

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

**Amendment No. 1
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

GT BIOPHARMA, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

2834
(Primary Standard Industrial
Classification Code Number)

94-1620407
(I.R.S. Employer
Identification Number)

N/A¹
(415) 919-4040
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)
Michael Breen
Chief Executive Officer

N/A¹
(415) 919-4040
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)
Copies to:

Alan A. Lanis, Jr.
Baker & Hostetler LLP
1900 Avenue of the Stars, Suite 2700
Los Angeles, CA 90067
Tel: (310) 820-8800

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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, 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 post-effective amendment filed pursuant to Rule 462(d) 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. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

¹ Effective as of July 1, 2024, the Company became a fully remote company. We do not maintain a principal executive office. For purposes of compliance with applicable requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, any stockholder communication required to be sent to the Company's principal executive offices may be directed to 505 Montgomery Street, 10th Floor, San Francisco, California 94111, or by email to auditcommittee@gtbiopharma.com.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED JUNE 27, 2025

PRELIMINARY PROSPECTUS



54,423,826 Shares of Common Stock

This prospectus relates to the offering from time to time by the selling stockholders named in this prospectus (the “Selling Stockholders”) of up to an aggregate 54,423,826 shares of our common stock, par value \$0.001 per share (the “Common Stock”), consisting of (i) 14,561,913 shares of Common Stock issuable upon the conversion of 6,612 shares of Series L 10% Convertible Preferred Stock, par value \$0.001 per share (the “Series L Preferred Stock” or the “Preferred Shares,” and the shares of Common Stock issuable upon conversion of the Preferred Shares, the “Conversion Shares”) issued in connection with our private placement in May 2025, (ii) 14,561,913 shares of Common Stock issuable upon the exercise of warrants (the “Common Stock Warrants” and the shares of Common Stock issuable upon exercise of the Common Stock Warrants, the “Common Stock Warrant Shares”) issued in connection with our private placement in May 2025, (iii) 300,000 shares of Common Stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants,” and the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants, the “Commitment Shares”) issued to Bristol Capital, LLC, a Delaware limited liability company (“Bristol”), and Five Narrow Lane, L.P., a Delaware limited partnership (“5NL”), as consideration for their commitment to purchase shares of Common Stock under the common shares purchase agreement, dated May 14, 2025 (as amended, the “Common Shares Purchase Agreement”), and (iv) up to 25,000,000 shares of Common Stock that we may sell to 5NL and Hailstone Peak Funding, LLC, a Delaware limited liability company and affiliate of Bristol (“Hailstone,” and together with 5NL, the “Facility Investors”), from time to time at our sole discretion, pursuant to the Common Shares Purchase Agreement (the “CEF Shares”). The Conversion Shares, the Common Stock Warrant Shares, the Commitment Shares and the CEF Shares are collectively referred to as the “Shares.” We are registering the Shares on behalf of the Selling Stockholders, to be offered and sold by them from time to time. We will not receive any proceeds from the sale of the Shares offered by this prospectus.

We have agreed to bear all of the expenses incurred in connection with the registration of the Shares. The Selling Stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers or dealer managers and similar expenses, if any, incurred for the sale of the Shares of our Common Stock.

The Selling Stockholders, or their respective donees, pledgees, transferees or other successors-in-interest, may sell or otherwise dispose of the Shares covered by this prospectus in a number of different ways. We provide more information about how the Selling Stockholders may sell or otherwise dispose of their resale securities in the section entitled “Plan of Distribution.” For a list of the Selling Stockholders, see the section entitled “Selling Stockholders.”

Our Common Stock is presently listed on the Nasdaq Capital Market under the trading symbol “GTBP.” On June 26, 2025, the closing sale price for our Common Stock was \$3.80 per share.

Investing in our securities involves a high degree of risk. See the section entitled “Risk Factors” beginning on page 7 of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

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

The date of this prospectus is , 2025.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement filed with the U.S. Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. By using a shelf registration statement, the Selling Stockholders may sell up to 54,423,826 shares of Common Stock from time to time in one or more offerings as described in this prospectus. We will not receive any proceeds from the sale by the Selling Stockholders of the shares of Common Stock offered pursuant to this prospectus and will not receive any proceeds from the sale of the Shares by the Selling Stockholders.

We may also file a prospectus supplement or post-effective amendment to the registration statement of which this prospectus forms a part that may contain material information relating to these offerings. The prospectus supplement or post-effective amendment may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or post-effective amendment, you should rely on the prospectus supplement or post-effective amendment, as applicable. Before purchasing any securities, you should carefully read this prospectus, any post-effective amendment, and any applicable prospectus supplement, together with the additional information described under the heading “Where You Can Find More Information.”

Neither we, nor the Selling Stockholders, have authorized anyone to provide you with any information or to make any representations other than those contained or incorporated by reference in this prospectus, any post-effective amendment, or any applicable prospectus supplement prepared by or on behalf of us or to which we have referred you. We and the Selling Stockholders take no responsibility for and can provide no assurance as to the reliability of any other information that others may give you. The Selling Stockholders will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, any post-effective amendment and any applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any post-effective amendment or any prospectus supplement may contain or incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information.

Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be incorporated by reference in this prospectus, any post-effective amendment or any prospectus supplement may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” incorporated by reference in this prospectus, any post-effective amendment and any applicable prospectus supplement. Accordingly, investors should not place undue reliance on this information.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.”

This prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectuses are the property of their respective owners.

Unless the context otherwise requires, the terms “we,” “our,” “us,” “our company,” and “GT Biopharma” refer to GT Biopharma, Inc.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including any prospectus supplement or document incorporated by reference herein, contains forward-looking statements about us and our industry. All statements other than statements of historical fact are “Forward-Looking Statements” for purposes of these provisions, including our plans of operation, any projections of revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, and any statements of assumptions underlying any of the foregoing. All forward-looking statements included in this document are made as of the date hereof and are based on information available to us as of such date. We assume no obligation to update any forward-looking statement. In some cases, forward-looking statements can be identified by the use of terminology such as “may,” “will,” “expects,” “plans,” “anticipates,” “intends,” “believes,” “estimates,” “potential,” or “continue,” or the negative thereof or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained herein are reasonable, there can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Future financial condition and results of operations, as well as any forward looking statements are subject to inherent risks and uncertainties, including any other factors referred to in our press releases and reports filed with the SEC. All subsequent forward-looking statements attributable to the company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements. Additional factors that may have a direct bearing on our operating results are described under “Risk Factors” in this prospectus or in any related free writing prospectus.

You should assume that the information appearing in this prospectus or any related free writing prospectus is accurate as of its date only. Because the risk factors described herein could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. All written or oral forward-looking statements attributable to us or any person acting on our behalf made after the date of this prospectus are expressly qualified in their entirety by the risk factors and cautionary statements contained in this prospectus. Unless legally required, we do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

In addition, statements that “we believe” and similarly qualified statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to rely unduly upon them.

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PROSPECTUS SUMMARY

This summary highlights certain information contained elsewhere in this prospectus. This summary does not contain all of the information that may be important to you or that you should consider before investing in our Common Stock. You should read the entire prospectus carefully, including our financial statements and related notes and especially the information under “Risk Factors” incorporated by reference herein from our annual report on Form 10-K for the year ended December 31, 2024 and other filings with the SEC. This prospectus contains forward-looking statements, based on current expectations and related to future events and our future financial performance, that involve risks and uncertainties. Our actual results may vary materially from those discussed in the forward-looking statements as a result of various factors, including, without limitation, those set forth under “Risk Factors,” as well as other matters described in this prospectus and in our annual report on Form 10-K.

Overview

We are a clinical stage biopharmaceutical company focused on the development and commercialization of novel immuno-oncology products based on our proprietary Tri-specific Killer Engager (TriKE®), and Tetra-specific Killer Engager (Dual Targeting TriKE®) fusion protein immune cell engager technology platforms. Our TriKE® and Dual Targeting TriKE® platforms generate proprietary therapeutics designed to harness and enhance the cancer killing abilities of a patient’s own natural killer cells, or NK cells. Once bound to an NK cell, our moieties are designed to activate the NK cell to direct it to one or more specifically targeted proteins expressed on a specific type of cancer cell or virus infected cell, resulting in the targeted cell’s death. TriKE®s can be designed to target any number of tumor antigens, including B7-H3, HER2, CD33 and PDL1, on hematologic malignancies or solid tumors and do not require patient-specific customization. We believe our TriKE® and Dual Targeting TriKE® platforms that activate endogenous NK cells are potentially safer than T-cell immunotherapy because there is less cytokine release syndrome (CRS) and fewer neurological complications. Our preclinical data suggests that this is explained by the TriKE® dependent CD16 directed IL-15 proliferation of NK cells but little effect on endogenous T cells.

We are using our TriKE® platform with the intent to bring to market immuno-oncology products that can treat a range of hematologic malignancies, solid tumors, and potentially autoimmune disorders. The platform is scalable, and we are implementing processes to produce investigational new drug (IND) ready moieties in a timely manner after a specific TriKE® conceptual design. Specific drug candidates can then be advanced into the clinic on our own or through potential collaborations with partnering companies. We believe our TriKE®s may have the ability, if approved for marketing, to be used as both monotherapy and in combination with other standard-of-care therapies.

Our initial work was conducted in collaboration with the Masonic Cancer Center at the University of Minnesota under a program led by Dr. Jeffrey Miller, Professor of Medicine, and the Interim Director at the Center. Dr. Miller, who also serves as our Consulting Senior Medical Director, is a recognized key opinion leader in the field of NK cell and IL-15 biology and their therapeutic potential. We have exclusive rights to the TriKE® platform and are generating additional intellectual property for specific moieties.

Recent Developments

Private Placement of Shares of Preferred Stock and Warrants

On May 12, 2025, the Company entered into a securities purchase agreement (as amended, the “Securities Purchase Agreement”) with certain of the Selling Stockholders (such Selling Stockholders, the “Private Placement Investors”), whereby we agreed to issue and sell to the Private Placement Investors (i) up to 6,612 Preferred Shares, (ii) the Common Stock Warrants, and (iii) warrants to purchase up to a number of shares of the Company’s Common Stock equal to the number of Greenshoe Conversion Shares (as defined in the Securities Purchase Agreement) issuable upon exercise of the Greenshoe Right (as defined below) (the “Vesting Warrants,” and together with the Common Stock Warrants, the “Warrants”), with an aggregate stated value of \$6,611,111.00, for an aggregate purchase price of \$5,950,000.00 (the transactions contemplated by the Securities Purchase Agreement, the “Private Placement”). Pursuant to the Securities Purchase Agreement, each Private Placement Investor may elect to purchase shares of Series L Preferred Stock with an aggregate stated value of up to \$24,018,349 (the “Greenshoe Rights”) for an aggregate purchase price of \$21,616,514, subject to adjustments, as further described in the Securities Purchase Agreement. Each Private Placement Investor is entitled to exercise its respective Greenshoe Rights for an amount of Series L Preferred Stock equal to the ratio of such Private Placement Investor’s original subscription amount to the original aggregate subscription amount of all Private Placement Investors.

In connection with our entry into the Securities Purchase Agreement, on May 12, 2025, we entered into a registration rights agreement with the Private Placement Investors (the “Registration Rights Agreement”), pursuant to which we agreed to file a resale registration statement with respect to the public resale of the shares of Common Stock issuable upon conversion of the Preferred Shares and upon exercise of the Warrants not later than 30 calendar days after May 12, 2025 and after each closing of the exercise of a Greenshoe Right in accordance with the Securities Purchase Agreement, to become effective no later than 90 days after filing.

The foregoing summary descriptions of the Securities Purchase Agreement and the Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of such documents, which are filed as exhibits to the registration statement of which this prospectus forms a part and are incorporated by reference herein.

The Committed Equity Facility

On May 14, 2025, the Company entered into the Common Shares Purchase Agreement with 5NL and Bristol relating to a committed equity facility (the “Committed Equity Facility”), whereby we have the right from time to time at our option to sell to the Facility Investors up to \$20 million of our Common Stock subject to certain conditions and limitations set forth in the Common Shares Purchase Agreement. Pursuant to the Common Shares Purchase Agreement, the Company can sell up to 25,000,000 shares of Common Stock. Bristol subsequently assigned all of its all of its right, title, interest and obligations in the Common Shares Purchase Agreement to its affiliate, Hailstone.

Sales of the shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement, and the timing of any sales, will be determined by the Company from time to time in its sole discretion and will depend on a variety of factors, including, among other things, market conditions, the trading price of the Common Stock and determinations by the Company regarding the use of proceeds of such shares of Common Stock. The net proceeds from any sales under the Common Shares Purchase Agreement will depend on the frequency with, and prices at, which the shares of Common Stock are sold to the Facility Investors.

The purchase price of the shares of Common Stock that the Company elects to sell to the Facility Investors pursuant to the Purchase Agreement will be 93% of the volume weighted average price of the shares of Common Stock during the applicable purchase date on which the Company has timely delivered written notice to the Facility Investors directing it to purchase shares of Common Stock under the Common Shares Purchase Agreement.

In connection with the execution of the Common Shares Purchase Agreement, the Company agreed to issue to 5NL and Bristol the Pre-Funded Warrants to purchase up to an aggregate 300,000 shares of Common Stock as consideration for their irrevocable commitment to purchase the shares of Common Stock upon the terms and subject to the satisfaction of the conditions set forth in the Common Shares Purchase Agreement.

The foregoing summary descriptions of the Common Shares Purchase Agreement and the Pre-Funded Warrant do not purport to be complete and are qualified in their entirety by reference to the full text of such documents, which are filed as exhibits to the registration statement of which this prospectus forms a part and are incorporated by reference herein.

Nasdaq Matter

On November 21, 2024, we received a letter (the “Notification Letter”) from the Listing Qualifications Staff (the “Staff”) of the Nasdaq Stock Market, LLC (“Nasdaq”) notifying us that the amount of our stockholders’ equity had fallen below the \$2,500,000 required minimum for continued listing set forth in Nasdaq Listing Rule 5550(b)(1) (the “Minimum Stockholders’ Equity Requirement”). Nasdaq’s determination was based upon our stockholders’ equity as reported in our Quarterly

The Notification Letter indicated that we had 45 days (i.e., until January 6, 2025) to submit a plan to regain compliance with the Minimum Stockholders' Equity Requirement, noting that if such plan is accepted, the Staff can grant us an extension of up to 180 days from the date of the Notification Letter to evidence compliance. In determining whether to accept our plan, the Staff will consider such things as the likelihood that the plan will result in compliance with Nasdaq's continued listing criteria, our past compliance history, the reasons for our current non-compliance, other corporate events that may occur within the review period, our overall financial condition and our public disclosures.

We submitted a plan of compliance to the Staff on December 31, 2024, outlining our plan to conduct periodic public and private securities offerings to regain compliance. The Staff also requested additional information regarding our financing plans and financial projection, which we provided to them. On June 13, 2025, we received a letter from the Staff notifying us that we have regained compliance with the Minimum Stockholders' Equity Requirement set forth in Nasdaq Listing Rule 5550(b)(1). Nasdaq will continue to monitor the Company to ensure its ongoing compliance with the Minimum Stockholders' Equity Requirement, so if at the time of the filing of the Company's next periodic financial statements the Company does not evidence compliance with the Minimum Stockholders' Equity Requirement, the Company may be subject to delisting.

If our Common Stock is delisted from Nasdaq, our ability to raise capital through public offerings of our securities and to finance our operations could be adversely affected. We also believe that delisting would likely result in decreased liquidity and/or increased volatility in our Common Stock and could harm our business and future prospects. In addition, we believe that, if our Common Stock is delisted, our stockholders would likely find it more difficult to obtain accurate quotations as to the price of our Common Stock and it may be more difficult for stockholders to buy or sell our Common Stock at competitive market prices, or at all.

Going Concern

We have evaluated the significance of the uncertainty regarding our financial condition in relation to our ability to meet our obligations, which has raised substantial doubt about our ability to continue as a going concern. While it is very difficult to estimate our future liquidity requirements, we believe if we are unable to obtain additional financing, existing cash resources will not be sufficient to enable us to fund the anticipated level of our operations through one year from the date the financial statements included in our annual report on Form 10-K for the year ended December 31, 2024 were issued. There can be no assurances that we will be able to secure additional financing on acceptable terms. In the event that we do not secure additional financing, we will be forced to delay, reduce, or eliminate some or all of our discretionary spending, which could adversely affect our business prospects, ability to meet long-term liquidity needs and ability to continue operations.

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. Accordingly, we may provide less public disclosure than larger public companies, including the inclusion of only two years of audited consolidated financial statements and only two years of management's discussion and analysis of financial condition and results of operations disclosure and the inclusion of reduced disclosure about our executive compensation arrangements. As a smaller reporting company, we are also exempt from compliance with the auditor attestation requirements pursuant to the Sarbanes-Oxley Act. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests. We will continue to be a "smaller reporting company" until we have \$250 million or more in public float (based on our Common Stock) measured as of the last business day of our most recently completed second fiscal quarter or, in the event we have no public float or a public float (based on our Common Stock) that is less than \$700 million, annual revenues of \$100 million or more during the most recently completed fiscal year.

