the Merger Closing Date, and (c) with respect to one-third of the shares of Common Stock held by them, the 18-month period following the Merger Closing Date. The Resale Shares covered hereby may be offered from time to time by the Selling Stockholders, provided that Resale Shares issued upon conversion of Series B Preferred Stock may only be offered after such shares of Series B Preferred Stock are converted to Common Stock pursuant to the terms of the Series B Certificate of Designation.

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 Series B Preferred Stock and Common Shares in connection with the Merger. The percentages of Common Stock owned after the offering by each Selling Stockholder below are based on 111,488,849 shares of Common Stock outstanding as of May 31, 2026, and, for each Selling Stockholder, assumes the conversion of only the Series B Preferred Stock owned by such Selling Stockholder but not the Series B Preferred Stock owned by any other Selling Stockholder.

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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 (%)
BC NovLigase Limited ⁽³⁾	954,417	954,417	—	—
Dr. Yue Xiong ⁽⁴⁾	2,376,500	2,376,500	—	—
Galaxy Alpha L.P. ⁽⁵⁾	190,883	190,883	—	—
Entities affiliated with GNI Japan ⁽⁶⁾	86,323,020	14,090,462	72,232,558	64.8%
HSG Venture VII Holdco, Ltd. ⁽⁷⁾	3,750,299	3,750,299	—	—
JT International Capital Management Ltd. ⁽⁸⁾	381,767	381,767	—	—
Kazuhiro Kawauchi ⁽⁹⁾	11,224	11,224	—	—
MSA China Venture Fund II L.P. ⁽¹⁰⁾	572,650	572,650	—	—
Neutron Star HK Limited ⁽¹¹⁾	2,059,296	2,059,296	—	—
Entities affiliated with Octagon Capital Advisors LP ⁽¹²⁾	954,416	954,416	—	—
Shenzhen Xinxifuxing Investment Partnership (Limited Partnership) ⁽¹³⁾	905,057	905,057	—	—
Sirius Medical Limited ⁽¹⁴⁾	724,045	724,045	—	—
The Jian Jin and Xufang Ye Revocable Trust ⁽¹⁵⁾	2,376,500	2,376,500	—	—
Wuxi Guolian Industry Synergy Investment Center (Limited Partnership) ⁽¹⁶⁾	905,057	905,057	—	—
Yuanqing Bencao Investment Limited ⁽¹⁷⁾	954,417	954,417	—	—
Satya Das ⁽¹⁸⁾	10,400	10,400	—	—
Hengxu Wei ⁽¹⁹⁾	64,402	64,402	—	—
John Sasaki ⁽²⁰⁾	16,635	16,635	—	—
Yang Yang ⁽²¹⁾	4,436	4,436	—	—

- (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. Unless an address is provided below, the address for the holder is 12730 High Bluff Drive, Suite 250, San Diego, CA 92130.
- (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 Series B Preferred Stock is prohibited from converting shares of Series B Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (established by the holder between 0.00% and 19.99%) (the “Beneficial Ownership Limitation”) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.
- (3) Consists of 954,417 shares of Common Stock. BC NovLigase Limited is managed by Qianye Karen Liu. BC NovLigase Limited’s address is Trinity Chambers, PO Box 4301, Road Town, Tortola, British Virgin Islands.
- (4) Consists of 2,376,500 shares of Common Stock issuable upon the conversion of 475,300 shares of Series B Preferred Stock. As of April 1, 2026, shares held by Dr. Yue Xiong were pledged as security pursuant to a lease agreement between Dr. Xiong and GNI USA, Inc., a Delaware corporation (“GNI USA”). The shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock held by Dr. Xiong are subject to a Beneficial Ownership Limitation of 4.99%.
- (5) Consists of 190,883 shares of Common Stock held by Galaxy Alpha L.P., a limited partnership incorporated in Cayman Islands. The registered address of Galaxy Alpha L.P. is Maricorp Services Ltd., P.O. Box 2075, #31 the Strand, 46 Canal Point Drive, Grand Cayman KY1-1105, Cayman Islands. HLC GP III Company Limited (“HLC GP”) acts as the general partner of Galaxy Alpha L.P. HLC GP is wholly owned by Mr. Stephen Hui Wang. The voting and investment power of shares held by Galaxy Alpha L.P. is exercised by Mr. Stephen Hui Wang.
- (6) Consists of (i) 72,773,219 shares of Common Stock held by GNI USA, (ii) 540,666 shares of Common Stock issuable upon conversion of 811 shares of Series X Preferred Stock underlying warrants held by GNI USA, (iii) 10,718,530 shares of Common Stock issuable upon the conversion of 2,143,706 shares of Series B Preferred Stock held by GNI USA and (iv) 2,290,600 shares of Common Stock issuable upon the conversion of 458,120 shares of Series B Preferred Stock held by GNI Group Ltd., a company incorporated under the laws of Japan with limited liability (“GNI Japan”). GNI USA, through GNI Japan-affiliated entities, is a wholly owned subsidiary of GNI Japan. By virtue of such relationship, GNI Japan may be deemed to have voting and investment power with respect to the shares held by GNI USA. The address for these entities is c/o GNI Group Ltd., Nihonbashi-Honcho YS Bldg. 3rd Floor 2-2-2 Nihonbashi-Honcho, Chuo-ku, 103-0023 Tokyo, Japan. The shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock held by each of GNI USA and GNI Japan are subject to a Beneficial Ownership Limitation of 19.99%.

