

PROSPECTUS SUPPLEMENT NO. 1
(To prospectus dated July 3, 2025)

GT BIOPHARMA, INC.
UP TO 54,423,826 SHARES OF COMMON STOCK

This prospectus supplement no. 1 (this "Prospectus Supplement") amends and supplements the prospectus dated July 3, 2025 (as may be supplemented or amended from time to time, the "Prospectus"), which forms a part of the Registration Statement on Form S-1 (Registration No. 333-287963) of GT Biopharma, Inc. (the "Company," "we," "us," or "our").

The purpose of this Prospectus Supplement is to update and supplement the information included in the Prospectus. This Prospectus Supplement is not considered complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This Prospectus Supplement should be read in conjunction with the Prospectus, and if there is any inconsistency between the information in the Prospectus and this Prospectus Supplement, you should rely on this Prospectus Supplement.

As previously disclosed, on May 12, 2025, the Company entered into a securities purchase agreement with the purchasers identified therein providing for the issuance and sale to the purchasers of certain securities, including up to 6,056 shares of Series L 10% Convertible Preferred Stock, par value \$0.001 per share ("Series L Preferred Stock"). Also, as previously disclosed, pursuant to the Certificate of Designation of Preferences, Rights and Limitations of Series L 10% Convertible Preferred Stock (the "Certificate of Designation"), the holders of the Series L Preferred Stock are entitled to receive cumulative dividends at the rate per share (as a percentage of the stated value per share) of 10% per annum until May 11, 2026, increasing to 12% per annum thereafter, payable quarterly on January 1, April 1, July 1 and October 1 in cash, shares of Common Stock, par value \$0.001 ("Common Stock") (subject to the Company's satisfaction of the conditions set forth in the Certificate of Designation), or a combination thereof. On December 18, 2025, the Company provided notice to the holders of the Series L Preferred Stock that the Company would pay its dividend payable on January 1, 2026 on the Series L Preferred Stock in shares of Common Stock in lieu of cash.

You should read this prospectus and any prospectus supplement or amendment carefully before you invest in our Common Stock.

Our shares of Common Stock are listed on the Nasdaq Capital Market ("Nasdaq") under the symbol "GTBP." On January 7, 2026, the closing price of our Common Stock was \$0.732 per share.

Investing in our securities involves risks that are described in the "Risk Factors" section beginning on page 7 of the Prospectus.

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

The date of this prospectus is January 8, 2026.