Corporate Information

Our Common Stock currently trades on the Nasdaq under the symbol "GTBP." Effective as of July 1, 2024, we became a fully remote company. We do not maintain a principal executive office. For purposes of compliance with applicable requirements of the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act, any stockholder communication required to be sent to our principal executive offices may be directed to 505 Montgomery Street, 10th Floor, San Francisco, CA 94111. Our telephone number is (415) 919-4040. We maintain a website at www.gtbiopharma.com. Information contained on or accessible through our website is not, and should not be considered, part of, or incorporated by reference into, this prospectus.

THE OFFERING

Common Stock offered by the Selling Stockholders

Up to 54,423,826 shares of Common Stock, consisting of (i) 14,561,913 Conversion Shares, (ii) 14,561,913 Common Stock Warrant Shares, (iii) 300,000 Commitment Shares, and (iv) up to 25,000,000 CEF Shares. We may elect, in our sole discretion, to sell the CEF Shares to the Facility Investors from time to time from and after the Commencement Date pursuant to the Common Shares Purchase Agreement.

Common Stock outstanding before this offering

3,147,995 shares of Common Stock.

Use of Proceeds

We will not receive any proceeds from any sale of the Shares by the Selling Stockholders. We may receive proceeds upon any exercise for cash of outstanding Common Stock Warrants. We may also receive up to \$20 million in aggregate gross proceeds under the Common Shares Purchase Agreement from sales of Common Stock that we may elect to make to Facility Investors pursuant to the Common Shares Purchase Agreement, if any, from time to time in our sole discretion, from and after the Commencement Date. See the section titled "Use of Proceeds."

Risk Factors

See the section under the heading "Risk Factors" in this prospectus and the other information included in, or incorporated by reference into, this prospectus or any prospectus supplement for a discussion of certain factors you should carefully consider before deciding to invest in shares of our Common Stock.

Nasdaq Symbol

Our Common Stock is listed on the Nasdaq under the symbol "GTBP."

RISK FACTORS

Investment in the shares of Common Stock offered pursuant to this prospectus and any applicable prospectus supplement involves risks. You should carefully consider the risk factors described below and in the “Risk Factors” sections incorporated by reference herein from our most recent annual report on Form 10-K, as well as any subsequent annual reports on Form 10-K, quarterly reports on Form 10-Q or current reports on Form 8-K we file after the date of this prospectus, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in the applicable prospectus supplement and any applicable free writing prospectus before acquiring any of such Common Stock. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered shares of Common Stock.

Risks Related to the Offering

There has been a limited public market for our Common Stock, and we do not know whether one will develop to provide you adequate liquidity. Furthermore, the trading price for our Common Stock, should an active trading market develop, may be volatile and could be subject to wide fluctuations in per-share price.

Our Common Stock is listed on the Nasdaq under the trading symbol “GTBP;” historically, however, there has been a limited public market for our Common Stock. We cannot assure you that an active trading market for our Common Stock will develop or be sustained. The liquidity of any market for the shares of our Common Stock will depend on a number of factors, including:

- the number of stockholders;
- our operating performance and financial condition;
- the market for similar securities;
- the extent of coverage of us by securities or industry analysts; and
- the interest of securities dealers in making a market in the shares of our Common Stock.

Even if an active trading market develops, the market price for our Common Stock may be highly volatile and could be subject to wide fluctuations. In addition, the price of shares of our Common Stock could decline significantly if our future operating results fail to meet or exceed the expectations of market analysts and investors and actual or anticipated variations in our quarterly operating results could negatively affect our share price.

The volatility of the price of our Common Stock may also be impacted by the risks discussed under this “Risk Factors” section, in addition to other factors, including:

- developments in the financial markets and worldwide or regional economies;
- announcements of innovations or new products or services by us or our competitors;
- announcements by the government relating to regulations that govern our industry;
- significant sales of our Common Stock or other securities in the open market;
- variations in interest rates;
- changes in the market valuations of other comparable companies; and
- changes in accounting principles.

It is not possible to predict the actual number of shares of Common Stock, if any, we will sell under the Common Shares Purchase Agreement to the Facility Investors, or the actual gross proceeds resulting from those sales.

On May 14, 2025, we entered into the Common Shares Purchase Agreement with 5NL and Bristol, pursuant to which the Facility Investors have committed to purchase up to \$20.0 million worth of shares of Common Stock, subject to certain limitations and conditions set forth in the Common Shares Purchase Agreement. The shares of Common Stock that may be issued under the Common Shares Purchase Agreement may be sold by us to the Facility Investors at our discretion from time to time until the first day of the month next following the 36-month period commencing on the date of this prospectus.

We generally have the right to control the timing and amount of any sales of our shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement. Sales of our Common Stock, if any, to the Facility Investors under the Common Shares Purchase Agreement will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to the Facility Investors all, some or none of the shares of Common Stock that may be available for us to sell to the Facility Investors pursuant to the Common Shares Purchase Agreement.

Because the purchase price per share of Common Stock to be paid by the Facility Investors for the shares of Common Stock that we may elect to sell to the Facility Investors under the Common Shares Purchase Agreement, if any, will fluctuate based on the market prices of our Common Stock at the time we elect to sell shares to the Facility Investors pursuant to the Common Shares Purchase Agreement, if any, it is not possible for us to predict, as of the date of this prospectus and prior to any such sales, the number of Common Stock that we will sell to the Facility Investors under the Common Shares Purchase Agreement, the purchase price per share that the Facility Investors will pay for Common Stock purchased from us under the Common Shares Purchase Agreement, or the aggregate gross proceeds that we will receive from those purchases by the Facility Investors under the Common Shares Purchase Agreement.

Although the Common Shares Purchase Agreement provides that we may, in our discretion, from time to time after the date of this prospectus and during the term of the Common Shares Purchase Agreement, direct the Facility Investors to purchase our Common Stock from us in one or more purchases under the Common Shares Purchase Agreement, for a maximum aggregate purchase price of up to \$20.0 million, only 25,000,000 shares of Common Stock are being registered for resale under the registration statement that includes this prospectus. However, because the market prices of our Common Stock may fluctuate from time to time after the date of this prospectus and, as a result, the actual purchase prices to be paid by the Facility Investors for our Common Stock that we direct it to purchase under the Common Shares Purchase Agreement, if any, also may fluctuate significantly based on the market price of our Common Stock.

Accordingly, if we decide to issue and sell to the Facility Investors under the Common Shares Purchase Agreement more than the 25,000,000 shares being registered for resale under this registration statement in order to receive additional proceeds (which we may elect to do, at our sole discretion, up to aggregate gross proceeds of \$20.0

million), we must first file with the SEC one or more additional registration statements to register the resale under the Securities Act by the Facility Investors of any such additional shares of Common Stock we wish to sell from time to time under the Common Shares Purchase Agreement, which the SEC must declare effective before we may elect to sell any such additional shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement. Any issuance and sale by us under the Common Shares Purchase Agreement of a substantial amount of shares of Common Stock in addition to the 25,000,000 shares of Common Stock being registered for resale by the Facility Investors under this prospectus could cause additional substantial dilution to our shareholders. The number of shares of Common Stock ultimately offered for sale by the Facility Investors is dependent upon the number of shares of Common Stock, if any, we ultimately elect to sell to the Facility Investors under the Common Shares Purchase Agreement. However, even if we elect to sell shares of Common Stock to the Facility Investors pursuant to the Common Shares Purchase Agreement, the Facility Investors may resell all, some or none of such shares at any time or from time to time in its sole discretion and at different prices.

Investors who buy shares of Common Stock from the Facility Investors at different times will likely pay different prices.

Pursuant to the Common Shares Purchase Agreement, we will have discretion, to vary the timing, price and number of shares sold to the Facility Investors. If and when we elect to sell Common Shares to the Facility Investors pursuant to the Common Shares Purchase Agreement, after the Facility Investors have acquired such Common Shares, the Facility Investors may resell all, some or none of such shares at any time or from time to time in their respective sole discretion and at different prices. As a result, investors who purchase shares from the Facility Investors in this offering at different times will likely pay different prices for those shares, and so may experience different levels of dilution and in some cases substantial dilution and different outcomes in their investment results. Investors may experience a decline in the value of the shares they purchase from the Facility Investors in this offering as a result of future sales made by us to the Facility Investors at prices lower than the prices such investors paid for their shares in this offering, or other sales made by us or the other Selling Stockholders. In addition, if we sell a substantial number of shares to the Facility Investors under the Common Shares Purchase Agreement, or if investors expect that we will do so, the actual sales of shares or the mere existence of our arrangement with the Facility Investors may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales.

We may use proceeds from sales of our Common Shares made pursuant to the Common Shares Purchase Agreement in ways with which you may not agree or in ways which may not yield a significant return.

We will have broad discretion over the use of proceeds from sales of our Common Shares made pursuant to the Common Shares Purchase Agreement, including for any of the purposes described in the section entitled “Use of Proceeds,” and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. However, we have not determined the specific allocation of any net proceeds among these potential uses, and the ultimate use of the net proceeds may vary from the currently intended uses. The net proceeds may be used for corporate purposes that do not increase our operating results or enhance the value of our Common Shares.

Our outstanding warrants and options may affect the market price of our Common Stock.

As of the date of this prospectus, we had 3,272,995 shares of Common Stock outstanding and issued and had outstanding warrants for the purchase of up to 16,601,669 additional shares of Common Stock at a weighted average exercise price of \$3.10 per share, 4,845,263 of which are exercisable as of the date of this prospectus (subject to certain beneficial ownership limitations). In addition, we had outstanding options for the purchase of up to 124,600 additional shares of Common Stock at a weighted average exercise price of \$32.69 per share, 109,692 of which are exercisable as of the date of this prospectus. The amount of Common Stock reserved for issuance may have an adverse impact on our ability to raise capital and may affect the price and liquidity of our Common Stock in the public market. In addition, the issuance of these shares of Common Stock will have a dilutive effect on current stockholders’ ownership.

Because our Common Stock may be deemed a low-priced “penny” stock, an investment in our Common Stock should be considered high-risk and subject to marketability restrictions.

Historically, the trading price of our Common Stock has been \$5.00 per share or lower, and deemed a penny stock, as defined in Rule 3a51-1 under the Exchange Act, and subject to the penny stock rules of the Exchange Act specified in rules 15c-1 through 15c-100. Those rules require broker-dealers, before effecting transactions in any penny stock, to:

- deliver to the customer, and obtain a written receipt for, a disclosure document;
- disclose certain price information about the stock;
- disclose the amount of compensation received by the broker-dealer or any associated person of the broker-dealer;
- send monthly statements to customers with market and price information about the penny stock; and
- in some circumstances, approve the purchaser’s account under certain standards and deliver written statements to the customer with information specified in rules.

Consequently, the penny stock rules may restrict the ability or willingness of broker-dealers to sell the common stock and may affect the ability of holders to sell their common stock in the secondary market and the price at which such holders can sell any such securities. These additional procedures could also limit our ability to raise additional capital in the future.

Financial Industry Regulatory Authority (“FINRA”) sales practice requirements may also limit a stockholder’s ability to buy and sell our Common Stock, which could depress the price of our Common Stock.

In addition to the “penny stock” rules described above, FINRA has adopted rules that require a broker-dealer to have reasonable grounds for believing that the investment is suitable for that customer before recommending an investment to a customer. Prior to recommending speculative low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer’s financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low-priced securities will not be suitable for at least some customers. Thus, the FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our Common Stock, which may limit your ability to buy and sell our shares of Common Stock, have an adverse effect on the market for our shares of Common Stock, and thereby depress our price per share of Common Stock.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our Common Stock may be influenced by the research and reports that industry or securities analysts publish about us or our business. We currently have research coverage by only one securities analyst, and we may never obtain research coverage by additional analysts. If no or few securities or industry analysts commence coverage of us, the trading price for our Common Stock may be negatively affected. In the event that we receive additional securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our operating

results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Anti-takeover provisions may limit the ability of another party to acquire us, which could cause our stock price to decline.

Delaware law and our amended and restated certificate of incorporation, as amended (“Charter”), our amended and restated bylaws (“Bylaws”) and other governing documents contain provisions that could discourage, delay or prevent a third party from acquiring us, even if doing so may be beneficial to our stockholders, which could cause our stock price to decline. In addition, these provisions could limit the price investors would be willing to pay in the future for shares of our Common Stock.

We do not currently or for the foreseeable future intend to pay dividends on our Common Stock.

We have never declared or paid any cash dividends on our Common Stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. As a result, any return on your investment in our Common Stock will be limited to the appreciation in the price of our Common Stock, if any.

Purchasers of our Common Stock in this offering will experience immediate and substantial dilution in the book value of their investment.

The effective public offering price per share of Common Stock in this offering may exceed the net tangible book value per share of our Common Stock outstanding prior to this offering, in which case you may incur an immediate and substantial dilution in the net tangible book value of the shares of Common Stock you purchase in this offering. Furthermore, if outstanding options or warrants are exercised, purchasers could experience further dilution.

We will need additional capital to conduct our operations and develop our products, and our ability to obtain the necessary funding is uncertain.

We have used a significant amount of cash since inception to finance the continued development and testing of our product candidates, and we expect to need substantial additional capital resources to develop our product candidates going forward and launch and commercialize any product candidates for which we receive regulatory approval.

We may not be successful in generating and/or maintaining operating cash flow, and the timing of our capital expenditures and other expenditures may not result in cash sufficient to sustain our operations through the commercialization of our product candidates. If financing is not sufficient and additional financing is not available or available only on terms that are detrimental to our long-term survival, it could have a material adverse effect on our ability to continue to function. The timing and degree of any future capital requirements will depend on many factors, including:

- accuracy of the assumptions underlying our estimates for capital needs in 2025 and beyond;
- scientific and clinical progress in our research and development programs;
- the magnitude and scope of our research and development programs and our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- our progress with pre-clinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

Additional financing through strategic collaborations, public or private equity or debt financings or other financing sources may not be available on acceptable terms, or at all. Additional equity financing could result in significant dilution to our stockholders, and any debt financings will likely involve covenants restricting our business activities. Further, if we obtain additional funds through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize on our own.

If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or product development initiatives, any of which could have a material adverse effect on our financial condition or business prospects.

Our Common Stock may be at risk for delisting from the Nasdaq in the future if we do not maintain compliance with Nasdaq’s continued listing requirements. Delisting could adversely affect the liquidity of our Common Stock and the market price of our Common Stock could decrease.

Our Common Stock is currently listed on Nasdaq. Nasdaq has minimum requirements that a company must meet in order to remain listed on Nasdaq, including corporate governance standards and a requirement that we maintain a stockholders’ equity above \$2,500,000 as set forth in Nasdaq Listing Rule 5550(b)(1) (“Minimum Stockholders’ Equity Requirement”).

On November 21, 2024, the Company received a letter from Nasdaq notifying the Company that its amount of stockholders’ equity has fallen below the \$2,500,000 required minimum for continued listing set forth in Nasdaq Listing Rule 5550(b)(1) (the “Notification Letter”).

The Notification Letter indicated that we had 45 days (i.e., until January 6, 2025) to submit a plan to regain compliance with the Minimum Stockholders’ Equity Requirement, noting that if such plan is accepted, the Staff can grant us an extension of up to 180 days from the date of the Notification Letter to evidence compliance. In determining whether to accept our plan, the Staff will consider such things as the likelihood that the plan will result in compliance with Nasdaq’s continued listing criteria, our past compliance history, the reasons for our current non-compliance, other corporate events that may occur within the review period, our overall financial condition and our public disclosures.

We submitted a plan of compliance to the Staff on December 31, 2024, outlining our plan to conduct periodic public and private securities offerings to regain compliance. The Staff also requested additional information regarding our financing plans and financial projection, which we provided to them. On June 13, 2025, we received a letter from the Staff notifying us that we have regained compliance with the Minimum Stockholders’ Equity Requirement set forth in Nasdaq Listing Rule 5550(b)(1). Nasdaq will continue to monitor the Company to ensure its ongoing compliance with the Minimum Stockholders’ Equity Requirement, so if at the time of the filing of the Company’s next periodic financial statements the Company does not evidence compliance with the Minimum Stockholders’ Equity Requirement, the Company may be subject to delisting.

If our Common Stock is delisted from Nasdaq, our ability to raise capital through public offerings of our securities and to finance our operations could be adversely affected. We also believe that delisting would likely result in decreased liquidity and/or increased volatility in our Common Stock and could harm our business and future prospects. In addition, we believe that, if our Common Stock is delisted, our stockholders would likely find it more difficult to obtain accurate quotations as to the price of our Common Stock and it may be more difficult for stockholders to buy or sell our Common Stock at competitive market prices, or at all.

In the future, if we fail to maintain such minimum requirements and a final determination is made by Nasdaq that our Common Stock must be delisted, the liquidity of our Common Stock would be adversely affected and the market price of our Common Stock could decrease. In addition, if delisted, we would no longer be subject to Nasdaq rules, including rules requiring us to have a certain number of independent directors and to meet other corporate governance standards. Our failure to be listed on Nasdaq or another established securities market would have a material adverse effect on the value of your investment in us.