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- (7) Consists of 3,750,299 shares of Common Stock held by HSG Venture VII Holdco, Ltd., an exempted company with limited liability incorporated under the laws of the Cayman Islands. HSG Venture VII Holdco, Ltd. is wholly owned by HongShan Capital Venture Fund VII, L.P., whose general partner is HSG Venture VII Management, L.P., whose general partner in turn, is HSG Holding Limited. The registered address of HSG Venture VII Holdco, Ltd. is Maples Corporate Services Limited, PO Box 309, Ugland House, South Church Street, Grand Cayman, KY1-1104, Cayman Islands.
- (8) Consists of 381,767 shares of Common Stock held by JT International Capital Management Limited (“JT International Capital”), a corporation incorporated in Cayman Islands. The registered address of JT International Capital is Campbells Corporate Services Limited, Floor 4, Willow House, Cricket Square, Grand Cayman KY1-9010, Cayman Islands. JT International is controlled by JT Investment Fund SPC South China Venture Capital Healthcare Fund SP (“SCVC Healthcare”). JT International Financial Limited is the fund manager of SCVC Healthcare, and is wholly-owned by Nice Wealth International Holdings Limited, which is in turn wholly-owned by Mr. Ping Hing Tsoi.
- (9) Consists of 11,224 shares of Common Stock.
- (10) Consists of 572,650 shares of Common Stock held by MSA China Venture Fund II L.P. MSA China Venture Fund II L.P. is managed by MSA China Fund II GP, LLC, its general partner (“the General Partner”). Yu Zeng is the Manager of the General Partner. MSA China Venture Fund II L.P.’s address is 2106, 21F, Radiance Building, No. 6, Wangjing East Park 4th District, Chaoyang District, Beijing, China.
- (11) Consists of 2,059,296 shares of Common Stock held by Neutron Star HK Limited, a private company limited by shares registered in Hong Kong (“Neutron Star HK Limited”). The address for Neutron Star HK Limited is Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, Hong Kong. The voting and investment power of shares held by Neutron Star HK Limited is exercised by Mr. Stephen Hui Wang.
- (12) Consists of (i) 477,208 shares of Common Stock held by Octagon Investments Master Fund L.P. (“Octagon Master Fund”) and (ii) 477,208 shares of Common Stock held by Octagon Coinvest Opportunities Fund L.P. (“Octagon Coinvest Fund”). Octagon Capital Advisors L.P. (“Octagon”) serves as the investment manager of the Octagon Master Fund and Octagon Coinvest Fund. Dr. Ting Jia, as the principal beneficial owner of Octagon (“Dr. Jia”), is the managing member of Octagon. By virtue of these relationships, each of Octagon and Dr. Jia may be deemed to beneficially own the foregoing shares of our Common Stock. Each of Octagon Master Fund and Octagon Coinvest Fund hold the shares of our Common Stock for the benefit of their respective investors. Each of the Octagon Master Fund, Octagon Coinvest Fund and Octagon, for the benefit of their respective investors, have the right to (1) directly or indirectly alone or with others, vote or dispose of our shares of Common Stock and (2) receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of, the shares of Common Stock. The address for the foregoing is 654 Madison Avenue, 21st Floor, New York, New York 10065.
- (13) Consists of 905,057 shares of Common Stock. Shenzhen Xinxifuxing Investment Partnership (Limited Partnership) is managed by Lan Youjin. Shenzhen Xinxifuxing Investment Partnership (Limited Partnership)’s address is 35th Floor, East Tower, Raffles Plaza, North Bund, 1089 Dongdaming Road, Hongkou District, Shanghai, China.
- (14) Consists of 724,045 shares of Common Stock issuable upon the conversion of 146,241 shares of Series B Preferred Stock held by Sirius Medical Limited. Sirius Medical Limited is managed by Bing Chen. Sirius Medical Limited’s address is 611, T1, South Yanggao Road, Pudong District, Shanghai, China. The shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock held by Sirius Medical Limited are subject to a Beneficial Ownership Limitation of 4.99%.
- (15) Consists of 2,376,500 shares of Common Stock issuable upon the conversion of 475,300 shares of Series B Preferred Stock held by a trust, for which Jian Jin and his spouse serve as co-trustees. The shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock held by the trust are subject to a Beneficial Ownership Limitation of 4.99%. The mailing address for the trust is 13520 Saw Palm Creek Trail, Bradenton, FL 34211.
- (16) Consists of 905,057 shares of Common Stock held by Wuxi Guolian Industry Synergy Investment Center (Limited Partnership) (“Wuxi Guolian”). Wuxi Guolian is managed by Weimin Zhang.
- (17) Consists of 954,417 shares of Common Stock held by Yuanqing Bencao Investment Limited (“Yuanqing Bencao”). Yuanqing Bencao is managed by Li Wei Jia. Yuanqing Bencao’s address is Room D1201, Science and Technology Building, Tsinghua Science and Technology Park, Haidan District, Beijing, China.
- (18) Consists of 10,400 shares of Common Stock.
- (19) Consists of 64,402 shares of Common Stock.
- (20) Consists of 16,635 shares of Common Stock.
- (21) Consists of 4,436 shares of Common Stock.