USE OF PROCEEDS

All of the Shares offered by the Selling Stockholders pursuant to this prospectus will be sold by the Selling Stockholders for their respective accounts. We will not receive any proceeds from any such sales.

A portion of the Shares covered by this prospectus are issuable upon exercise of the Common Stock Warrants and the Pre-Funded Warrants issued to the Selling Stockholders. The initial exercise price of the outstanding Common Stock Warrants is \$2.043 per share. The exercise price and number of shares of Common Stock issuable upon exercise of the Common Stock Warrants may be adjusted in certain circumstances, including stock splits or dividends, mergers, or reclassifications or similar events. Upon any cash exercise of outstanding Common Stock Warrants, the applicable Selling Stockholders will pay us the exercise price. To the extent we receive proceeds from the cash exercise of outstanding Common Stock Warrants, we intend to use the proceeds for working capital and for other general corporate purposes. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes in the event any of the Common Stock Warrants are exercised for cash.

We may also receive up to \$20,000,000 aggregate gross proceeds under the Common Shares Purchase Agreement from any sales we make to the Facility Investors pursuant to the Common Shares Purchase Agreement. The net proceeds from sales, if any, under the Common Shares Purchase Agreement, will depend on the frequency and prices at which we sell our Common Stock to the Facility Investor after the date of this prospectus. We intend to use the proceeds from the sale of shares of Common Stock under the Common Shares Purchase Agreement for working capital and for other general corporate purposes. See the section titled “The Committed Equity Facility” in this prospectus for more information.

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

THE COMMITTED EQUITY FACILITY

On May 14, 2025, we entered into the Common Shares Purchase Agreement with 5NL and Bristol establishing the Committed Equity Facility. Pursuant to and subject to the conditions set forth in the Common Shares Purchase Agreement, beginning after the date of initial satisfaction of all such conditions (the “Commencement Date”), we have the right from time to time at our option to direct the Facility Investors to purchase our shares of Common Stock, up to a maximum aggregate purchase price of \$20.0 million. Sales of our shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement, and the timing of any sales, will be determined by us from time to time in our sole discretion and will depend on a variety of factors, including, among other things, market conditions, the trading price of our Common Stock and determinations by us regarding the use of proceeds from any sale of such Common Stock. The net proceeds from any sales under the Committed Equity Facility will depend on the frequency with, and prices at, which the shares of Common Stock are sold to the Facility Investors. To the extent we sell shares under the Common Shares Purchase Agreement, we currently plan to use any proceeds therefrom for working capital and general corporate purposes.

In accordance with our obligations under the Common Shares Purchase Agreement, we have filed the registration statement of which this prospectus forms a part in order to register the resale by the Facility Investors of up to 25,000,000 shares of Common Stock. In consideration for the Facility Investors’ execution and delivery of the Common Shares Purchase Agreement, we paid the upfront commitment fee to each of the Facility Investors in the form of Pre-Funded Warrants to purchase up to 150,000 shares Common Stock each, with an exercise price of \$0.001 per share.

Under applicable Nasdaq rules, unless and until we obtain prior shareholder approval we cannot issue shares of Common Stock to the Facility Investors that would exceed the Exchange Cap (as defined below). In addition, neither Facility Investor is obligated to buy any shares of Common Stock under the Common Shares Purchase Agreement if such shares, when aggregated with all other shares of Common Stock then beneficially owned by such Facility Investors and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in such Facility Investor beneficially owning shares of Common Stock in excess of either 4.99% or 9.99%, as applicable, of our outstanding shares of Common Stock (the “Beneficial Ownership Cap”).

The Common Shares Purchase Agreement contains customary registration rights, representations, warranties, conditions and indemnification obligations by each party. The representations, warranties and covenants contained in the Common Shares Purchase Agreement were made only for purposes of the Common Shares Purchase Agreement and as of specific dates, were solely for the benefit of the parties to such agreements and are subject to certain important limitations.

VWAP Purchase of shares of Common Stock Under the Common Shares Purchase Agreement

From and after the Commencement Date, we will have the right, but not the obligation, from time to time at our sole discretion, until the first day of the month next following the 36-month period from the Commencement Date, to direct the Facility Investors to purchase up to a specified maximum amount of shares of Common Stock (each such purchase, a “VWAP Purchase”) by delivering written notice to the Facility Investors (such notice, a “VWAP Purchase Notice”) on any trading day, so long as all shares of Common Stock subject to all prior VWAP Purchases by the Facility Investors have previously been delivered to the Facility Investors.

The maximum number of shares of Common Stock that the Facility Investors are required to purchase in any single VWAP Purchase under the Common Shares Purchase Agreement is equal to the least of:

- a number of shares of Common Stock which, when aggregated with all other shares of Common Stock then beneficially owned by such Facility Investor and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in such Facility Investor beneficially owning shares of Common Stock equal to (but not exceeding) the Beneficial Ownership Cap;
- the total volume of shares of Common Stock as reported by Bloomberg through its “AQR” function during the applicable period (subject to adjustment in the case that the price of our Common Stock falls below a specified threshold price) multiplied by (ii) the lesser of (A) the percentage of the volume of the shares of Common Stock that we direct the Facility Investors to purchase and (B) 15% of the volume of the shares of Common Stock (unless we and the Facility Investors expressly agree that such percentage shall exceed 15%) (the amount set forth in this bullet, the “VWAP Purchase Share Request”); and

- the number of shares of Common Stock set forth in any VWAP Purchase Notice, representing the Company's good faith estimate of the number of shares of Common Stock equivalent to the VWAP Purchase Share Request during the applicable period on the date on which such shares of Common Stock are delivered to the Facility Investors under the Common Shares Purchase Agreement (the "VWAP Purchase Date").

The per share purchase price for the shares of Common Stock that we elect to sell to the Facility Investors in a VWAP Purchase pursuant to the Common Shares Purchase Agreement, if any (the "VWAP Purchase Price") will be equal to ninety-three percent (93%) of the lesser of the (i) lowest sale price on the VWAP Purchase Date and (ii) the VWAP over the applicable VWAP Purchase Period on such VWAP Purchase Date for such VWAP Purchase. Notwithstanding the foregoing, if the price of Common Stock falls below a threshold price determined by us (which shall be no lower than 90% of the closing price of the shares of Common Stock as of the prior business day but not less than \$1.00 (the "Threshold Price")), the VWAP Purchase Price shall be calculated using the VWAP for the shares of Common Stock during the portion of the applicable trading day during for which the price is not below the Threshold Price, and, as applicable, using the Block (as defined below) with the lowest price that is not below the Threshold Price. "Block" means any trade on in excess of 10,000 shares of Common Stock on a single trading day to a single purchaser, as reported by Bloomberg through its "AQR" function.

We define "VWAP" as, for the shares of Common Stock for a specified period, the dollar volume-weighted average price for the shares of Common Stock, as reported by Bloomberg through its "AQR" function, with all such determinations being appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during such period. There is no upper limit on the price per share that the Facility Investors could be obligated to pay for shares of Common Stock we elect to sell to the Facility Investors in any VWAP Purchase under the Common Shares Purchase Agreement.

At or prior to 5:30 p.m., New York City time, on the applicable VWAP Purchase Date, the Facility Investors will provide us with a written confirmation for such VWAP Purchase setting forth the applicable VWAP Purchase Price per share to be paid by the Facility Investors and the total aggregate VWAP Purchase Price to be paid by the Facility Investors for the total number of shares of Common Stock purchased by the Facility Investors in such VWAP Purchase.

The payment for, against delivery of, shares of Common Stock purchased by the Facility Investors in a VWAP Purchase under the Common Shares Purchase Agreement is required to be fully settled by 5:00 p.m., New York City time, on the trading day immediately following the applicable date of such VWAP Purchase Date, as set forth in the Common Shares Purchase Agreement.

Conditions Precedent to Commencement and Each VWAP Purchase

The Facility Investors' obligation to accept VWAP Purchase Notices that are timely delivered by us under the Common Shares Purchase Agreement and to purchase our shares of Common Stock in VWAP Purchases under the Common Shares Purchase Agreement, are subject to (i) the initial satisfaction, at the Commencement Date, and (ii) the satisfaction, at each time we deliver a VWAP Purchase Notice on the applicable date of VWAP Purchase after the Commencement Date (the "VWAP Purchase Commencement Time"), of the conditions precedent thereto set forth in the Common Shares Purchase Agreement, which conditions include, among others, the following:

- the accuracy in all material respects of the representations and warranties of the Company and the Facility Investors included in the Common Shares Purchase Agreement;
- the Company having performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Common Shares Purchase Agreement to be performed, satisfied or complied with by the Company;

- the registration statement that includes this prospectus (and any one or more additional registration statements filed with the SEC that include shares of Common Stock that may be issued and sold by the Company to the Facility Investors under the Common Shares Purchase Agreement) having been declared effective under the Securities Act by the SEC and not being subject to any stop order, and the Facility Investors being able to utilize this prospectus (and the prospectus included in any one or more additional registration statements filed with the SEC under the Common Shares Purchase Agreement) to resell all of the shares of Common Stock included in this prospectus (and included in any such additional prospectuses);
- the absence of any material misstatement or omission in the registration statement that includes this prospectus (or in any one or more additional registration statements filed with the SEC that include shares of Common Stock that may be issued and sold by the Company to the Facility Investors under the Common Shares Purchase Agreement);
- this prospectus and all reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the SEC pursuant to the reporting requirements of the Exchange Act having been filed with the SEC;
- all of the shares of Common Stock that have been registered with the SEC for resale having been approved for listing or quotation on Nasdaq (or if the shares of Common Stock are not then listed on Nasdaq, on any Principal Market), subject only to notice of issuance;
- no condition, occurrence, state of facts or event constituting a Material Adverse Effect (as such term is defined in the Common Shares Purchase Agreement) shall have occurred and be continuing;
- customary bankruptcy-related conditions; and
- the receipt by the Facility Investors of customary legal opinions, auditor comfort letters and bring-down legal opinions, and auditor comfort letters as required under the Common Shares Purchase Agreement.

Termination of the Common Shares Purchase Agreement

Unless earlier terminated as provided in the Common Shares Purchase Agreement, the Common Shares Purchase Agreement will terminate automatically on the earliest to occur of:

- the first day of the month next following the 36-month anniversary of the Commencement Date;
- the date on which the Facility Investors shall have purchased shares of Common Stock under the Common Shares Purchase Agreement for an aggregate gross purchase price equal to \$20.0 million;
- the date on which the shares of Common Stock shall have failed to be listed or quoted on Nasdaq or any other Principal Market;
- the 30th trading day following the date on which the Company commences a voluntary bankruptcy case or any third party commences a bankruptcy proceeding against the Company; and

- the date on which a custodian is appointed for the Company in a bankruptcy proceeding for all or substantially all of its property, or the Company makes a general assignment for the benefit of its creditors.

We have the right to terminate the Common Shares Purchase Agreement at any time after Commencement, at no cost or penalty, upon 10 trading days' prior written notice to the Facility Investors. We and the Facility Investors may also terminate the Common Shares Purchase Agreement at any time by mutual written consent. The Facility Investors also have the right to terminate the Common Shares Purchase Agreement upon 10 trading days' prior written notice to us, but only upon the occurrence of certain customary events. No termination of the Common Shares Purchase Agreement by us or by the Facility Investors will become effective prior to the second trading day immediately following the date on which any pending (or not fully settled) VWAP Purchase has been fully settled in accordance with the terms and conditions of the Common Shares Purchase Agreement, and will not affect any of our respective rights and obligations under the Common Shares Purchase Agreement with respect to any pending (or not fully settled) VWAP Purchase, and both we and the Facility Investors have agreed to complete our respective obligations with respect to any such pending (or not fully settled) VWAP Purchase under the Common Shares Purchase Agreement. Furthermore, no termination of the Common Shares Purchase Agreement will affect the registration rights provisions contained within the Common Shares Purchase Agreement, which will survive any termination of the Common Shares Purchase Agreement.

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No Short-Selling or Hedging by the Facility Investors

Each of the Facility Investors has agreed that neither it nor any of its officers, nor any entity managed or controlled by it, will engage in or effect, directly or indirectly, for its own principal account or for the principal account of any of its officers or any entity managed or controlled by it, any (i) "short sale" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the shares of Common Stock or (ii) hedging transaction, which established a net short position with respect to the shares of Common Stock, during the term of the Common Shares Purchase Agreement.

Prohibition on Variable Rate Transactions

Subject to specified exceptions included in the Common Shares Purchase Agreement, during the term of the Common Shares Purchase Agreement, while any VWAP Purchase Notice has been delivered but the related delivery and payment of such shares of Common Stock has not yet been completed, we are limited in our ability to enter into specified "Variable Rate Transactions" (as such term is defined in the Common Shares Purchase Agreement) other than another "equity line of credit," which is prohibited. Such transactions include, among others, the issuance of convertible securities with a conversion or exercise price that is based upon or varies with the trading price of shares of our shares of Common Stock after the date of issuance.

Effect of Sales of Shares of Common Stock under the Common Shares Purchase Agreement on Our Shareholders

The shares of Common Stock being registered for resale in this offering may be issued and sold by us to the Facility Investors from time to time at our discretion over a period until the first day of the month next following the 36-month anniversary of the Commencement Date. The resale by the Facility Investors of a significant amount of shares registered for resale in this offering at any given time, or the perception that these sales may occur, could cause the market price of our shares of Common Stock to decline and to be highly volatile. Sales of our shares of Common Stock, if any, to the Facility Investors under the Common Shares Purchase Agreement will be determined by us in our sole discretion and will depend upon market conditions and other factors. We may ultimately decide to sell to the Facility Investors all, some or none of the shares of Common Stock that may be available for us to sell to the Facility Investors pursuant to the Common Shares Purchase Agreement. If and when we elect to sell shares of Common Stock to the Facility Investors pursuant to the Common Shares Purchase Agreement, after the Facility Investors have acquired such shares, the Facility Investors may resell all, some or none of such shares of Common Stock at any time or from time to time in its discretion and at different prices. As a result, investors who purchase shares of Common Stock from the Facility Investors in this offering at different times will likely pay different prices for those shares of Common Stock, and so may experience different levels of dilution and in some cases substantial dilution and different outcomes in their investment results. See "Risk Factors-Risks Related to the Committed Equity Financing-Investors who buy shares of Common Stock from the Facility Investors at different times will likely pay different prices."

Investors may experience a decline in the value of the shares of Common Stock they purchase from the Facility Investors in this offering as a result of future sales made by us to the Facility Investors at prices lower than the prices such investors paid for their shares in this offering. In addition, if we sell a substantial number of shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement, or if investors expect that we will do so, the actual sales of shares of Common Stock or the mere existence of our arrangement with the Facility Investors may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales.

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Because the purchase price per share to be paid by the Facility Investors for the shares of Common Stock that we may elect to sell to the Facility Investors under the Common Shares Purchase Agreement, if any, will fluctuate based on the market prices of our Common Stock during the applicable period for each VWAP Purchase made pursuant to the Common Shares Purchase Agreement, if any, as of the date of this prospectus it is not possible for us to predict the number of shares of Common Stock that we will sell to the Facility Investors under the Common Shares Purchase Agreement, the actual purchase price per share to be paid by the Facility Investors for those shares of Common Stock, or the actual gross proceeds to be raised by us from those sales, if any. As of May 30, 2025, there were 3,147,995 shares of Common Stock outstanding. Although the Common Shares Purchase Agreement provides that we may sell up to an aggregate gross purchase price of \$20.0 million of our shares of Common Stock to the Facility Investors, only 25,000,000 of our shares of Common Stock are being registered for resale under the registration statement that includes this prospectus.

If all of the 25,000,000 shares of Common Stock offered for resale by the Facility Investors under this prospectus were issued and outstanding as of May 30, 2025, such shares of Common Stock would represent approximately 89% of the total number of our shares of Common Stock outstanding.

If we decide to issue and sell to the Facility Investors under the Common Shares Purchase Agreement more than the 25,000,000 shares of Common Stock that are being registered for resale under this prospectus, which we may elect to do, at our sole discretion, up to aggregate gross proceeds under the Committed Equity Facility of \$20.0 million, in order to receive additional proceeds we must first file with the SEC one or more additional registration statements to register the resale under the Securities Act by the Facility Investors of any such additional shares of Common Stock we wish to sell from time to time under the Common Shares Purchase Agreement, which the SEC must declare effective, in each case before we may elect to sell any such additional shares of Common Stock to the Facility Investors under the Common Shares Purchase Agreement. The number of shares of Common Stock ultimately offered for sale by the Facility Investors for resale under this prospectus in order to receive or under any future prospectus is dependent upon the number of shares of Common Stock, if any, we ultimately sell to the Facility Investors under the Common Shares Purchase Agreement. Further, if and when we elect to sell shares of Common Stock to the Facility Investors pursuant to the Common Shares Purchase Agreement, after the Facility Investors has acquired such shares, the Facility Investors may resell all, some or none of such shares of Common Stock at any time or from time to time in its discretion and at different prices.