Relationship with the Selling Stockholders

In connection with the Closing of the Merger, we entered into the Registration Rights Agreement with Cullgen and the Cullgen Holders. We consider GNI Japan and GNI USA to be related parties as they are holders of more than 5% of our Common Stock.

Registration Rights Agreement

Pursuant to the terms of the Registration Rights Agreement, we are required to prepare and file with the SEC a registration statement that permits the resale or other disposition of the Selling Stockholders’ Merger Common Shares and Conversion Series B Shares issued to such Selling Stockholders and, subject to certain exceptions, use commercially reasonable efforts to keep the registration statement of which this prospectus forms a part effective under the Securities Act for so long as such securities registered for resale thereunder retain their character as Registrable Securities (as defined in the Registration Rights Agreement). We are filing this registration statement, of which this prospectus forms a part, to satisfy our obligations under the Registration Rights Agreement.

We have also agreed, among other things, to indemnify the Cullgen Holders and each of their respective officers, directors, members, employees, partners, managers, stockholders, affiliates, investment advisors and agents, each

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person who controls any such Cullgen Holder and the officers, directors, members, employees, partners, managers, stockholders, affiliates, investment advisors and agents of each such controlling person from certain liabilities and pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incident to our obligations under the Registration Rights Agreement.

DESCRIPTION OF CAPITAL STOCK

Description of Common Stock

Under our restated certificate of incorporation (the “Certificate of Incorporation”), we have the authority to issue 400,000,000 shares of Common Stock. As of May 31, 2026, 111,488,849 shares of Common Stock were issued and outstanding. All shares of Common Stock will, when issued, be duly authorized, fully paid and nonassessable.

Dividends. Subject to preferential dividend rights of any other class or series of stock, the holders of shares of Common Stock are entitled to receive dividends, including dividends of our stock, as and when declared by the Board, subject to any limitations imposed by law and to the rights of the holders, if any, of our preferred stock. On September 20, 2022, we paid a special, one-time cash dividend of approximately \$45.0 million (or \$1.43 per share) to the holders of Common Stock of record as of the close of business on September 6, 2022. On January 12, 2023, we paid a special, one-time cash dividend of approximately \$7.6 million (or \$0.24 per share) to the holders of Common Stock of record as of the close of business on January 5, 2023. In June 2023, we distributed \$3.5 million, which reflected, in connection with an asset purchase agreement with Vertex Pharmaceuticals Inc. (“Vertex”), the hold-back amount received from Vertex less expenses and a reserve for potential tax liabilities, to holders of the contingent value right issued to our holders of Common Stock of record on January 5, 2023 (the “CVR Holders”). On August 26, 2024, we distributed approximately \$12.6 million (or \$0.40 per contingent value right) to the CVR Holders. We do not anticipate paying periodic cash dividends on Common Stock for the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of the Board and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as the Board deems relevant.

Liquidation. In the event we are liquidated, dissolved or our affairs are wound up, after we pay or make adequate provision for all of our known debts and liabilities, each holder of Common Stock will be entitled to share ratably in all assets that remain, subject to any rights that are granted to the holders of any class or series of preferred stock.

Voting Rights. For all matters submitted to a vote of stockholders, each holder of Common Stock is entitled to one vote for each share registered in his or her name. Except as may be required by law and in connection with some significant actions, such as mergers, consolidations, or amendments to the Certificate of Incorporation that affect the rights of stockholders, holders of Common Stock vote together as a single class. There is no cumulative voting in the election of our directors, which means that, subject to any rights to elect directors that are granted to the holders of any class or series of preferred stock, a plurality of the votes cast at a meeting of stockholders at which a quorum is present is sufficient to elect a director.

Other Rights and Restrictions. Subject to the preferential rights of any other class or series of stock, all shares of Common Stock have equal dividend, distribution, liquidation and other rights, and have no preference, appraisal or exchange rights, except for any appraisal rights provided by Delaware law. Furthermore, holders of Common Stock have no conversion, sinking fund or redemption rights, or preemptive rights to subscribe for any of our securities. The Certificate of Incorporation and amended and restated bylaws (the “Bylaws”) do not restrict the ability of a holder of Common Stock to transfer his or her shares of Common Stock.

The rights, powers, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock which we may designate and issue in the future.

Description of Preferred Stock

Under the Certificate of Incorporation, we have authority, subject to any limitations prescribed by law and without further stockholder approval, to issue from time to time up to 5,000,000 shares of preferred stock, par value \$0.001 per share, in one or more series. On December 22, 2022, we designated 123,418 shares of our preferred stock as “Series X Convertible Preferred Stock” (the “Series X Preferred Stock”). As of April 1, 2026, we had zero shares of Series X Preferred Stock issued and outstanding. On February 23, 2026, the Board authorized the issuance of shares of the Series B Preferred Stock, pursuant to the terms of the Merger Agreement.