The issuance of shares of Common Stock to the Facility Investors pursuant to the Common Shares Purchase Agreement will not affect the rights or privileges of our existing shareholders, except that the economic and voting interests of each of our existing shareholders will be diluted. Although the number of shares of Common Stock that our existing shareholders own will not decrease, the shares of Common Stock owned by our existing shareholders will represent a smaller percentage of our total outstanding Common Stock after any such issuance.

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The following table sets forth information at varying purchase prices assuming we sell to the Facility Investors under the Common Shares Purchase Agreement the lesser of (i) the maximum number of CEF Shares offered by this prospectus and (ii) the maximum number of CEF Shares that we may sell to the Facility Investors that results in the sale of shares of Common Stock with an aggregate purchase price of \$20.0 million:

| Assumed Trading Price of Common Stock | Number of Shares Sold Under the Facility(1) | Total Shares of Common Stock Issued to the Facility Investors | Percentage of Outstanding shares of Common Stock After Giving Effect to Issuances to the Facility Investors(2) | Purchase Price for Common Stock Sold Under the Facility(3) |
|---------------------------------------|---|---|--|--|
| \$ 3.04(4) | 7,074,137 | 7,074,137 | 69% | \$ 20 million |
| \$ 0.86 | 25,000,000 | 25,000,000 | 89% | \$ 20 million |
| \$ 1.08 | 20,000,000 | 20,000,000 | 86% | \$ 20 million |
| \$ 2.15 | 10,000,000 | 10,000,000 | 76% | \$ 20 million |
| \$ 4.30 | 5,000,000 | 5,000,000 | 61% | \$ 20 million |

- (1) The number of CEF Shares offered by this prospectus may not cover all Common Stock we ultimately may sell to the Facility Investors under the Common Shares Purchase Agreement, depending on the purchase price per share of such sales. We have included in this column only those CEF Shares being offered for resale by the Facility Investors under this prospectus, without regard to the Beneficial Ownership Cap or the Exchange Cap. The assumed average purchase prices are solely for illustrative purposes and are not intended to be estimates or predictions of the future performance of our shares of Common Stock.
- (2) The denominator used to calculate the percentages in this column is based on 3,147,995 shares of Common Stock outstanding as of May 30, 2025, adjusted to include the shares of Common Stock issued and sold to the Facility Investors under the Common Shares Purchase Agreement.
- (3) Purchase prices represent the illustrative aggregate purchase price to be received from the sale of all of the shares of Common Stock issued and sold to the Facility Investors under the Committed Equity Facility as set forth in the second column, multiplied by the VWAP Purchase Price, assuming for illustrative purposes that the VWAP Purchase Price is equal to 93% of the assumed trading price of shares of Common Stock listed in the first column.
- (4) Represents the closing price of our Common Stock on Nasdaq on June 10, 2025.

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MARKET INFORMATION FOR SECURITIES AND DIVIDEND POLICY

Market Information

Our Common Stock is currently listed on the Nasdaq Capital Market under the symbol “GTBP.” Until May 2009, our Common Stock was traded on the OTC Bulletin Board (“OTCBB”) under the symbol “OXIS.” From May 20, 2009 until March 11, 2010, our Common Stock was traded on Pink OTC Markets Inc. trading platform under the symbol “OXIS.” From January 2015 to August 2017, our Common Stock was quoted on the OTCQB under the “OXIS” trading symbol. From August 2017 to February 11, 2021, our Common Stock was quoted on the OTCQB under the “GTBP” trading symbol.

As of May 30, 2025, there were 3,147,995 shares of our Common Stock outstanding, held of record by 39 stockholders.

Dividend Policy

We have not paid any dividends on our Common Stock to date and do not anticipate that we will pay dividends in the foreseeable future. Any payment of cash dividends on our Common Stock in the future will be dependent upon the amount of funds legally available, our earnings, if any, our financial condition, our anticipated capital requirements and other factors that the Board of Directors may think are relevant. However, we currently intend for the foreseeable future to follow a policy of retaining all of our earnings, if any, to finance the development and expansion of our business and, therefore, do not expect to pay any dividends on our Common Stock in the foreseeable future.

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DESCRIPTION OF CAPITAL STOCK

The following summary of the rights of our Capital Stock is not complete and is subject to and qualified in its entirety by reference to our Charter and Bylaws, copies of which are filed as exhibits to our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on April 14, 2025, the Certificates of Designations and forms of securities, copies of which are filed as exhibits to the registration statement of which this prospectus forms a part, which are incorporated by reference herein.

The following summary describes the material terms of our Capital Stock. The summary is qualified in its entirety by reference to our Charter and our Bylaws.

Authorized Shares

Our authorized shares consist of 250,000,000 shares of Common Stock and 15,000,000 shares of preferred stock, \$0.001 par value per share (the “Preferred Stock”). Our Common Stock is registered under Section 12(b) of the Exchange Act and is listed on the Nasdaq under the trading symbol “GTBP.”

On February 2, 2024, the Company effectuated a reverse stock split of its Common Stock, par value \$0.001 per share, at a ratio of 1 for 30 (the “Reverse Stock Split”). Common Stock began trading on a Reverse Stock Split-adjusted basis on Nasdaq on February 5, 2024 under the existing trading symbol “GTBP.”

As a result of the reverse stock split, every 30 shares of issued and outstanding Common Stock were automatically combined into one issued and outstanding share of Common Stock, without any change in the par value per share. No fractional shares will be issued in connection with the Reverse Stock Split. Stockholders who otherwise would be entitled to receive fractional shares of Common Stock will be entitled to receive their pro-rata portion of the net proceeds obtained from the aggregation and sale by the exchange agent of the fractional shares resulting from the Reverse Stock Split (reduced by any customary brokerage fees, commission and other expenses). The Reverse Stock Split reduced the number of shares of Common Stock outstanding on the effective date of the Reverse Stock Split from 41,419,000 shares to 1,380,633 shares, subject to minor adjustments due to the treatment of fractional shares. The number of authorized shares of Common Stock remains unchanged at 250,000,000 shares.

Proportionate adjustments have been made to the per share exercise price and the number of shares of Common Stock that may be purchased upon exercise of outstanding stock options and warrants for Common Stock, and to the number of shares of Common Stock reserved for future issuance pursuant to the GT Biopharma, Inc. 2022 Omnibus Incentive Plan.

Common Stock

Holders of our Common Stock are entitled to one vote for each share of Common Stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our Common Stock are entitled to receive dividends ratably, if any, as may be declared by the Board out of legally available funds, subject to any preferential dividend rights of any Preferred Stock then outstanding. In the event of our dissolution, liquidation or winding up, holders of our Common Stock are entitled to share ratably in our net assets legally available after the payment of all of our debts and other liabilities, subject to the liquidation preferences of any Preferred Stock then outstanding. Holders of our Common Stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Preferred Stock currently outstanding or that we may designate and issue in the future. All outstanding shares of our Common Stock are fully paid and non-assessable. Except as described below in “*Anti-Takeover Provisions Under Our Charter and Bylaws and Delaware Law*,” holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business, and a vote of the majority of the voting power represented at such meeting at which a quorum is generally required to take action under our Charter and Bylaws.

Preferred Stock

Our Board is authorized, without action by the stockholders, to designate and issue up to 15,000,000 shares of Preferred Stock in one or more series. In the past the Board has designated series lettered A through L and issued shares in those series (other than Series K). As of the date of this prospectus, only preferred shares in the series designated C and L have shares issued and outstanding. Our Board can fix or alter the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting a class or series. The issuance of Preferred Stock could, under certain circumstances, result in one or more of the following adverse effects:

- decreasing the market price of our Common Stock;
- restricting dividends on our Common Stock;
- diluting the voting power of our Common Stock;
- impairing the liquidation rights of our Common Stock; or
- delaying or preventing a change in control of us without further action by our shareholders.

Our Board will make any determination to issue such shares based on its judgment as to our best interests and the best interests of our stockholders.

Series C Preferred Stock

For a discussion of the terms of our Series C Preferred Stock, see Note 6 to our audited financial statements, *Stockholders' Equity*, incorporated in this document by reference.

Series L Preferred Stock

On May 12, 2025, in connection with the Private Placement, we filed a Certificate of Designation of Preferences, Rights and Limitations of Series L 10% Convertible Preferred Stock (the “Certificate of Designations”) to our Certificate of Incorporation with the Secretary of State of the State of Delaware, which established the designations, preferences, powers and rights of the Series L Preferred Stock. On May 22, 2025, we filed with the Secretary of State of the State of Delaware a Certificate of Increase (the “Certificate of Increase”) increasing the shares of Series L Preferred Stock as designated in the Certificate of Designations from 28,056 shares to 30,630 shares.

In connection with the Private Placement, we issued an aggregate 6,612 shares of Series L Preferred Stock, or the Preferred Shares, which have a stated value of \$1,000, subject to increase as described in the Certificate of Designations, per share and are initially convertible into 3,235,978 shares of Common Stock at the election of the holders, subject to (i) a restriction preventing the holders and their affiliates from beneficially owning more than 19.99% of our outstanding shares of Common Stock (the “Beneficial Ownership Limitation”), (ii) a restriction prohibiting the conversion of the Preferred Shares to the extent that the aggregate number of shares of Common Stock issued pursuant to the Securities Purchase Agreement and Common Shares Purchase Agreement, including through conversion of any Preferred Shares, exercise of any Warrants or issuances of Common Stock pursuant to the Common Shares Purchase Agreement, exceeds 507,025 (the “Exchange Cap”), and (iii) a contractually stipulated 4.99% or 9.99% blocker provision. The foregoing limitations described in clause (i) and (ii) may be removed upon receipt of stockholder approval, and, as required by the Securities Purchase Agreement, we have included a proposal to be voted on at our Annual Meeting, to be held on July 24, 2025, seeking stockholder approval of the removal of such limitations.

General

The Series L Preferred Stock has the powers, designations, preferences and other rights as are set forth in the Certificate of Designations.

The Series L Preferred Stock ranks senior to all shares of capital stock of the Company, as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company.

Dividends

The Series L Preferred Stock bears dividends at a per annum rate of 10%, and 12% per annum thereafter (subject to increase upon certain events as described in the Certificate of Designations), payable quarterly on January 1, April 1, July 1 and October 1, beginning on the first such date after the Original Issue Date and on each Conversion Date (each as defined in the Certificate of Designations) in cash or in duly authorized, validly issued, fully paid and non-assessable shares of Common Stock, or a combination thereof (the dollar amount to be paid in shares of Common Stock, the “Dividend Share Amount”). The form of dividend payments to each holder will be determined in the following order of priority: (i) if funds are legally available for the payment of dividends and the Equity Conditions (as defined in the Certificate of Designations) have not been met during the 10 consecutive trading days immediately prior to the applicable dividend payment date (the “Dividend Notice Period”), in cash only, (ii) if funds are legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, at the sole election of the Company, in cash or shares of Common Stock which shall be valued at the Dividend Conversion Rate (as defined in the Certificate of Designations), (iii) if funds are not legally available for the payment of dividends and the Equity Conditions have been met during the Dividend Notice Period, in shares of Common Stock which shall be valued at the Dividend Conversion Rate, (iv) if funds are not legally available for the payment of dividends and the Equity Condition relating to an effective Conversion Shares Registration Statement (as defined in the Certificate of Designations) has been waived by such holder (provided that the other Equity Conditions have been met during the Dividend Notice Period), as to such holder only, in unregistered shares of Common Stock which shall be valued at the Dividend Conversion Rate, and (v) if funds are not legally available for the payment of dividends

and the Equity Conditions have not been met during the Dividend Notice Period, then, at the election of such Holder, such dividends shall accrue to the next Dividend Payment Date or shall be accreted to, and increase, the outstanding Stated Value (as defined in the Certificate of Designations).

Conversion

Each share of Series L Preferred Stock will be convertible, at any time and from time to time from and after the Original Issue Date at the option of the holder thereof, into that number of shares of Common Stock (subject to the Beneficial Ownership Limitation and the Exchange Cap) determined by dividing the Stated Value of such share of Series L Preferred Stock by the Conversion Price (as defined below). The Conversion Price for the Series L Preferred Stock will equal \$2.043, subject to adjustment as described in the Certificate of Designations (the “Conversion Price”); provided that upon each exercise of a Greenshoe Right pursuant to the Securities Purchase Agreement in the event that 90% of the arithmetic average of the five lowest trading prices during the 10 trading days immediately prior to such exercise of a Greenshoe Right is less than the then Conversion Price (each such price, the “Adjusted Price”), the Conversion Price shall thereafter be reduced to equal the Adjusted Price, subject to further adjustment hereunder, provided further that the reduced Adjusted Price shall in all events be subject to a floor of \$0.454 (the “Floor Price”) (subject to adjustment for reverse and forward stock splits, recapitalizations and similar transactions following the Original Issue Date and provided that if the Adjusted Price is less than the Floor Price, the Adjusted Price will equal the Floor Price).

Voting Rights

The shares of Series L Preferred Stock have no voting rights. However, as long as any shares of Series L Preferred Stock are outstanding, the Company may not, without the affirmative vote of the holders of a majority of the then outstanding shares of Series L Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series L Preferred Stock or alter or amend the Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Liquidation (as defined below) senior to, or otherwise pari passu with, the Series L Preferred Stock, (c) amend its Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of the holders, (d) increase the number of authorized shares of Series L Preferred Stock, or (e) enter into any agreement with respect to any of the foregoing.

Liquidation

Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “Liquidation”), the holders will be entitled to receive out of the assets, whether capital or surplus, of the Company an amount equal to the Stated Value, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under the Certificate of Designations, for each share of Series L Preferred Stock before any distribution or payment shall be made to the holders of any securities junior to the Series L Preferred Stock, and if the assets of the Company are insufficient to pay in full such amounts, then the entire assets to be distributed to the holders will be ratably distributed among the holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full.

Warrants

2023 and 2024 Warrants

Common warrants for the purchase of up to 740,000 shares of Common Stock (the “2024 Common Warrants”) were issued pursuant to a securities purchase agreement between us and certain institutional investors, dated as of May 21, 2024 (the “2024 Purchase Agreement”) in registered form and entitle the registered holder to purchase one share of our Common Stock at a price equal to \$4.35 per share, subject to adjustment as discussed below, terminating at 5:00 p.m., New York City time, on the fifth anniversary of the date of issuance. Also pursuant to the 2024 Purchase Agreement, we had an additional number of outstanding placement agent warrants for the purchase of up to 88,800 shares of Common Stock at an exercise price of \$5.4375. (the “2024 Placement Agent Warrants,” and together with the 2024 Common Warrants, the “2024 Warrants”).

Common warrants to purchase up to an aggregate of 216,667 shares of Common Stock (the “2023 Common Warrants”), pre-funded warrants to purchase up to 96,667 shares of Common Stock (the “2023 Pre-Funded Warrants”), and placement agent warrants to purchase up to 13,000 of Common Stock (the “2023 Placement Agents Warrants,” and together with the 2023 Common Warrants and 2023 Pre-Funded Warrants, the “2023 Warrants”) were issued pursuant to a purchase agreement dated December 30, 2022. The 2023 Common Warrants have an exercise price equal to \$30.00 per share, are exercisable commencing six months following issuance, and have a term of exercise equal to five years following the initial issuance date. The 2023 Pre-Funded Warrants had an exercise price of \$0.003 per share, are immediately exercisable and could be exercised at any time after their original issuance until such 2023 Pre-Funded Warrants were exercised in full. The 2023 Placement Agents Warrants have an exercise price equal to \$37.50 per share, are exercisable commencing six months following issuance, and have a term of exercise equal to five years following the initial issuance date. The 2023 Shares and 2023 Common Warrants were sold at an offering price of \$30.00 per share and accompanying the 2023 Common Warrant and the 2023 Pre-Funded Warrants and the 2023 Common Warrants were sold at an offering price of \$29.997 per 2023 Pre-Funded Warrant and accompanying 2023 Common Warrant.

Holders of 2023 Warrants and 2024 Warrants (together, the “2023 and 2024 Warrants”) may exercise such warrants on a “cashless” basis if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such Warrant. In such event, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of Common Stock determined according to a formula set forth in the 2023 and 2024 Warrants. The exercise price and number of shares of Common Stock issuable upon exercise of the 2023 and 2024 Warrants may be adjusted in certain circumstances, including in the event of a stock dividend, extraordinary dividend on or recapitalization, reorganization, merger or consolidation. The 2023 and 2024 Warrants may be exercised by delivery of a notice of exercise and the aggregate exercise price (assuming no cashless exercise has been elected if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such 2023 and 2024 Warrant) to us as specified in such 2023 and 2024 Warrants. Holders of 2023 and 2024 Warrants do not have the rights or privileges of holders of Common Stock and any voting rights until they exercise their warrants and receive shares of Common Stock. After the issuance of shares of Common Stock upon exercise of the 2023 and 2024 Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Common Stock and Vesting Warrants

Pursuant to the Securities Purchase Agreement, each Private Placement Investor was issued (i) a Common Stock Warrant, to purchase up to 3,235,978 shares of Common Stock equal to 100% of the shares of Common Stock issuable upon conversion of the shares of the Series L Preferred Shares issued to such Private Placement Investor and (ii) a Vesting Warrant (the exercisability of which shall vest ratably from time to time in proportion to the Private Placement Investor’s (or its permitted assigns’) exercise of such Private Placement Investor’s Greenshoe Rights pursuant to Section 2.4 of the Securities Purchase Agreement), to purchase up to 11,756,406 shares of Common Stock equal to the number of Greenshoe Conversion Shares (as defined in the Securities Purchase Agreement) applicable to such Private Placement Investor, in accordance with the Securities Purchase Agreement. The Common Stock Warrants have an initial exercise price of \$2.043 per share, and are exercisable, subject to the Beneficial Ownership Limitation and the Exchange Cap, immediately upon issuance and have a term of exercise equal to five years. With respect to the Vesting Warrants, the exercisability shall vest ratably from time to time in proportion to each Private Placement Investor’s (or its permitted assigns’) exercise of Greenshoe Rights, each to purchase a number of shares of Common Stock equal to the number of Greenshoe Conversion Shares. The Vesting Warrants have an initial exercise price of \$2.043 per share, and are exercisable subject to certain vesting limitations and the Beneficial Ownership Limitation and the Exchange Cap, and have a term of exercise equal to five years from the date that the applicable warrant shares vest.

Holders of the Warrants may exercise such warrants on a “cashless” basis if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such Warrant. In such event, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of Common Stock determined according to a formula set forth in the Warrants. The exercise price and number of shares of Common Stock issuable upon exercise of the Warrants may be adjusted in certain circumstances. The Warrants may be exercised by delivery of a notice of exercise and the aggregate exercise price (assuming no cashless exercise has been elected if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such Warrant) to us as specified in such Warrants. Holders of the Warrants do not have the rights or privileges of holders of Common Stock and any voting rights until they exercise their Warrants and receive shares of Common Stock. After the issuance of shares of Common Stock upon exercise of the Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Pre-Funded Warrants

In connection with the execution of the Common Shares Purchase Agreement, the Company issued to 5NL and Bristol the Pre-Funded Warrants to purchase an aggregate 300,000 shares of Common Stock as consideration for their irrevocable commitment to purchase the shares of Common Stock upon the terms and subject to the satisfaction of the conditions set forth in the Purchase Agreement. The aggregate exercise price of the Pre-Funded Warrants, except for a nominal exercise price of \$0.001 per Warrant Share, were pre-funded to the Company on May 14, 2025.

Holders of the Pre-Funded Warrants may exercise such warrants on a “cashless” basis if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such Pre-Funded Warrant. In such event, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of Common Stock determined according to a formula set forth in the Pre-Funded Warrants. The exercise price and number of shares of Common Stock issuable upon exercise of the Pre-Funded Warrants may be adjusted in certain circumstances. The Pre-Funded Warrants may be exercised by delivery of a notice of exercise and the aggregate exercise price (assuming no cashless exercise has been elected if an effective registration statement is not available with respect to the offering of shares of Common Stock upon exercise of such Pre-Funded Warrant) to us as specified in such Pre-Funded Warrants. Holders of the Pre-Funded Warrants do not have the rights or privileges of holders of Common Stock and any voting rights until they exercise their Pre-Funded Warrants and receive shares of Common Stock. After the issuance of shares of Common Stock upon exercise of the Pre-Funded Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Anti-Takeover Provisions Under Our Charter and Bylaws and Delaware Law

Certain provisions of Delaware law, our Charter and our Bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, may have the effect of discouraging coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to first negotiate with our Board. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Charter

Undesignated Preferred Stock. Our Board has the ability to issue Preferred Stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our Company.

Special Meetings of Stockholders. Our bylaws provide that special meetings of our stockholders may be called only by our Chairman, President or a majority of the entire Board, thus prohibiting a stockholder from calling a special meeting. This provision might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Board Vacancies Filled Only by Majority of Directors. Vacancies and newly created seats on our Board may be filled only by a majority of the directors then in office. Only our Board may determine the number of directors on our board. The inability of stockholders to determine the number of directors or to fill vacancies or newly created seats on our Board makes it more difficult to change the composition of our Board, but these provisions promote a continuity of existing management.

No Cumulative Voting. The Delaware General Corporate Law (“DGCL”) provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our Charter provides otherwise. Our Charter and Bylaws do not expressly provide for cumulative voting.

Directors Removed Only by Special Meeting of Stockholders. A director can be removed only by the affirmative vote of a majority of the votes of the issued and outstanding stock entitled to vote for the election of directors of the corporation given at a special meeting of the stockholders called and held for this purpose.

Amendment of Charter Provisions. In order to amend certain of the above provisions in our Charter and our Bylaws, the Board is expressly authorized to adopt, alter or repeal the bylaws, subject to the rights of the stockholders entitled to vote. Stockholders can vote at any stockholder meeting and repeal, alter, or amend the bylaws by the affirmative vote of a majority of the stockholders entitled to vote in such meeting.

Delaware Anti-takeover Statute

We are subject to Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interest stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes mergers, asset sales and other transactions in which the interested stockholder receives or could receive a financial benefit on other than a *pro rata* basis with other stockholders. An “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation’s outstanding voting stock. This provision has an anti-takeover effect with respect to transactions not approved in advance by our Board, including discouraging takeover attempts that might result in a premium over the market price for the shares of our market price. With approval of our stockholders, we could amend our Charter in the future to avoid the restrictions imposed by this anti-takeover law.

The provisions of Delaware law and our Charter could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our Common Stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

Our transfer agent and registrar for our capital stock is Computershare. The transfer agent’s address is 8742 Lucent Blvd., Suite 225, Highland Ranch, CO 80129, and its telephone number is (303) 262-0600.

Existing Trading Markets

Our Common Stock is listed on Nasdaq under the trading symbol “GTBP.” The closing sale price of our Common Stock on Nasdaq on June 10, 2025, was \$3.04 per share.

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

SELLING STOCKHOLDERS

The Common Stock being offered by the Selling Stockholders are those previously issued to the Selling Stockholders, and those issuable to the Selling Stockholders or the Facility Investors, as applicable, upon (i) conversion of the Preferred Shares, (ii) exercise of the Common Stock Warrants, (iii) exercise of the Pre-Funded Warrants, and (iii) pursuant to the Common Shares Purchase Agreement. For additional information regarding the issuances of those Preferred Shares and the Common Stock Warrants, see “Private Placement of Shares of Preferred Stock and Warrants” above. For additional information regarding the issuances of those shares of Common Stock and the Pre-Funded Warrants pursuant to the Common Shares Purchase Agreement, see “The Committed Equity Facility” above. We are registering the shares of Common Stock in order to permit the Selling Stockholders to offer the Shares for resale from time to time. Except for the ownership of the Shares of capital stock and warrants, the Selling Stockholders have not had any material relationship with us within the past three years.

The table below lists the Selling Stockholders and other information regarding the beneficial ownership of the shares of Common Stock by each of the Selling Stockholders. The second column lists the number of shares of Common Stock beneficially owned by each Selling Stockholder, based on its ownership of the shares of capital stock and warrants, as of May 30, 2025, assuming conversion of the shares of the Preferred Shares and exercise of the Common Stock Warrants held by the Selling Stockholders on that date, without regard to any limitations on conversion or exercise.

The third column lists the shares of Common Stock being offered by this prospectus by the Selling Stockholders.

In accordance with the terms of the Registration Rights Agreement with the Private Placement Investors, this prospectus covers the resale of the sum of (i) the number of shares of Common Stock underlying the Preferred Shares issued to the Selling Stockholders in the “Private Placement of Shares of Preferred Stock and Warrants” described above, determined as if the outstanding Preferred Shares were converted in full, and (ii) the maximum number of shares of Common Stock issuable upon exercise of the related Common Stock Warrants, determined as if the outstanding Common Stock Warrants were exercised in full, determined as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the Registration Rights Agreement, without regard to any limitations on the conversion of the Preferred Shares or exercise of the Common Stock Warrants.

In addition, this prospectus covers the resale of the sum of (i) the number of shares of Common Stock underlying the Commitment Shares issued to 5NL and Bristol under the “Committed Equity Facility” described above, determined as if the outstanding Pre-Funded Warrants were exercised in full, and (ii) the CEF Shares. Because the purchase price to be paid by the Facility Investors for the CEF Shares, if any, that we may elect to sell to the Facility Investors in one or more VWAP Purchases from time to time under the Common Shares Purchase Agreement will be determined on the applicable purchase dates therefor, the actual number of shares of our Common Stock that we may sell to the Facility Investors under the Common Shares Purchase Agreement may be fewer than the number of CEF Shares being offered for resale under this prospectus.

The fourth column assumes the sale of all of the shares offered by the Selling Stockholders pursuant to this prospectus.

Under the terms of the shares of the Preferred Shares, the Common Stock Warrants, and the Common Shares Purchase Agreement, a Selling Stockholder may not convert any Preferred Shares or exercise any Common Stock Warrants or Pre-Funded Warrants, as applicable, and we may not issue any shares of Common Stock to the extent such conversion or exercise would cause such Selling Stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of Common Stock which would exceed 4.99% or 9.99%, as applicable, of our then outstanding Common Stock following such conversion, exercise or issuance, or the Beneficial Ownership Limitation or Exchange Cap, excluding for purposes of such determination shares of Common Stock issuable upon conversion of such Preferred Shares which have not been converted, exercise of such Common Stock Warrants or Pre-Funded Warrants which have not been exercised, and the issuance of CEF Shares that have not been issued. The number of shares in the second and fourth columns do not reflect these limitations. The Selling Stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

| Name of Selling Stockholder | Number of shares of Common Stock Owned Prior to Offering ⁽¹⁾ | | Maximum Number of shares of Common Stock to be Sold Pursuant to this Prospectus | Number of shares of Common Stock Owned After Offering ⁽²⁾ | |
|--|---|---------|---|--|---------|
| | Number | Percent | | Number | Percent |
| Bristol Investment Fund Ltd. ⁽³⁾ | 224,693 | 7.1% | 19,992,142 | 224,693 | 7.1% |
| Five Narrow Lane, L.P. ⁽⁴⁾ | 224,693 | 7.1% | 19,992,142 | 224,693 | 7.1% |
| The Hewlett Fund LP ⁽⁵⁾ | 9,769 | 0.3% | 2,447,380 | 9,769 | 0.3% |
| Boothbay Absolute Return Strategies, LP ⁽⁶⁾ | 7,815 | 0.2% | 1,957,904 | 7,815 | 0.2% |
| Kingsbrook Opportunities Master Fund LP ⁽⁷⁾ | 1,953 | 0.1% | 489,476 | 1,953 | 0.1% |
| Intracoastal Capital LLC ⁽⁸⁾ | 14,653 | 0.5% | 3,671,070 | 14,653 | 0.5% |
| Rainforest Partners LLC ⁽⁹⁾ | 9,769 | 0.3% | 2,447,380 | 9,769 | 0.3% |
| Robert Marzilli ⁽¹⁰⁾ | 200,000 | 6.4% | 2,447,380 | 200,000 | 6.4% |
| Nicholas R. Nikolov, MD Defined Benefit Plan ⁽¹¹⁾ | 3,907 | 0.1% | 978,952 | 3,907 | 0.1% |

- (1) The amount of shares of Common Stock that each Selling Stockholder could acquire within 60 days of May 30, 2025, in connection with the Private Placement and the Committed Equity Facility, as applicable, including by (i) converting Preferred Shares, (ii) exercising the Common Stock Warrants, and/or (iii) exercising the Pre-Funded Warrants, is subject to such Selling Stockholder’s contractually stipulated 4.99% or 9.99% blocker, as applicable, and pro-rata portion of the conversion limitations under the Beneficial Ownership Limitation and the Exchange Cap.

In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares of Common Stock beneficially owned prior to the offering all of the shares that the Facility Investors may be required to purchase under the Common Shares Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to conditions contained in the Common Shares Purchase Agreement, the satisfaction of which are entirely outside of the Facility Investors’ control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, the VWAP Purchases of our Common Stock under the Common Shares Purchase Agreement are subject to certain agreed upon maximum amount limitations set forth in the Common Shares Purchase Agreement, including the contractually stipulated 4.99% or 9.99% blocker, as applicable, and the Beneficial Ownership Limitation and Exchange Cap.

- (2) Assumes the sale of all shares of our Common Stock being offered for resale pursuant to this prospectus.

- (3) The address for Bristol Investment Fund, Ltd. (“BIF”) is Citco Trustees (Cayman) Limited, 89 Nexus Way, Camana Bay, PO Box 311063, Grand Cayman KY1-1205, Cayman Islands. Paul Kessler, as manager of Bristol Capital Advisors, LLC, the investment advisor to BIF, has voting and investment control over the securities held by BIF. Mr. Kessler, as manager of Bristol and Hailstone, has voting and investment control over the securities held by Bristol and Hailstone. Mr. Kessler disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein. Shares beneficially owned consists of (i) 204,235 shares of Common Stock by Bristol and BIF, and (ii) 20,458 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by BIF within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 19,992,142, inclusive of the CEF Shares by Hailstone.
- (4) The address for Five Narrow Lane, L.P. is 510 Madison Avenue, Suite 1400, New York, New York 10022. Each of Arie Rabinowitz and Joseph Hammer may be deemed to have investment discretion and voting power over the shares held by Five Narrow Lane, L.P. Each of Messrs. Rabinowitz and Hammer disclaims any beneficial ownership of these shares except to the extent of his pecuniary interest therein. Shares beneficially owned consists of (i) 224,400 shares of Common Stock, and (ii) 293 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by Five Narrow Lane LP within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 19,992,142, inclusive of the CEF Shares.

- (5) The address for The Hewlett Fund LP is 100 Merrick Road, Suite 400W, Rockville Centre, New York 11570. Martin Chopp has voting and investment control over the securities held by The Hewlett Fund LP. Shares beneficially owned consists of (i) 9,741 shares of Common Stock and, (ii) 28 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by The Hewlett Fund LP within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 2,447,380.
- (6) The address for Boothbay Absolute Return Strategies, LP (“BBARS”) is c/o Kingsbrook Partners LP, 689 Fifth Avenue, 12th Floor, New York, New York 10022. BBARS is managed by Boothbay Fund Management, LLC, a Delaware limited liability company (“Boothbay”). Boothbay, in its capacity as the investment manager of BBARS, has the power to vote and the power to direct the disposition of all securities held by the BBARS. Ari Glass is the Managing Member of Boothbay. Each of BBARS, Boothbay and Mr. Glass disclaim beneficial ownership of these securities, except to the extent of any pecuniary interest therein. Shares beneficially owned consists of (i) 7,782 shares of Common Stock, and (ii) 33 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by Boothbay Absolute Return Strategies, LP within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 4.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 1,957,904.
- (7) The address for Kingsbrook Opportunities Master Fund LP (the “Kingsbrook Opportunities”) is c/o Kingsbrook Partners LP, 689 Fifth Avenue, 12th Floor, New York, New York 10022. Kingsbrook Partners LP (“Kingsbrook Partners”) is the investment manager of Kingsbrook Opportunities and consequently has voting control and investment discretion over securities held by Kingsbrook Opportunities. Kingsbrook Opportunities GP LLC (“Opportunities GP”) is the general partner of Kingsbrook Opportunities and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Opportunities. KB GP LLC (“GP LLC”) is the general partner of Kingsbrook Partners and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Partners. Ari J. Storch, Adam J. Chill and Scott M. Wallace are the sole managing members of Opportunities GP and GP LLC and as a result may be considered beneficial owners of any securities deemed beneficially owned by Opportunities GP and GP LLC. Each of Kingsbrook Partners, Opportunities GP, GP LLC and Messrs. Storch, Chill and Wallace disclaim beneficial ownership of these securities. Shares beneficially owned consists of (i) 1,909 shares of Common Stock, and (ii) 44 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by Kingsbrook Opportunities Master Fund LP within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 489,476.
- (8) The address for Intracoastal Capital LLC (“Intracoastal”) is 245 Palm Trail, Delray Beach, Florida 33843. Mitchell P. Kopin (“Mr. Kopin”) and Daniel B. Asher (“Mr. Asher”), each of whom are managers of Intracoastal, have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities reported herein that are held by Intracoastal. Shares beneficially owned consists of (i) 14,635 shares of Common Stock, and (ii) 18 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by Intracoastal Capital LLC within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 3,671,070.
- (9) The address for Rainforest Partners LLC is 850 East 26th Street, Brooklyn, New York 11210. Mark Weinberger is the managing member of Rainforest Partners LLC, and has sole voting and investment power over the securities held by Rainforest Partners LLC. Shares beneficially owned consists of (i) 9,741 shares of Common Stock, and (ii) 28 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by Rainforest Partners LLC within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 4.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 2,447,380.
- (10) The address for Robert A. Marzilli is 457 Sunset Beach Rd., Richmond Hill, Ontario, L4E 3J3, Canada. This information is based on information known to the company through a non-objecting beneficial ownership report (the “NOBO Report”) as of April 30, 2025. Mr. Marzilli has not provided or verified the information appearing on the NOBO Report, and so this information may not be accurate for a number of reasons, including, but not limited to, if Mr. Marzilli has divested such ownership through private contractual or other means not reflected in the NOBO Report, or is the beneficial owner of other shares not disclosed in the NOBO Report. The shares beneficially owned reflects the application of a contractually stipulated 9.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 2,447,380.
- (11) The address for the Nicholas R. Nikolov, MD Defined Benefit Plan is 436 N. Bedford Dr., #207, Beverly Hills, California 90210. Shares beneficially owned consists of (i) 3,866 shares of Common Stock, and (ii) 41 shares of Common Stock issuable upon the conversion of the Preferred Shares and/or exercise of the Common Stock Warrants held by the Nicholas R. Nikolov, MD Defined Benefit Plan within 60 days of May 30, 2025. The shares beneficially owned reflects the application of a contractually stipulated 4.99% blocker provision, the Beneficial Ownership Limitation and the Exchange Cap. To the extent such ownership limitations are removed, then the shares beneficially owned and to be sold in the offering would increase to 978,952.