Pursuant to the Certificate of Incorporation, we are authorized to issue “blank check” preferred stock, which may be issued from time to time in one or more series upon authorization by the Board. The Board, without further approval of the stockholders, is authorized to fix the designation, powers, preferences, relative, participating optional or other special rights, and any qualifications, limitations and restrictions applicable to each series of the preferred stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate

purposes could, among other things, adversely affect the voting power or rights of the holders of Common Stock and, under certain circumstances, make it more difficult for a third party to gain control of us, discourage bids for our Common Stock at a premium or otherwise adversely affect the market price of the Common Stock.

Series X Convertible Preferred Stock

Conversion. Under the Certificate of Incorporation, (i) effective as of 5:00 p.m. (New York City time) on the second business day after the date on which such stockholder approval is received, each share of Series X Preferred Stock then outstanding automatically converts into approximately 10,000 shares of Common Stock, and (ii) at any time thereafter at the option of the holder thereof, into approximately 10,000 shares of Common Stock, in the case of each of (i) and (ii) subject to certain beneficial ownership limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set at 9.9% and thereafter adjusted by the holder to a number between 4.9% and 19.9%) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

Voting Rights. Except as otherwise provided in the Certificate of Designation of Preferences, Rights and Limitations of Series X Convertible Preferred Stock, filed with the Secretary of State of the State of Delaware on December 27, 2022, as amended on October 30, 2023 (as amended, the “Series X Certificate of Designation”) or as otherwise required by the Delaware General Corporation Law (the “DGCL”), Series X Preferred Stock does not have voting rights. However, as long as any shares of Series X Preferred Stock are outstanding, in addition to any other requirement of the DGCL or the Certificate of Incorporation, we shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of Series X Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to Series X Preferred Stock or alter or amend the Series X Certificate of Designation, amend or repeal any provision of or add any provision to, the Certificate of Incorporation or Bylaws, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of Series X Preferred Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise, (ii) issue further shares of Series X Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series X Preferred Stock, (iii) at any time while at least 30% of the originally issued Series X Preferred Stock remains issued and outstanding, consummate either: (A) any Fundamental Transaction (as defined in the Series X Certificate of Designation) or (B) any merger or consolidation of the combined company with or into another entity or any stock sale to, or other business combination in which the combined company’s stockholders immediately before such transaction do not hold at least a majority of the capital stock of the combined company immediately after such transaction, or (iv) enter into any agreement with respect to any of the foregoing.

Dividends. Holders of Series X Preferred Stock shall be entitled to receive when, as and if dividends are declared and paid on shares of Common Stock, an equivalent dividend (with the same dividend declaration date and payment date), calculated on an as-converted basis without regard to the Beneficial Ownership Limitation (as defined in the Series X Certificate of Designation), provided, however, in no event shall holders of Series X Preferred Stock be entitled to receive (a) the “rights” distributed pursuant to the Contingent Value Rights Agreement, dated December 26, 2022, as amended on March 29, 2023 (as amended, the “CVR Agreement”) or any amounts paid under the CVR Agreement, or (b) cash distributions declared by the combined company on or prior to the closing of the transactions contemplated by the Business Combination Agreement, dated as of December 26, 2022, as amended on March 29, 2023 and August 30, 2023, by and among us, GNI USA, GNI Japan, GNI Hong Kong Limited, a company incorporated under the laws of Hong Kong with limited liability, Shanghai Genomics, Inc., a company organized under the laws of the People’s Republic of China, the Minority Holders (as defined therein) and Continent Pharmaceuticals Inc., a Cayman Islands company limited by shares.

Liquidation. Series X Preferred Stock ranks (i) senior to any class or series of capital stock of the combined company hereafter created specifically ranking by its terms junior to any Series X Preferred Stock; (ii) on parity with Common Stock and any class or series of capital stock of the combined company hereafter created specifically ranking by its terms on parity with Series X Preferred Stock; and (iii) junior to (A) any class or series of capital stock of the combined company hereafter created specifically ranking by its terms senior to any Series X Preferred Stock or (B) any “rights” distributed pursuant to the CVR Agreement or any amounts paid under the CVR Agreement, in each case, as to distributions of assets upon liquidation, dissolution or winding up of the combined company, whether voluntarily or involuntarily.

Series B Preferred Stock

Conversion. Each share of Series B Preferred Stock then outstanding shall be convertible, at the option of the holder thereof, into a number of shares of Common Stock equal to the Conversion Ratio, subject to certain beneficial ownership limitations as set forth in the Series B Certificate of Designation. The “Conversion Ratio” for each share of Series B Preferred Stock is five (5) shares of Common Stock issuable upon the conversion of each share of Series B Preferred Stock (corresponding to a ratio of 5:1), subject to adjustment as provided in the Series B Certificate of Designation. Notwithstanding anything herein to the contrary, a holder of Series B Preferred Stock may not convert their shares into Common Stock if such holder has not executed and delivered to the Company a Lock-Up Agreement.