MATERIAL TAX CONSIDERATIONS

The following is a discussion of material U.S. federal income tax consequences generally applicable to the acquisition, ownership, and disposition of Common Stock issued pursuant to this offering. This discussion does not address tax consequences other than those pertaining to U.S. federal income taxation. For example, this discussion does

not address any consequences relating to estate or gift taxation, the alternative minimum tax, or the Medicare tax on investment income. Nor does this discussion address any aspects of U.S. state or local or non-U.S. taxation. This discussion applies only to holders that hold our Common Stock as “capital assets” within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended (the “Code”). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances or status, including:

- financial institutions or financial services entities;
- broker-dealers;
- S corporations;
- partnerships (including entities or arrangements treated as partnerships for U.S. federal income tax purposes);
- taxpayers that are subject to the mark-to-market accounting rules;
- tax-exempt entities;
- governments or agencies or instrumentalities thereof;
- insurance companies;
- regulated investment companies or real estate investment trusts;
- expatriates or former long-term residents or citizens of the United States;
- persons for whom our Common Stock or pre-funded warrants constitute “qualified small business stock” within the meaning of Section 1202 of the Code;
- persons that hold our securities as part of a straddle, constructive sale, hedging, conversion or other integrated or similar transaction;
- persons subject to the alternative minimum tax;
- U.S. persons whose functional currency is not the U.S. dollar;
- controlled foreign corporations;
- accrual method taxpayers that file applicable financial statements as described in Section 451(b) of the Code; or
- passive foreign investment companies.

If a partnership (or any entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds Common Stock, common warrants, or pre-funded warrants, the tax treatment of such partnership and a person treated as a partner of such partnership will generally depend on the status of the partner and the activities of the partnership. Partnerships holding any Common Stock, common warrants, or pre-funded warrants, and persons that are treated as partners of such partnerships, should consult their tax advisors.

This discussion is based on the Code, Treasury Regulations promulgated under the Code, and judicial and administrative interpretations thereof, all as of the date hereof. U.S. tax law is subject to change, which change could apply retroactively and could affect the tax considerations described herein. We have not and do not intend to seek any ruling from the U.S. Internal Revenue Service (the “IRS”) regarding any U.S. federal income tax considerations described herein. There can be no assurance that the IRS will not take positions inconsistent with the considerations discussed below or that any such positions would not be sustained by a court.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR WITH RESPECT TO THE PARTICULAR TAX CONSEQUENCES TO SUCH PROSPECTIVE INVESTOR OF THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF COMMON STOCK, INCLUDING THE EFFECTS OF U.S. FEDERAL, STATE AND LOCAL, AND NON-U.S. TAX LAWS.

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U.S. HOLDERS

As used herein, a “U.S. Holder” is a beneficial owner of our Common Stock that is, for U.S. federal income tax purposes:

- an individual citizen or resident of the United States,
- a corporation (or other entity that is treated as a corporation for U.S. federal income tax purposes) that is created or organized (or treated as created or organized) in or under the laws of the United States or any state thereof or the District of Columbia,
- an estate whose income is subject to U.S. federal income tax regardless of its source, or
- a trust if (1) a U.S. court can exercise primary supervision over the administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in place to be treated as a U.S. person.

Distributions on Our Common Stock

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. If we do make distributions with respect to our Common Stock, a U.S. Holder generally should be required to include in gross income as a dividend the amount of any cash distribution or the fair market value of any other property distributed with respect to shares of our Common Stock, to the extent the distribution is paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts treated as a dividend that we pay to a U.S. Holder that is a taxable corporation may qualify for a dividends received deduction, provided certain holding period and other requirements are satisfied. Amounts treated as a dividend that we pay to a non-corporate U.S. Holder may be taxed as “qualified dividend income” at preferential tax rates accorded to long-term capital gains, subject to certain exceptions and provided certain holding period and other requirements are satisfied. Distributions in excess of current and accumulated earnings and profits should generally constitute a return of capital that is applied against and that reduces (not below zero) the U.S. Holder’s adjusted tax basis in its shares of our Common Stock. Any remaining excess should generally be treated as gain realized on the sale or other disposition of our Common Stock and should generally be treated as described below under “—U.S. Holders—Sale, Exchange, or Other Taxable Disposition of our Common Stock”

Sale, Exchange, or Other Taxable Disposition of our Common Stock

Upon a sale, exchange, or other taxable disposition of our Common Stock, a U.S. Holder generally should recognize capital gain or loss equal to the difference between the amount realized on such sale, exchange, or other taxable disposition and the U.S. Holder’s adjusted tax basis in the applicable shares of our Common Stock. Any such capital gain or loss generally should be long-term capital gain or loss if the U.S. Holder’s holding period for the shares of our Common Stock so disposed of exceeds one year. Long-term capital gains recognized by non-corporate U.S. Holders may be eligible to be taxed at reduced rates. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

U.S. backup withholding and information reporting requirements may apply to distributions on our Common Stock, and the receipt of proceeds from the sale, exchange, or other disposition of our Common Stock. Backup withholding generally should not apply, however, to a U.S. Holder who furnishes a correct taxpayer identification number and makes other required certifications, or who is otherwise exempt from backup withholding and establishes such exempt status. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a U.S. Holder’s U.S. federal income tax liability, and a U.S. Holder generally may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the IRS and furnishing any required information.

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NON-U.S. HOLDERS

As used herein, a “non-U.S. Holder” is a beneficial owner of our Common Stock that, for U.S. federal income tax purposes, is or is treated as an individual, corporation, estate or trust that is not a U.S. Holder.

Distributions on our Common Stock

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. If we do make distributions with respect to our Common Stock, any such distribution made to a non-U.S. Holder with respect to our Common Stock should generally constitute a dividend for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Provided that any such dividend is not effectively connected with such non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base maintained by such non-U.S. Holder), and subject to the discussion below regarding backup withholding and FATCA (defined below), such dividend should generally be subject to withholding tax from the gross amount of the dividend at a rate of 30%, unless such non-U.S. Holder is eligible for a reduced rate of withholding tax under an applicable income tax treaty and provides proper certification of its eligibility for such reduced rate (usually on an IRS Form W-8BEN or W-8BEN-E, as applicable). Any distribution not constituting a dividend should generally be treated first as reducing (not below zero) the non-U.S. Holder’s adjusted tax basis in our Common Stock and then, to the extent such distribution exceeds the non-U.S. Holder’s adjusted tax basis, as gain realized from the sale or other disposition of our Common Stock, which should generally be treated as described below under “—Non-U.S. Holders—Sale, Exchange or Other Taxable Disposition of our Common stock.”

Dividends paid by us to a non-U.S. Holder that are effectively connected with such non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base maintained by such non-U.S. Holder) should generally not be subject to U.S. withholding tax, provided such non-U.S. Holder complies with certain certification and disclosure requirements (usually by providing an IRS Form W-8ECI). Instead, such dividends should generally be subject to U.S. federal income tax, net of certain deductions, at the same graduated individual or corporate rates applicable to U.S. Holders. If the non-U.S. Holder is a corporation, dividends that are effectively connected income may also be subject to a “branch profits tax” at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty).

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Sale, Exchange, or Other Taxable Disposition of our Common Stock

Subject to the discussion below regarding backup withholding and FATCA, a non-U.S. Holder generally should not be subject to U.S. federal income tax on gain realized from a sale, exchange, or other disposition of our Common Stock unless:

- (i) such non-U.S. Holder is an individual who was present in the United States for 183 days or more in the taxable year of such disposition and certain other requirements are met, in which case any gain realized will generally be subject to a flat 30% U.S. federal income tax;
- (ii) the gain is effectively connected with a trade or business of such non-U.S. Holder in the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base maintained by such non-U.S. Holder), in which case such gain will be subject to U.S. federal income tax, net of certain deductions, at the same graduated individual or corporate rates applicable to U.S. Holders, and any such gain of a non-U.S. Holder that is a corporation may be subject to an additional “branch profits tax” at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty); or
- (iii) subject to certain exceptions discussed below, we are or have been a U.S. real property holding corporation (a “USRPHC”) at any time during the shorter of the five-year period preceding such disposition and such non-U.S. Holder’s holding period, in which case (a) gain recognized by such non-U.S. holder on the sale, exchange, or other disposition of our Common Stock, pre-funded warrants, or common warrants should generally be subject to tax at generally applicable U.S. federal income tax rates and (b) a buyer of our Common Stock, pre-funded warrants, or common warrants from such non-U.S. Holder may be required to withhold U.S. federal income tax at a rate of 15% of the amount realized upon such disposition.

For purposes of item (iii) immediately above, we will generally be classified as a USRPHC if the fair market value of our “United States real property interests” equals or exceeds 50% of the sum of the fair market value of our worldwide real property interests and our other assets used or held for use in a trade or business, as determined for U.S. federal income tax purposes. Although there can be no assurance, we believe that we are not currently a USRPHC and we do not anticipate becoming a USRPHC. Even if we are or become a USRPHC, a non-US Holder should generally not be subject to U.S. federal income tax under the rules discussed in item (iii) with respect to gain realized on a sale or other disposition of our Common Stock if (A) our Common Stock is considered to be regularly traded on an established securities market and (B) such non-U.S. Holder has not owned and is not deemed to have owned more than 5% of our Common Stock at any time during the shorter of the five-year period preceding such disposition and such non-U.S. Holder’s holding period. There can be no assurance that shares of our Common Stock qualify as regularly traded on an established securities market for purposes of these rules.

Information Reporting and Backup Withholding

U.S. backup withholding and information reporting requirements may apply to distributions on our Common Stock, constructive distributions on common warrants, and the receipt of proceeds from the sale or disposition of our Common Stock. A non-U.S. Holder may have to comply with certification procedures to establish that it is not a U.S. person for U.S. federal income tax purposes, to otherwise establish an exemption from information reporting and backup withholding requirements, or to claim a reduced rate of withholding under an applicable income tax treaty. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a non-U.S. Holder’s U.S. federal income tax liability, and a non-U.S. Holder generally may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the IRS and furnishing any required information.

Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Code and the Treasury Regulations and administrative guidance promulgated thereunder (commonly referred to as the “Foreign Account Tax Compliance Act” or “FATCA”) generally impose withholding at a rate of 30% in certain circumstances on dividends in respect of securities (including our Common Stock), and (subject to the proposed Treasury Regulations discussed below) the gross proceeds derived from the sale or other disposition of our Common Stock, which are held by or through certain foreign financial institutions (including investment funds), unless any such institution (i) enters into, and complies with, an agreement with the IRS to, among other things, comply with specified due diligence, report, on an annual basis, information with respect to interests in, and accounts maintained by, the institution that are owned by certain U.S. persons and by certain non-U.S. entities that are wholly or partially owned by U.S. persons and to withhold on certain payments, or (ii) if allowed under an intergovernmental agreement between the United States and an applicable foreign country, reports such information to its local tax authority, which may exchange such information with the U.S. authorities. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Accordingly, the disclosure of the ownership of the entity through which our securities (including our Common stock) is held will affect the determination of whether such withholding and reporting is required. Withholding agents may, however, rely on proposed U.S. Treasury Regulations that would no longer require FATCA withholding on payments of gross proceeds. A withholding agent, and not GT BIOPHARMA, INC., will determine whether or not to implement gross proceeds FATCA withholding. Similarly, dividends in respect of our Common Stock held by an investor that is a non-financial non-U.S. entity that does not qualify under certain exceptions will generally be subject to withholding at a rate of 30%, unless such entity either (i) certifies to the applicable withholding agent that such entity does not have any “substantial United States owners” or (ii) provides certain information regarding the entity’s “substantial United States owners,” which may in turn be provided to the U.S. Department of Treasury. All

PLAN OF DISTRIBUTION

Each Selling Stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq 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 effected after the effective date of the registration statement of which this prospectus is a part;
- 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;
- a combination of any such methods of sale; 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 of 1933, as amended (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.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. 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 which 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 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 the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Facility Investors are each an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act. The Facility Investors may use one or more registered broker-dealers to effectuate all sales, if any, of the CEF Shares that they may acquire from us pursuant to the Common Shares Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such registered broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Each such broker-dealer may receive commissions from the Facility Investors for executing such sales for the Facility Investors and, if so, such commissions will not exceed customary brokerage commissions.

We know of no existing arrangements between the Facility Investors or any other shareholder, broker, dealer, underwriter or agent relating to the sale or distribution of the CEF Shares offered by this prospectus.

As consideration for their irrevocable commitment to, at our request, purchase the CEF Shares under the Common Shares Purchase Agreement, we issued the Pre-Funded Warrants to the Facility Investors upon execution of the Purchase Agreement. We have agreed to reimburse the Facility Investors up to \$25,000 for the fees and disbursements of its counsel in connection with the transactions contemplated by the Common Shares Purchase Agreement and up to \$5,000 per fiscal quarter thereafter in connection with the Facility Investors’ ongoing due diligence review.

We also have agreed to indemnify the Facility Investors and certain other persons against certain liabilities in connection with the offering of the CEF Shares offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. The Holder has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by the Facility Investors specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders, including the Facility Investors, against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) 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, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or 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).

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and because we are a smaller reporting company, later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (including those made after the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement) we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on [Form 10-K](#) and [Form 10-K/A](#) for the year ended December 31, 2024 filed with the SEC on February 21, 2025 and amended on April 14, 2025;
- our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2025, filed with the SEC on May 15, 2025;
- our Current Reports on Form 8-K filed with the SEC on [January 27, 2025](#), [February 26, 2025](#), [April 4, 2025](#), [May 5, 2025](#), [May 13, 2025](#), [May 13, 2025](#), [May 27, 2025](#) and [June 11, 2025](#); and
- the description of our Common Stock contained in [Exhibit 4.3](#) to our Annual Report on Form 10-K for the year ended December 31, 2024 filed with the SEC on February 21, 2025, including any amendment or report filed for the purpose of updating such description.

All documents the Company subsequently filed with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or documents that is not deemed filed under such provisions, (1) on or after the date of filing of the registration statement containing this prospectus and prior to the effectiveness of the registration statement and (2) on or after the date of this prospectus until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus is a part has been withdrawn, shall be deemed incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of those documents and will be automatically updated and, to the extent described above, supersede information contained or incorporated by reference in this prospectus and previously filed documents that are incorporated by reference in this prospectus. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

Nothing in this prospectus shall be deemed to incorporate information furnished but not filed with the SEC pursuant to Item 2.02, 7.01 or 9.01 of Form 8-K.

Upon written or oral request, we will provide without charge to each person to whom a copy of the prospectus is delivered a copy of the documents incorporated by reference herein (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by contacting GT Biopharma, Inc.

We maintain a website at <https://ir.gtbiopharma.com>. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and other reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

There have been no material changes to the Company’s affairs that have occurred since December 31, 2024 that have not been described in a Form 10-Q or Form 8-K filed under the Exchange Act.

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WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 under the Securities Act with the SEC with respect to this offering. This prospectus was filed as a part of that registration statement but does not contain all of the information contained in the registration statement and exhibits. Reference is thus made to the omitted information. Statements made in this prospectus are summaries of the material terms of contracts, agreements and documents and are not necessarily complete; however, all information we considered material has been disclosed. Reference is made to each exhibit for a more complete description of the matters involved and these statements are qualified in their entirety by the reference. You can find, copy and inspect information we file at the SEC’s public reference room, which is located at 100 F Street, N.E., Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC’s public reference room. The SEC also maintains a web site (<http://www.sec.gov>) that contains this filed registration statement, reports and other information regarding us that we have filed electronically with the SEC. For more information pertaining to our company and this offering, reference is made to the registration statement.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Baker & Hostetler LLP, Los Angeles, California.

EXPERTS

The consolidated balance sheets of GT Biopharma, Inc. as of December 31, 2024 and 2023, and the related consolidated statements of comprehensive loss, stockholders’ equity (deficit) and cash flows of GT Biopharma, Inc. for the years ended December 31, 2024 and 2023, incorporated by reference in this prospectus have been so incorporated in reliance on the reports of Weinberg and Company, P.A., an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

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54,423,826 Shares of Common Stock

The date of this prospectus is , 2025.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distributions

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the SEC registration fee.

| | | |
|------------------------------|----|-----------|
| SEC registration fee | \$ | 54,321.94 |
| FINRA filing fee | \$ | * |
| Accounting fees and expenses | \$ | 10,000 |
| Legal fees and expenses | \$ | 150,000 |
| Miscellaneous | \$ | * |
| Total | \$ | * |

* These fees are calculated based on the securities offered and the numbers of issuances and accordingly cannot be determined at this time.

Item 14. Indemnification of Directors and Officers

Section 145 of the DGCL provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to us. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Our certificate of incorporation provides for indemnification by us of our directors, officers and employees to the fullest extent permitted by the DGCL.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions or (iv) for any transaction from which the director derived an improper personal benefit. Our certificate of incorporation provides for such limitation of liability.

We have entered into separate indemnification agreements with our directors and executive officers.

Item 15. Recent Sales of Unregistered Securities

Since January 1, 2022, the Company made the following issuances of its unregistered securities pursuant exemptions contained in Section 4(a)(2) or 3(a)(9) of the Securities Act and/or Rule 506 of Regulation D promulgated thereunder:

- Since January 1, 2022, we have issued 29,935 shares of Common Stock with a fair value of approximately \$1,053,000 in connection with compensation of the Company's officers and directors.
- On August 24, 2022, the Company entered into a revised agreement with this third-party manufacturer and issued 40,742 shares of Common Stock with a fair value of approximately \$3.2 million as part of a payment arrangement.

- During the year ended December 31, 2022, the Company issued 11,257 shares of Common Stock upon conversion of notes payable.
- During the year ended December 31, 2022, the Company issued 23,654 shares of Common Stock to officers, employees, and Board with a fair value of approximate \$2.5 million. This included 12,602 shares with a fair value of \$938,000 that were granted during the year.
- During the year ended December 31, 2022, the Company issued 17,562 shares of Common Stock to consultants with a fair value of approximately \$2.1 million.
- During the year ended December 31, 2022, the Company issued 57,437 shares of Common Stock to settle approximately \$700,000 of vendor payables.

- During the year ended December 31, 2023, the Company issued 14,237 shares of Common Stock to officers, employees, and Board with a fair value of approximate \$267,000. This included 13,333 shares with a fair value of \$115,000 that were granted during the year.
- During the year ended December 31, 2023, the Company issued 1,545 shares of Common Stock to consultants with a fair value of approximately \$162,000.
- On January 4, 2023, the Company entered into a purchase agreement signed on December 30, 2022, between the Company and an institutional investor for the issuance and sale, in a registered direct offering of 120,000 shares of the Company's Common Stock, pre-funded warrants to purchase up to 96,667 shares of the Company's Common Stock, warrants to purchase up to an aggregate of 216,667 shares of the Company's Common Stock and placement agent warrants to purchase up to 13,000 of the Company's Common Stock. The Company raised \$6.5 million from the offering.
- On April 30, 2024, the Company issued 36,018 shares of Common Stock to settle \$278,500 of vendor accounts payable. The shares were valued at the month-end closing price of the Company's Common Stock for the months for which services were provided by the vendor.
- On May 23, 2024, the Company issued 740,000 common warrants, each to purchase one share of Common Stock at an exercise price equal to \$4.35 and are exercisable immediately upon issuance and will expire on the date that is five years following the date of issuance.
- On May 23, 2024, the Company issued placement agent warrants to the placement agent to purchase up to 88,800 shares of Common Stock as part of the compensation payable to the placement agent in connection with such offering at an exercise price of \$5.4375 per share and will expire five years from the commencement of sales of the offering.
- On June 30, 2024, the Company issued 91,579 shares of Common Stock to settle \$531,300 of vendor accounts payable. The shares were valued at the month-end closing price of the Company's Common Stock for the months for which services were provided by the vendor.
- On February 26, 2025, the Company issued (i) 302,069 common warrants, each to purchase one share of Common Stock at an exercise price equal to \$2.02 and are exercisable immediately upon issuance and will expire on the date that is five years following the date of issuance, (ii) 302,069 common warrants, each to purchase one share of Common Stock at an exercise price equal to \$2.02 and are exercisable immediately upon issuance and will expire on the date that is eighteen months following the date of issuance, and (iii) placement agent warrants to the placement agent to purchase up to 21,145 shares of Common Stock at an exercise price equal to \$2.8375.
- On March 31, 2025, the Company issued prefunded warrants underlying 326,251 shares of Common Stock to settle approximately \$847,000 of vendor accounts payable. The shares were valued at the month-end closing price of the Company's Common Stock for the months for which services were provided by the vendor.
- On May 12, 2025, the Company entered into a securities purchase agreement with the purchasers identified therein for the issuance and sale of (i) 6,612 shares of Series L Preferred Stock, (ii) warrants to purchase up to 3,235,978 shares of Common Stock equal to 100% of the shares of Common Stock issuable upon conversion of the shares of Series L Preferred Stock, and (iii) warrants to purchase up to 11,756,406 of Common Stock equal to the number of Greenshoe Conversion Shares issuable upon exercise of the Greenshoe Right, with an aggregate stated value of \$6.6 million, for an aggregate purchase price of \$5.95 million.
- On May 13, 2025, the Company issued 50,000 shares of Common Stock and warrants underlying 50,000 shares of Common Stock at an exercise price equal to \$2.50 to a vendor accounts as compensation for services.
- On May 14, 2025, the Company issued pre-funded warrants underlying an aggregate 300,000 shares of Common Stock to 5NL and Bristol as consideration for their irrevocable commitment to purchase the shares of common stock upon the terms and subject to the satisfaction of the conditions set forth in the Purchase Agreement.
- On May 15, 2025, the Company issued warrants underlying 24,390 shares of Common Stock at an exercise price equal to \$2.46 to investors in return entering into a Consent and Waiver Agreement dated March 18, 2025.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

Exhibit Index

| Exhibit Number | Exhibit Description | Form | Date | Number | File No. | Filed Herewith |
|----------------|--|--------|------------|--------|----------|----------------|
| 3.1 | Restated Certificate of Incorporation as filed in Delaware September 10, 1996 and as thereafter amended through March 1, 2002 | 10-KSB | 04/01/02 | 3.A | | |
| 3.2 | Certificate of Amendment to the Restated Certificate of Incorporation of GT Biopharma, Inc., dated February 9, 2011 | 10-K | 03/31/2011 | 3.2 | | |
| 3.3 | Certificate of Amendment to the Restated Certificate of Incorporation of GT Biopharma, Inc., effective as of July 19, 2017 | 8-K/A | 03/15/2018 | 3.1 | | |
| 3.4 | Certificate of Amendment to the Restated Certificate of Incorporation of GT Biopharma, Inc., effective as of February 10, 2021 | 8-K | 02/11/2021 | 3.1 | | |
| 3.5 | Certificate of Amendment to the Restated Certificate of Incorporation of GT Biopharma, Inc., effective June 13, 2022 | 10-K | 03/30/2023 | 3.5 | | |
| 3.6 | Amended and Restated Bylaws of GT Biopharma, Inc., effective November 3, 2022 | 8-K | 11/09/2022 | 3.1 | | |
| 3.7 | Certificate of Amendment of Restated Certificate of Incorporation of GT Biopharma, Inc., effective February 1, 2024 | 8-K | 02/01/2024 | 3.1 | | |
| 4.1 | Certificate of Designation of Preferences, Rights and Limitations of Series J-1 Preferred Stock of GT Biopharma, Inc., dated April 3, 2019 | 8-K | 04/04/2019 | 3.1 | | |
| 4.2 | Certificate of Designation of Preferences, Rights and Limitations of Series K Preferred Stock of GT Biopharma, Inc., dated February 22, 2021 | 10-K | 04/16/2021 | 4.2 | | |
| 4.3 | Certificate of Designation of Preferences, Rights and Limitations of Series L 10% Convertible Preferred Stock, dated May 12, 2025 | 8-K | 05/13/2025 | 3.1 | | |
| 4.4 | Certificate of Increase of the Designated Number of Shares of Series L 10% Convertible Preferred Stock, dated May 22, 2025 | 8-K | 05/27/2025 | 3.1 | | |
| 4.5 | Description of the Registrant's Securities Registered pursuant to Section 12 of the Securities Exchange Act of 1934, as Amended | 10-K | 03/30/2023 | 4.3 | | |
| 4.6 | Form of 10% Senior Convertible Debenture (related to Securities Purchase Agreement, dated January 9, 2017) | 8-K | 01/13/2017 | 10.2 | | |
| 4.7 | Form of Common Stock Purchase Warrant (related to Securities Purchase Agreement, dated January 9, 2017) | 8-K | 01/13/2017 | 10.3 | | |

| | | | | |
|------|---|-----|------------|------|
| 4.8 | Registration Rights Agreement, dated January 22, 2018, among GT Biopharma, Inc. and the buyers named therein | 8-K | 01/23/2018 | 10.2 |
| 4.9 | Form of Senior Convertible Note (related to Securities Purchase Agreement, dated January 22, 2018) | 8-K | 01/23/2018 | 10.3 |
| 4.10 | Form of Warrant to Purchase Common Stock (related to Securities Purchase Agreement, dated January 22, 2018) | 8-K | 01/23/2018 | 10.4 |
| 4.11 | Form of 10% Senior Convertible Debenture (related to Securities Purchase Agreement, dated August 2, 2018) | 8-K | 08/03/2018 | 4.1 |
| 4.12 | Form of 10% Senior Convertible Debenture (related to Securities Purchase Agreement, dated September 7, 2018) | 8-K | 09/07/2018 | 4.1 |
| 4.13 | Form of 10% Senior Convertible Debenture (related to Securities Purchase Agreement, dated September 24, 2018) | 8-K | 09/28/2018 | 4.1 |

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| Exhibit Number | Exhibit Description | Form | Date | Number | File No. | Filed Herewith |
|----------------|--|---------|------------|--------|----------|----------------|
| 4.14 | Form of Secured Convertible Note (related to Securities Purchase Agreement, dated February 4, 2019) | 8-K | 02/06/2019 | 4.1 | | |
| 4.15 | Registration Rights Agreement, dated May 22, 2019, among GT Biopharma, Inc. and the purchasers named therein | 8-K | 05/24/2019 | 10.2 | | |
| 4.16 | Form of Convertible Note (related to Securities Purchase Agreement, dated August 20, 2019) | 8-K | 05/24/2019 | 4.1 | | |
| 4.17 | Registration Rights Agreement, dated August 20, 2019, among GT Biopharma, Inc. and the purchasers named therein | 8-K | 08/20/2019 | 10.2 | | |
| 4.18 | Form of Convertible Note (related to Securities Purchase Agreement, dated May 22, 2019) | 8-K | 05/24/2019 | 4.1 | | |
| 4.19 | Registration Rights Agreement, dated January 30, 2020, among GT Biopharma, Inc. and the purchaser named therein | 10-Q | 05/15/2020 | 10.2 | | |
| 4.20 | Registration Rights Agreement, dated January 30, 2020, among GT Biopharma, Inc. and the purchaser named therein | 10-Q | 05/15/2020 | 10.2 | | |
| 4.21 | Form of Convertible Note (related to Securities Purchase Agreement, dated January 30, 2020) | 10-Q | 05/15/2020 | 10.3 | | |
| 4.22 | Form of Registration Rights Agreement among GT Biopharma, Inc. and the purchaser named therein (executed in April/May 2020) | 10-Q | 05/15/2020 | 10.5 | | |
| 4.23 | Form of Convertible Note (related to Securities Purchase Agreement executed in April/May 2020) | 10-Q | 05/15/2020 | 10.6 | | |
| 4.24 | Registration Rights Agreement, dated July 7, 2020, among GT Biopharma, Inc. and the purchaser named therein | 8-K | 07/09/2020 | 10.3 | | |
| 4.25 | Form of Convertible Note (related to Securities Purchase Agreement, dated July 7, 2020) | 8-K | 07/09/2020 | 4.1 | | |
| 4.26 | Form of Convertible Note, dated June 19, 2020 (related to Settlement Agreement, dated June 19, 2020) | 8-K | 06/19/2020 | 10.2 | | |
| 4.27 | Form of Pre-Funded Warrant to Purchase Common Stock, dated June 19, 2020 (related to Settlement Agreement, dated June 19, 2020) | 8-K | 06/19/2020 | 10.3 | | |
| 4.28 | Form of Convertible Note (related to Securities Purchase Agreement, dated September 16, 2020) | 8-K | 09/22/2020 | 4.1 | | |
| 4.29 | Form of Secured Convertible Note | 8-K | 11/09/2020 | 4.1 | | |
| 4.30 | Form of Settlement Note, dated November 9, 2020. | 10-Q | 11/13/2020 | 10.20 | | |
| 4.31 | Settlement Note, dated December 22, 2020, by GT Biopharma Inc. payable to Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B. | 8-K | 12/28/2020 | 10.2 | | |
| 4.32 | Form of Amendment to Convertible Note, dated January 31, 2021 | 8-K | 02/01/2020 | 10.2 | | |
| 4.33 | Form of Common Warrant | 8-K | 01/03/2023 | 4.1 | | |
| 4.34 | Form of Pre-Funded Warrant | 8-K | 01/03/2023 | 4.2 | | |
| 4.35 | Form of Placement Agent Warrant | 8-K | 01/03/2023 | 4.3 | | |
| 4.36 | Form of Common Warrant | 8-K | 05/23/2024 | 4.1 | | |
| 4.37 | Form of Common Warrant | S-1/A | 01/27/2025 | 4.35 | | |
| 4.38 | Form of Pre-Funded Warrant | S-1/A | 01/27/2025 | 4.36 | | |
| 4.39 | Form of Placement Agent Warrant | S-1/A | 01/27/2025 | 4.37 | | |
| 4.40 | Form of Series A Inducement Warrant | 8-K | 02/26/2025 | 4.1 | | |
| 4.41 | Form of Series B Inducement Warrant | 8-K | 02/26/2025 | 4.2 | | |
| 4.42 | Form of Inducement Placement Agent Warrants | S-3 | 03/06/2025 | 4.10 | | |
| 4.43 | Form of Prefunded Common Stock Warrant | 8-K | 04/04/2025 | 4.1 | | |
| 4.44 | Form of Common Warrant | 8-K | 05/13/2025 | 4.1 | | |
| 4.45 | Form of Vesting Warrant | 8-K | 05/13/2025 | 4.2 | | |
| 4.46 | Form of Prefunded Common Stock Purchase Warrant | 10-Q | 05/15/2025 | 4.6 | | |
| 4.47 | GT Biopharma, Inc. 2022 Omnibus Incentive Plan | DEF 14A | 04/29/2022 | | | |
| 5.1 | Opinion of Baker & Hostetler LLP | | | | | X |
| 10.1 | Exclusive License Agreement, dated July 18, 2016, between the Regents of the University of Minnesota and Oxis Biotech, Inc. | 10-Q | 08/11/2017 | 10.3 | | |
| 10.2 | License Agreement, dated September 3, 2015, among Daniel A. Vallera, Jeffrey Lion and Oxis Biotech, Inc. | 10-Q | 08/11/2017 | 10.4 | | |
| 10.3 | Clinical Trial Agreement, dated September 2019, between the Regents of the University of Minnesota and GT Biopharma, Inc. | 10-Q | 05/15/2020 | 10.7 | | |