Voting Rights. On all matters submitted to a vote of the Company’s stockholders, the holders of shares of Series B Preferred Stock shall vote together with the holders of Common Stock as a single class and, in connection therewith, each holder of outstanding shares of Series B Preferred Stock shall be entitled to cast one vote for each share of Series B Preferred Stock held by such holder as of the record date for determining stockholders entitled to vote on such matter. In addition to any other vote required herein or by the DGCL, as long as any shares of Series B Preferred Stock are outstanding, the Company shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series B Preferred Stock: (i) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock or alter or amend the Series B Certificate of Designation, amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or Bylaws (as amended, restated or amended and restated from time to time), or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series B Preferred Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation, recapitalization, reclassification, conversion or otherwise or (ii) issue further shares of Series B Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series B Preferred Stock. Holders of shares of Common Stock acquired upon the conversion of shares of Series B Preferred Stock shall be entitled to the same voting rights as each other holder of Common Stock.

Dividends. Holders of Series B Preferred Stock shall be entitled to receive, and the Company shall pay, dividends on shares of the Series B Preferred Stock (on an as-if-converted-to-Common-Stock basis, without regard to the Beneficial Ownership Limitation (as defined in the Series B Certificate of Designation)) equal to and in the same form, and in the same manner, as dividends (other than dividends on shares of the Common Stock payable in the form of Common Stock) actually paid on shares of the Common Stock when, as and if such dividends (other than dividends payable in the form of Common Stock) are paid on shares of the Common Stock. Other than as set forth in the previous sentence, no other dividends shall be paid on shares of Series B Preferred Stock, and the Company shall pay no dividends (other than dividends payable in the form of Common Stock) on shares of the Common Stock unless it simultaneously complies with the previous sentence.

Liquidation. The Series B Preferred Stock shall rank on parity with the Common Stock as to distributions of assets upon liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily. Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary (a “Liquidation”), each holder of Series B Preferred Stock shall be entitled to receive out of the assets, whether capital or surplus, of the Company the same amount that a holder of Common Stock would receive if the Series B Preferred Stock were fully converted (disregarding for such purpose any beneficial ownership limitations) to Common Stock which amounts shall be paid pari passu with all holders of Common Stock, plus an additional amount equal to any dividends declared on but unpaid to such shares. If, upon any such Liquidation, the assets of the Company shall be insufficient to pay the holders of shares of the Series B Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Company shall be distributed ratably to the holders of Series B Preferred Stock and the holders of Common Stock in accordance with the respective amounts that would be payable on all such securities if all amounts payable thereon were paid in full. For the avoidance of any doubt, a Fundamental Transaction shall not be deemed a Liquidation unless the Company expressly declares that such Fundamental Transaction shall be treated as if it were a Liquidation.

Certain Effects of Authorized but Unissued Stock

We have shares of Common Stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing requirements of Nasdaq. We may issue these additional shares for a variety of corporate purposes, including future public or private offerings to raise additional capital or to facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved preferred stock may enable the Board to issue shares of preferred stock with terms that could render more difficult or

discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of Common Stock and the likelihood that holders of Common Stock will receive dividend payments or payments upon liquidation.

Anti-Takeover Effects of Provisions of Our Charter Documents

The Certificate of Incorporation provides for the Board to be divided into three classes serving staggered terms. Approximately one-third of the Board will be elected each year. The provision for a classified board could prevent a party who acquires control of a majority of the outstanding voting stock from obtaining control of the Board until the second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of the Company and could increase the likelihood that incumbent directors will retain their positions. The Certificate of Incorporation provides that directors may be removed with or without cause only by the affirmative vote of the holders of at least 66 2/3% of the voting power of all outstanding stock entitled to vote in the election of directors, voting together as a single class.

The Certificate of Incorporation requires that certain amendments to the Certificate of Incorporation and amendments by the stockholders of the Bylaws require the affirmative vote of holders of at least 66 2/3% of the then outstanding stock entitled to vote generally in the election of directors, voting together as a single class. These provisions could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of the Company and could delay changes in management.

Our Bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual stockholders meeting, including proposed nominations of persons for election to the Board. At an annual stockholders meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the Board. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to the Secretary of the Company timely written notice, in proper form, of his or her intention to bring that business before the annual stockholders meeting. The Bylaws do not give the Board the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of the Company.

The Bylaws provide that only the Board, the chairperson of the Board, the President or the Chief Executive Officer may call a special meeting of stockholders. Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of the Board by calling a special meeting of stockholders prior to such time as a majority of the Board, the chairperson of the Board, the President or the Chief Executive Officer believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the Board also could be delayed until the next annual stockholders meeting.

The Certificate of Incorporation does not allow stockholders to act by written consent without a meeting. Without the availability of stockholder's actions by written consent, a holder controlling a majority of our capital stock would not be able to amend our Bylaws or remove directors without holding a stockholders' meeting.