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| Exhibit Number | Exhibit Description | Form | Date | Number | File No. | Filed Herewith |
|----------------|---------------------|------|------|--------|----------|----------------|
|----------------|---------------------|------|------|--------|----------|----------------|

| | | | | | | |
|-------|---|-------|------------|-------|--|--|
| 10.4 | Securities Purchase Agreement, dated January 30, 2020, among GT Biopharma, Inc. and the purchaser named therein | 10-Q | 05/15/2020 | 10.1 | | |
| 10.5 | Form Securities Purchase Agreement among GT Biopharma, Inc. and the purchaser named therein (executed in April/May 2020) | 10-Q | 05/15/2020 | 10.4 | | |
| 10.6 | Securities Purchase Agreement, dated July 7, 2020, among GT Biopharma, Inc. and the purchaser named therein | 8-K | 07/09/2020 | 10.1 | | |
| 10.7 | Form of Standstill and Forbearance Agreement, dated June 23, 2020, between the Company and certain holders of convertible notes and debentures | 8-K | 06/23/2020 | 10.1 | | |
| 10.8 | Settlement Agreement, dated June 19, 2020, among GT Biopharma, Inc., Empery Asset Master Ltd., Empery Tax Efficient, LP and Empery Tax Efficient II, LP, Anthony Cataldo and Paul Kessler, | 8-K | 06/19/2020 | 10.1 | | |
| 10.9 | Executive Employment Agreement, dated October 19, 2018, among GT Biopharma, Inc. and Raymond W. Urbanski | 10-Q | 11/14/2018 | 10.17 | | |
| 10.10 | Consultant Agreement, dated February 14, 2018, among GT Biopharma, Inc., Georgetown Translational Pharmaceuticals, Inc. and Anthony J. Cataldo | 8-K | 02/21/2018 | 10.3 | | |
| 10.11 | Employment agreement with Anthony Cataldo | 10-Q | 08/14/2020 | 10.11 | | |
| 10.12 | Employment agreement with Steven Weldon | 10-Q | 08/14/2020 | 10.12 | | |
| 10.13 | Securities Purchase Agreement, dated September 16, 2020, among GT Biopharma, Inc. and the purchasers named therein | 8-K | 09/22/2020 | 10.1 | | |
| 10.14 | Master Services Agreement, dated October 5, 2020, between Gt Biopharma, Inc. and Cytovance Biologics, Inc. | 8-K | 10/06/2020 | 10.1 | | |
| 10.15 | Form of First Amendment and Extension of Standstill and Forbearance Agreement | 8-K | 11/04/2020 | 10.1 | | |
| 10.16 | Securities Purchase Agreement | 8-K | 11/09/2020 | 10.1 | | |
| 10.17 | Settlement Agreement, dated as of November 9, 2020, by and among Adam Kasower, East Ventures, Inc., A British Virgin Islands company, SV Booth Investments III, LLC, a Delaware limited liability company and Theorem Group, LLC, a California LLC and GT Biopharma Inc., a Delaware corporation, | 10-Q | 11/13/2020 | 10.19 | | |
| 10.18 | Steve Weldon Letter of Resignation, dated November 11, 2020 | 10-Q | 11/13/2020 | 10.21 | | |
| 10.19 | Board Service Agreement with Bruce Wendel, dated November 11, 2020 | 10-Q | 11/13/2020 | 10.22 | | |
| 10.20 | Board Service Agreement with Greg Berk, dated November 11, 2020 | 10-Q | 11/13/2020 | 10.23 | | |
| 10.21 | Consultant Agreement with Michael Handelman, dated November 13, 2020 | 10-Q | 11/13/2020 | 10.24 | | |
| 10.22 | Form of Amendment to Convertible Note & Standstill Agreement | 8-K | 12/23/2020 | 10.1 | | |
| 10.23 | Settlement Agreement, dated as of December 22, 2020, by and among Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, Anthony Cataldo, Paul Kessler and GT Biopharma Inc., a Delaware corporation, | 8-K | 12/28/2020 | 10.1 | | |
| 10.24 | Form of Second Amendment and Extension of Standstill and Forbearance Agreement, | 8-K | 02/01/2020 | 10.1 | | |
| 10.25 | Board Service Agreement with Rajesh Shrotriya, dated January 12, 2021. | S-1/A | 02/08/2021 | 10.69 | | |

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| Exhibit Number | Exhibit Description | Form | Date | Number | File No. | Filed Herewith |
|----------------|---|-------|------------|--------|----------|----------------|
| 10.26 | Board Service Agreement with Michael Breen, dated January 12, 2021. | S-1/A | 02/08/2021 | 10.70 | | |
| 10.27 | Amendment to Settlement Note with Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B. | S-1/A | 02/08/2021 | 10.71 | | |
| 10.28 | Form of Securities Purchase Agreement - December 2020 / January 2021 Notes | S-1/A | 02/08/2021 | 10.72 | | |
| 10.29 | Form of December 2020 / January 2021 Note | S-1/A | 02/08/2021 | 10.73 | | |
| 10.30 | Amended and Restated Employment Agreement with Anthony Cataldo, dated April 23, 2021. | 10-Q | 05/17/2021 | 10.1 | | |
| 10.31 | Amended and Restated Employment Agreement with Michael Handelman, dated April 23, 2021. | 10-Q | 05/17/2021 | 10.2 | | |
| 10.32 | Amended and Restated Employment Agreement with Dr. Gregory Berk, dated April 23, 2021 | 10-Q | 05/17/2021 | 10.3 | | |
| 10.33 | Exclusive License Agreement with Regents of the University of Minnesota, dated March 26, 2021 | 10-K | 03/28/2022 | 10.73 | | |
| 10.34 | Research Agreement with Regents of the University of Minnesota, dated June 16, 2021. | 10-K | 03/28/2022 | 10.74 | | |
| 10.35 | Sublease Agreement dated November, 2021, between Aimmune Therapeutics, Inc. (Sublandlord) and GT Biopharma, Inc. (Subtenant) | 10-K | 03/28/2022 | 10.75 | | |
| 10.36 | Employment Agreement with Michael Breen, entered into as of December 31, 2021 with an effective date of November 8, 2021 | 10-K | 03/28/2022 | 10.76 | | |
| 10.37 | Amendment No. 1 to Employment Agreement with Michael Breen, dated as of June 17, 2022. | 10-K | 03/26/2024 | 10.77 | | |
| 10.38 | Amendment No. 2 to Services Agreement with Michael Breen, dated as of February 20, 2023. | 10-K | 03/26/2024 | 10.78 | | |
| 10.39 | Board Service Agreement with Michael Breen dated November 11, 2020 | 10-Q | 05/16/2022 | 10.1 | | |
| 10.40 | Employment Agreement with Manu Ohri dated May 15, 2022 | 10-Q | 05/16/2022 | 10.2 | | |
| 10.41 | Amendment No. 1 to Employment Agreement with Manu Ohri, dated as of February 17, 2023 | 10-K | 03/26/2024 | 10.81 | | |
| 10.42 | Settlement and Investment Agreement dated August 24, 2022, by and between GT Biopharma, Inc. and Cytovance Biologics, Inc. | 10-Q | 10/31/2022 | 10.1 | | |
| 10.43 | Form of Securities Purchase Agreement, dated December 2022, by and between GT Biopharma, Inc. and the purchasers named therein. | 8-K | 01/03/2023 | 10.1 | | |
| 10.44 | Amendment No. 1 to Settlement and Investment Agreement, dated as of April 25, 2024, by and between GT Biopharma, Inc. and Cytovance Biologics, Inc. | 8-K | 04/30/2024 | 10.1 | | |
| 10.45 | Amended and Restated Exclusive Patent License Agreement with the Regents of the University of Minnesota, dated May 13, 2024 | 10-Q | 04/30/2024 | 10.2 | | |
| 10.46 | Sponsored Research Agreement with the Regents of the University of Minnesota dated May 20, 2024 | 10-Q | 04/30/2024 | 10.3 | | |
| 10.47 | Form of Securities Purchase Agreement | 8-K | 05/23/2024 | 10.1 | | |
| 10.48 | Form of Placement Agency Agreement | 8-K | 05/23/2024 | 10.2 | | |
| 10.49 | Code of Ethics | 10-K | 03/31/2015 | 14.1 | | |
| 10.50 | Investigator Initiated Clinical Trial Agreement | 8-K | 11/18/2024 | 10.1 | | |

| | | | | | |
|---------|---|-------|------------|-------|---|
| 10.51 | Form of Securities Purchase Agreement | S-1/A | 01/27/2025 | 10.51 | |
| 10.52 | Form of Placement Agency Agreement | S-1/A | 01/27/2025 | 10.52 | |
| 10.53 | Employment Agreement between the Company and Alan Urban, dated as of June 7, 2024 | 8-K | 06/07/2024 | 10.1 | |
| 10.54 | Form of Inducement Letter | 8-K | 02/26/2025 | 10.1 | |
| 10.55 | Securities Purchase Agreement, dated as of May 12, 2025, between the Company and the purchasers identified therein. | 8-K | 05/13/2025 | 10.1 | |
| 10.56 | First Amendment to Securities Purchase Agreement, dated as of May 21, 2025, between the Company and the purchasers identified therein. | 8-K | 05/27/2025 | 10.1 | |
| 10.57 | Registration Rights Agreement, dated as of May 12, 2025, between the Company and the purchasers identified therein. | 8-K | 05/13/2025 | 10.2 | |
| 10.58 | Joinder to Registration Rights Agreement, dated as of May 21, 2025, between the Company and the purchaser identified therein. | 8-K | 05/27/2025 | 10.2 | |
| 10.59 | Form of Voting Agreement | 8-K | 05/13/2025 | 10.3 | |
| 10.60 | Form of Lock-Up Agreement | 8-K | 05/13/2025 | 10.4 | |
| 10.61 | Common Shares Purchase Agreement, dated as of May 14, 2025, between the Company and the investors identified therein. | 10-Q | 05/15/2025 | 10.2 | |
| 10.62 | First Amendment to Common Shares Purchase Agreement, dated as of June 10, 2025, between the Company and the investors identified therein. | 8-K | 06/11/2025 | 10.1 | |
| 21.1 | Subsidiaries of GT Biopharma, Inc. | 10-K | 03/31/2015 | 21.1 | |
| 23.1 | Consent of Weinberg & Company | | | | X |
| 23.2 | Consent of Baker & Hostetler LLP (incl. in Exhibit 5.1) | | | | X |
| 24.1 | Power of Attorney | S-1 | 06/11/2025 | 24.1 | |
| 101.INS | XBRL Instance Document | | | | X |
| 101.SCH | XBRL Taxonomy Extension Schema Document | | | | X |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document | | | | X |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document | | | | X |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document | | | | X |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document | | | | X |
| 107 | Filing Fee Table | | | | X |

† Confidential treatment granted from the SEC as to certain portions, which portions have been omitted and filed separately with the SEC.

+ Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. GT Biopharma, Inc. will furnish copies of any such schedules to the SEC upon request.

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Item 17. Undertakings

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to:
 - (i) include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) 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; and
 - (iii) 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 paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 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 of 1933, 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 of 1933 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 of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Los Angeles, State of California, on June 27, 2025.

GT Biopharma Inc.

Date: June 27, 2025

By: /s/ Michael Breen
Michael Breen
Chief Executive Officer

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

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--|---|---------------|
| <u>/s/ Michael Breen</u> Michael Breen | Executive Chairman of the Board and Chief Executive Officer (Principal Executive Officer) | June 27, 2025 |
| <u>/s/ Alan Urban</u> Alan Urban | Chief Financial Officer and Secretary (Principal Financial and Accounting Officer) | June 27, 2025 |
| <u>*</u> Charles J. Casamento | Director | June 27, 2025 |
| <u>*</u> Hilary Kramer | Director | June 27, 2025 |
| <u>*</u> David C. Mun-Gavin | Director | June 27, 2025 |
| <u>*By: /s/ Alan Urban</u> Alan Urban Attorney-in-fact | | |

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June 27, 2025

GT Biopharma, Inc.
505 Montgomery Street, 10th Floor,
San Francisco, California 94111

Ladies and Gentlemen:

We have acted as counsel to GT Biopharma, Inc., a Delaware corporation (the “Company”), in connection with the filing of a Registration Statement on Form S-1 (the “Registration Statement”) by the Company with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Act”), relating to the registration of the offer and sale from time to time by the selling stockholders named in the Registration Statement of an aggregate of up to 120,553,632 shares (the “Shares”) of Common Stock, par value \$0.001 per share (the “Common Stock”), of the Company, which consists of (i) 14,561,913 shares of Common Stock issuable upon the conversion of 6,612 shares of Series L 10% Convertible Preferred Stock, par value \$0.001 per share (the “Preferred Shares,” and the shares of Common Stock issuable upon conversion of the Preferred Shares, the “Conversion Shares”), (ii) 14,561,913 shares of Common Stock issuable upon the exercise of warrants (the “Common Stock Warrants” and the shares of Common Stock issuable upon exercise of the Common Stock Warrants, the “Common Stock Warrant Shares”), (iii) 300,000 shares of Common Stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants,” and the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants, the “Commitment Shares”), and (iv) up to 25,000,000 shares of Common Stock, which the Company may elect, in its sole discretion, to issue and sell to certain of the selling stockholders, from time to time after the effective date of the Registration Statement, including the related prospectus contained therein and forming a part thereof, pursuant to and subject to the satisfaction of the conditions contained in the common shares purchase agreement, dated as of May 14, 2025, as amended on June 10, 2025, between the Company and the certain selling stockholders identified therein (the “CEF Shares”).

In connection with this opinion, we have examined and relied upon the Registration Statement and related prospectus, the Company’s Restated Certificate of Incorporation, as amended (the “Certificate of Incorporation”), and Amended and Restated Bylaws, as amended, each as currently in effect, and such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters. For purposes of this opinion, we have assumed that at the time of the issuance of the Conversion Shares, the Common Stock Warrant Shares, the Commitment Shares and the CEF Shares, a sufficient number of shares of Common Stock will remain authorized and available for issuance pursuant to the Certificate of Incorporation, as it then may be amended.

Subject to the foregoing and the other matters set forth herein, we are of the opinion that:

(a) when the Conversion Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name of or on behalf of the holders thereof and have been issued by the Company in the circumstances contemplated by the Certificate of Designation of, Preferences, Rights and Limitations of the Series L 10% Convertible Preferred Stock, the Conversion Shares will be duly authorized by all necessary corporate action of the Company and will be validly issued, fully paid and nonassessable;

(b) when the Common Stock Warrant Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name of or on behalf of the Common Stock Warrant holders and have been issued by the Company against payment therefor in the circumstances contemplated by the Common Stock Warrants, the Common Stock Warrant Shares will be duly authorized by all necessary corporate action of the Company and will be validly issued, fully paid and nonassessable;

(c) when the Commitment Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name of or on behalf of the Pre-Funded Warrant holders and have been issued by the Company against payment therefor, the Commitment Shares will be duly authorized by all necessary corporate action of the Company and will be validly issued, fully paid and nonassessable; and

(d) when the CEF Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name of or on behalf of the holders of CEF Shares and have been issued by the Company against payment therefor in the circumstances contemplated by the Common Shares Purchase Agreement have been duly authorized for issuance by all necessary corporate action on the part of the Company and, when issued and delivered against payment therefor in accordance with the terms of the Common Shares Purchase Agreement, will be validly issued, fully paid and non-assessable.

In rendering each of the foregoing opinions, we have assumed (i) that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the Delaware General Corporation Law and (ii) upon the issuance of any of the Conversion Shares, the Common Stock Warrant Shares, the Commitment Shares and the CEF Shares, the total number of shares of Common Stock issued and outstanding will not exceed the total number of shares of Common Stock that the Company is then authorized to issue under its Certificate of Incorporation.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof.

We hereby consent to the reference to our firm under the caption “Legal Matters” in the prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,
/s/ Baker & Hostetler LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Amendment No. 1 to the Registration Statement on Form S-1 (File 333- 287963) of GT Biopharma, Inc. of our report dated February 21, 2025, which includes an explanatory paragraph regarding the Company's ability to continue as a going concern, relating to the financial statements of GT Biopharma, Inc. as of and for the years ended December 31, 2024 and 2023 which appear in GT Biopharma, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2024 filed with the Securities and Exchange Commission on February 21, 2025. We also consent to the reference to our firm under the heading "Experts" in such Registration Statement and related Prospectus.

/s/ Weinberg & Company, P.A.
June 27, 2025
Los Angeles, California

Calculation of Filing Fee Tables

Form S-1
(Form Type)**GT Biopharma, Inc.**
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

| | Security Type | Security Class Title | Fee Calculation or Carry Forward Rule | Amount Registered | Proposed Maximum Offering Price Per Unit | Maximum Aggregate Offering Price | Fee Rate | Amount of Registration Fee | Carry Forward Form Type | Carry Forward File Number | Carry Forward Initial effective date | Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward |
|--------------------------|-----------------------------|---|---------------------------------------|-------------------|--|----------------------------------|------------|----------------------------|-------------------------|---------------------------|--------------------------------------|---|
| | Newly Registered Securities | | | | | | | | | | | |
| Fees to Be Paid | Equity | Common Stock, par value \$0.001 per share | 457(c) | 54,423,826 (1) | \$3.62 (2) | \$197,014,250.12 | 0.00015310 | \$30,162.88 | - | - | - | - |
| Fees Previously Paid | - | - | - | - | - | - | - | \$54,321.94 | - | - | - | - |
| | Carry Forward Securities | | | | | | | | | | | |
| Carry Forward Securities | - | - | - | - | - | - | - | - | - | - | - | - |
| | Total Offering Amounts | | | | | \$197,014,250.12 | | \$30,162.88 | | | | |
| | Total Fees Previously Paid | | | | | | | \$54,321.94 | | | | |
| | Total Fee Offsets | | | | | | | - | | | | |
| | Net Fee Due | | | | | | | - | | | | |

- (1) Represents shares of Common Stock, par value \$0.001 per share ("Common Stock"), of GT Biopharma, Inc. (the "Company"), which consists of (i) 14,561,913 shares of Common Stock issuable upon the conversion of 6,612 shares of Series L 10% Convertible Preferred Stock, par value \$0.001 per share, (ii) 14,561,913 shares of Common Stock issuable upon the exercise of warrants, (iii) 300,000 shares of Common Stock issuable upon the exercise of pre-funded warrants, and (iv) up to 25,000,000 shares of Common Stock, offered for resale by the selling stockholders pursuant to the prospectus contained in this Registration Statement on Form S-1. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the registrant is also registering an indeterminate number of additional shares of common stock issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act. The price per share and aggregate offering price are based on the average of the high and low prices of the registrant's Common Stock on June 26, 2025, as reported on The Nasdaq Capital Market.