The Certificate of Incorporation and Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery (the "Court of Chancery") of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware or other state courts of the State of Delaware) is the sole and exclusive forum for the following types of proceedings (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers, employees or stockholders to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery or (iv) any action asserting a claim arising pursuant to any provision of the Certificate of Incorporation or Bylaws (in each case, as they may be amended from time to time) or that is governed by the internal affairs doctrine. This choice of forum provision will not apply to suits brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our Bylaws also provide that,

unless we consent in writing to the selection of an alternative forum, federal district courts of the United States will be the exclusive forum for any complaint asserting a cause of action arising under the Securities Act. There is uncertainty as to whether a court would enforce such a provision. In addition, our Bylaws provide that any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock are deemed to have notice of and consented to the foregoing choice of forum provisions; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

Anti-Takeover Effects of Provisions of Delaware Law

We are subject to the provisions of Section 203 of the DGCL (“Section 203”). Under Section 203, we would generally be prohibited from engaging in any business combination with any interested stockholder for a period of three years following the time that this stockholder became an interested stockholder unless:

- prior to this time, the Board approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers, and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the Board and authorized at a special or annual stockholders meeting, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Under Section 203, a “business combination” includes:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder, subject to limited exceptions;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Transfer Agent and Registrar

The transfer agent for our Common Stock is Equiniti Trust Company, LLC. Its address is 6201 15th Avenue, Brooklyn, NY 11219.

Listing

Our Common Stock is listed on Nasdaq under the symbol “GYRE.”

PLAN OF DISTRIBUTION

Each Selling Stockholder of the securities and any of their pledgees, assignees, donees, transferees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their securities covered hereby on the principal trading market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities 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;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- in a distribution to members, partners, stockholders or other equityholders of the Selling Stockholders;
- a combination of any such methods of sale or distribution; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not 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 Rule 2121.

In connection with the sale of the securities 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 securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities 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 create one or more derivative securities that require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). The Selling Stockholders also may transfer the securities in other circumstances, in which case the transferees, pledgees, donees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

We are required to pay certain fees and expenses incurred by us incident to the registration of the securities. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of the date that the securities (i) have been sold, pursuant to this prospectus or pursuant to Rule 144, or (ii) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, and without the requirement for us to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the Common Stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the Common Stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

There can be no assurance that any Selling Stockholder will sell any or all of the shares of Common Stock registered pursuant to the registration statement, of which this prospectus forms a part.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

The Selling Stockholders did not engage in any resales prior to the consummation of the Merger.

LEGAL MATTERS

Certain legal matters, including the legality of the securities offered, will be passed upon for us by Gibson, Dunn & Crutcher LLP, San Francisco, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the reports of Grant Thornton Zhitong Certified Public Accountants LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC, and 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. This prospectus, which forms part of the registration statement, does not contain all of the information included in the registration statement, including its exhibits and schedules. For further information about us and the securities described in this prospectus, you should refer to the registration statement, its exhibits and schedules and our reports, proxies, information statements and other information filed with the SEC.

Our filings are available to the public on the Internet, through a database maintained by the SEC at www.sec.gov. We also maintain a website at www.gyretx.com. We have included our website address for the information of prospective investors and do not intend it to be an active link to our website. Information contained on our website does not constitute a part of this prospectus or any applicable prospectus supplement (or any document incorporated by reference herein or therein).

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference 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 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) between the date of the initial registration statement and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed, except that we are not incorporating by reference any information furnished (and not filed) with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K:

- our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on [March 13, 2026](#) (including the portions of our Definitive Proxy Statement on Schedule 14A filed on [April 27, 2026](#) incorporated by reference therein);
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2026, filed with the SEC on [May 8, 2026](#);
- our Current Reports on Form 8-K (except for information contained therein which is furnished rather than filed) filed on [March 2, 2026](#), [March 23, 2026](#), [April 17, 2026](#), [May 4, 2026](#) and [June 16, 2026](#); and
- the description of our Common Stock attached as [Exhibit 4.1](#) to our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on March 13, 2026, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02, Item 7.01 or Item 9.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, and (ii) after the date of this prospectus but prior to the termination of the offering. These documents include, without limitation, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, as well as proxy statements.

You may request a copy of these filings, at no cost, by contacting us, either orally or in writing, at the following:

Gyre Therapeutics, Inc.
12730 High Bluff Drive
Suite 250
San Diego, California 92130
(858) 284-0115

We maintain a website at www.gyretx.com. Information about us, including our reports filed with the SEC, is available through that site. Such reports are accessible at no charge through our website and are made available as soon as reasonably practicable after such material is filed with or furnished to the SEC. Our website and the information contained on that website, or connected to that website, are not incorporated by reference in this prospectus.

You may read and copy any materials we file with the SEC at the SEC's website mentioned under the heading "Where You Can Find More Information." The information on the SEC's website is not incorporated by reference in this prospectus.

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	\$ 25,372.82
Printing and engraving	17,500
Legal fees and expenses	250,000
Accounting fees and expenses	20,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous expenses	55,000
Total	<u>\$372,872.82</u>

Item 15. Indemnification of Officers and Directors

The company is a Delaware corporation. Section 145(a) of the DGCL provides that a Delaware corporation may 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, whether civil, criminal, administrative or investigative, other than an action 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, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the 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.

Section 145(b) of the DGCL provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine, upon application, that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

Further subsections of DGCL Section 145 provide that:

- (1) to the extent a present or former director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (i) and (ii) of Section 145 or in the defense of any claim, issue or matter therein, such person shall be indemnified against expenses, including attorneys' fees, actually and reasonably incurred by such person in connection therewith;
- (2) the indemnification and advancement of expenses provided for pursuant to Section 145 shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of shareholders or disinterested directors or otherwise; and
- (3) the corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under Section 145.

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As used in this Item 15, the term “proceeding” means any threatened, pending or completed action, suit or proceeding, whether or not by or in the right of the company, and whether civil, criminal, administrative, investigative or otherwise.

Section 145 of the DGCL makes provision for the indemnification of officers and directors in terms sufficiently broad to indemnify officers and directors of the company under certain circumstances from liabilities (including reimbursement for expenses incurred) arising under the Securities Act. The Certificate of Incorporation and Bylaws provide, in effect, that, to the fullest extent and under the circumstances permitted by Section 145 of the DGCL, the company will indemnify any and all of its officers and directors. The company has entered into indemnification agreements with its officers and directors. The company may, in its discretion, similarly indemnify its employees and agents. The Certificate of Incorporation also relieves the company’s directors from monetary damages to the company or its shareholders for breach of such director’s fiduciary duty as a director to the fullest extent permitted by the DGCL. Under Section 102(b)(7) of the DGCL, a corporation may relieve its directors from personal liability to such corporation or its shareholders for monetary damages for any breach of their fiduciary duty as directors except (i) for a breach of the duty of loyalty, (ii) for failure to act in good faith, (iii) for intentional misconduct or knowing violation of law, (iv) for willful or negligent violations of certain provisions in the DGCL imposing certain requirements with respect to stock repurchases, redemptions and dividends or (v) for any transactions from which the director derived an improper personal benefit.

The company has purchased insurance policies that, within the limits and subject to the terms and conditions thereof, cover certain expenses and liabilities that may be incurred by directors and officers in connection with proceedings that may be brought against them as a result of an act or omission committed or suffered while acting as a director or officer of the company.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, the Company 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.

TABLE OF CONTENTS**Item 16. Exhibits**

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

Exhibit No.	Description
<u>2.1</u>	Agreement and Plan of Merger and Reorganization, dated March 2, 2026, by and among Gyre Therapeutics, Inc., Helix Merger Sub Corp. and Cullgen Inc. (incorporated by reference to Exhibit 2.1 to the Company's Form 8-K filed on March 2, 2026).
<u>3.1</u>	Restated Certificate of Incorporation of Gyre Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Form 10-Q filed on November 13, 2024).
<u>3.2</u>	Amended and Restated Bylaws of Gyre Therapeutics, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Form 8-K filed on October 30, 2023).
<u>3.3(a)</u>	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock, filed with the Delaware Secretary of State on April 10, 2017 (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on August 13, 2017).
<u>3.3(b)</u>	Certificate of Elimination of Series A Preferred Stock, filed with the Delaware Secretary of State on March 25, 2024 (incorporated by reference to Exhibit 3.6(b) to the Company's Form 10-K filed on March 17, 2024).
<u>3.4(a)</u>	Certificate of Designation of Preferences, Rights and Limitations of Series X Convertible Preferred Stock, filed with the Delaware Secretary of State on December 27, 2022 (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on December 27, 2022).
<u>3.4(b)</u>	Amendment to Certificate of Designation of Preferences, Rights and Limitations of Series X Convertible Preferred Stock, filed with the Delaware Secretary of State on October 30, 2023 (incorporated by reference to Exhibit 3.2 to the Company's Form 8-K filed on October 30, 2023).
<u>3.5(a)</u>	Certificate of Designation of Preferences, Rights and Limitations of Series Y Preferred Stock, filed with the Delaware Secretary of State on June 20, 2023, with respect to the Series Y Preferred Stock (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on June 20, 2023).
<u>3.5(b)</u>	Certificate of Elimination of Series Y Preferred Stock, filed with the Delaware Secretary of State on August 31, 2023 (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on August 31, 2023).
<u>3.6</u>	Form of Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock.
<u>4.1</u>	Form of Warrant to Purchase Series X Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on October 30, 2023).
<u>4.2</u>	Form of Registration Rights Agreement, by and among Gyre Therapeutics, Inc. and certain investors signatory thereto (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed on March 2, 2026).
<u>5.1</u>	Opinion of Gibson, Dunn & Crutcher LLP.

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Exhibit No.	Description
<u>10.1</u>	Form of Company Support Agreement (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 2, 2026).
<u>10.2</u>	Form of Lock-Up Agreement (incorporated by reference to Exhibit 10.4 to the Company's Form 8-K filed on March 2, 2026).
<u>10.3</u>	Securities Purchase Agreement by and between the Company and GNI USA, dated October 27, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on October 30, 2023).
<u>23.1</u>	Consent of Grant Thornton Zhitong Certified Public Accountants LLP, Independent Registered Public Accounting Firm.
<u>23.2</u>	Consent of Gibson, Dunn & Crutcher LLP (included in Exhibit 5.1).
<u>24.1</u>	Power of Attorney (included on the signature page to the registration statement).
<u>107</u>	Filing Fee Table.

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;
- (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 percent change in the maximum aggregate offering price set forth in the "Filing Fee Table" in the effective registration statement; and

(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 subparagraphs (i),(ii), and (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 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.
- (b) 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 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 of 1933, 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 San Diego, State of California, on July 13, 2026.

GYRE THERAPEUTICS, INC.

By: /s/ Ying Luo
 Ying Luo
 Chief Executive Officer and President

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Ying Luo and Thomas Eastling, and each of them, as true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, and generally to do all such things in their names and behalf in their capacities as officers and directors to enable Gyre Therapeutics, Inc. to comply with the provisions of the Securities Act of 1933 and all requirements of the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Ying Luo</u> Ying Luo	Chief Executive Officer, President and Director (Principal Executive Officer)	July 13, 2026
<u>*</u> Thomas Eastling	Chief Financial Officer (Principal Financial and Accounting Officer)	July 13, 2026
<u>Ping Zhang</u>	Chairman	July 13, 2026
<u>*</u> Gordon G. Carmichael, Ph.D.	Director	July 13, 2026
<u>*</u> David M. Epstein, Ph.D.	Director	July 13, 2026
<u>*</u> Rodney L. Nussbaum	Director	July 13, 2026
<u>*</u> Renate Parry, Ph.D.	Director	July 13, 2026
<u>*</u> Dan Weng, M.D.	Director	July 13, 2026

* By: /s/ Ying Luo
 Ying Luo
 Attorney-in-Fact

GIBSON DUNN

July 13, 2026

Gyre Therapeutics, Inc.
12730 High Bluff Drive
Suite 250
San Diego, CA 92130

Re: Gyre Therapeutics, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Gyre Therapeutics, Inc., a Delaware corporation (the “Company”), in connection with the preparation and filing with the Securities and Exchange Commission (the “Commission”) of a Registration Statement on Form S-3 (the “Registration Statement”) pursuant to the Securities Act of 1933, as amended (the “Securities Act”), relating to the resale from time to time by the selling stockholders named therein of up to 31,302,863 shares of the Company’s common stock (the “Common Stock”), par value \$0.001 per share (the “Shares”).

In arriving at the opinion expressed below, we have examined originals, or copies certified or otherwise identified to our satisfaction as being true and complete copies of the originals, of specimen Common Stock certificates and such other documents, corporate records, certificates of officers of the Company and of public officials and other instruments as we have deemed necessary or advisable to enable us to render the opinions set forth below. In our examination, we have assumed without independent investigation the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies.

Based upon the foregoing, and subject to the assumptions, exceptions, qualifications and limitations set forth herein, we are of the opinion that the Shares, when issued against payment therefor as set forth in the Registration Statement, will be validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement, and we further consent to the use of our name under the caption “Legal Matters” in the Registration Statement and the prospectus that forms a part thereof. In giving these consents, we do not thereby admit that we are within 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/ Gibson, Dunn & Crutcher LLP

Gibson, Dunn & Crutcher LLP
One Embarcadero Center Suite 2600 | San Francisco, CA 94111-3715 | T: 415.393.8200 | F: 415.393.8306 | gibsondunn.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 13, 2026 with respect to the consolidated financial statements and internal control over financial reporting of Gyre Therapeutics, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2025, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned reports in this Registration Statement, and to the use of our name as it appears under the caption “Experts”.

/s/ Grant Thornton Zhitong Certified Public Accountants LLP

Beijing, China

July 13, 2026

CALCULATION OF FILING FEE TABLE

S-3
(Form Type)

Gyre Therapeutics, 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	1	Equity	Common Stock, \$0.001 par value per share	457(c)	1,081,332	\$6.69	\$7,234,111.08	0.0001381	\$999.03				
Fees Previously Paid	2	Equity	Common Stock, \$0.001 par value per share	457(c)	30,221,531	\$5.84	\$176,493,741.04	0.0001381	\$24,373.79				
Carry Forward Securities													
Carry Forward Securities		—	—	—	—		—		—	—	—	—	—
Total Offering Amounts							\$183,727,852.12		\$25,372.82				
Total Fees Previously Paid									\$24,373.79				
Total Fee Offsets									\$0.00				
Net Fee Due									\$999.03				

1. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement also covers such an indeterminate amount of shares of common stock as may become issuable to prevent dilution resulting from stock splits, stock dividends and similar events.

The amount registered consists of up to (i) 11,735,356 shares of Common Stock for which a registration fee was previously paid, (ii) 18,486,175 shares of Common Stock issuable upon the conversion of 3,697,235 shares of Series B Preferred Stock for which a registration fee was previously paid, (iii) 540,666 shares of Common Stock issued upon the conversion of 811 shares of Series X Convertible Preferred Stock, par value \$0.001 per share (“Series X Preferred Stock”), and (iv) 540,666 shares of Common Stock issuable upon conversion of 811 shares of Series X Preferred Stock, issuable upon the exercise of a warrant to purchase shares of Series X Preferred Stock.

Estimated solely for the purpose of calculating the registration fee, based on the average of the high and low prices of the shares of common stock on the Nasdaq Capital Market on July 10, 2026 (such date being within five business days of the date that this amendment to the registration statement was filed with the Securities and Exchange Commission, in accordance with Rule 457(c) under the Securities Act).

2. Estimated solely for the purpose of calculating the registration fee, based on the average of the high and low prices of the shares of common stock on the Nasdaq Capital Market on June 16, 2026.