

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

**POST-EFFECTIVE AMENDMENT NO. 2
TO
FORM S-1
ON
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

TANGO THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

85-1195036
(I.R.S. Employer Identification Number)

201 Brookline Avenue
Suite 901
Boston, MA 02215
(857) 320-4900

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Barbara Weber, M.D.
President and Chief Executive Officer
Tango Therapeutics, Inc.
201 Brookline Avenue
Suite 901
Boston, MA 02215
(857) 320-4900

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom, Esq.
William D. Collins, Esq.
Goodwin Procter LLP
100 Northern Avenue
Boston, Massachusetts 02210
Tel: (617) 570-1000

Douglas Barry, Esq.
General Counsel
Tango Therapeutics, Inc.
201 Brookline Avenue
Suite 901
Boston, MA 02215
(857) 320-4900

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

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

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

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

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

EXPLANATORY NOTE

On September 10, 2021, the registrant filed a Registration Statement on Form S-1 (Registration No. 333-259448) which was declared effective by the Securities and Exchange Commission, or the SEC, on September 29, 2021, or the Registration Statement.

This Post-Effective Amendment No. 2 to Form S-1 on Form S-3, or the Post-Effective Amendment No. 2, is being filed by the registrant to convert the Registration Statement on Form S-1 into a Registration Statement on Form S-3.

No additional securities are being registered under this Post-Effective Amendment No. 2. All applicable registration fees were paid at the time of the original filing of the Registration Statement.

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 jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 21, 2022

PRELIMINARY PROSPECTUS



Up to 68,034,602 Shares of Common Stock

This prospectus relates to the offer and sale, from time to time, by the selling securityholders named in this prospectus, or the Selling Securityholders, or any of their pledgees, donees, assignees and successors-in-interest, or collectively, the permitted transferees, of (i) up to 18,610,000 shares of our common stock that were issued to certain investors, or collectively, the PIPE Investors, in a private placement in connection with the closing of the Business Combination (as defined below) and (ii) up to 49,424,602 shares of our common stock that were issued to certain former shareholders of Tango Therapeutics Sub, Inc. at the closing of the Business Combination.

We will not receive any proceeds from the sale of shares of common stock by the Selling Securityholders pursuant to this prospectus. However, we will pay the expenses, other than underwriting discounts and commissions and certain expenses incurred by the Selling Securityholders in disposing of the securities, associated with the sale of securities pursuant to this prospectus.

We are registering the securities described above for resale pursuant to certain registration rights we have granted. Our registration of the securities covered by this prospectus does not mean that the Selling Securityholders will offer or sell any of the securities. The Selling Securityholders and any of their permitted transferees may offer, sell or distribute all or a portion of the securities covered by this prospectus in a number of different ways and at varying prices. Additional information on the Selling Securityholders, and the times and manner in which they may offer and sell the securities covered by this prospectus, is provided under "*Selling Securityholders*" and "*Plan of Distribution*" in this prospectus.

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

Our common stock is listed on the Nasdaq Capital Market under the symbol "TNGX". On September 20, 2022, the closing price of our common stock was \$3.49 per share.

We are an "emerging growth company" as that term is defined under the federal securities laws and, as such, are subject to certain reduced public company reporting requirements.

Investing in our securities involves risks that are described in the "[Risk Factors](#)" section beginning on page 8 of this 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 _____, 2022.

TABLE OF CONTENTS

| | Page |
|--|-------------|
| INTRODUCTORY NOTE AND FREQUENTLY USED TERMS | i |
| ABOUT THIS PROSPECTUS | 1 |
| THE COMPANY | 3 |
| THE OFFERING | 5 |
| CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS | 6 |
| RISK FACTORS | 8 |
| USE OF PROCEEDS | 9 |
| DESCRIPTION OF CAPITAL STOCK | 10 |
| SELLING SECURITYHOLDERS | 14 |
| PLAN OF DISTRIBUTION | 21 |
| LEGAL MATTERS | 26 |
| EXPERTS | 26 |
| WHERE YOU CAN FIND MORE INFORMATION | 27 |
| INCORPORATION OF CERTAIN INFORMATION BY REFERENCE | 28 |

INTRODUCTORY NOTE AND FREQUENTLY USED TERMS

On August 10, 2021, or the Closing Date, BCTG Acquisition Corp., a Delaware corporation and our predecessor, or BCTG, consummated a business combination, or the Business Combination, pursuant to the terms of the Agreement and Plan of Merger, dated as of April 13, 2021, or the Merger Agreement, by and among BCTG, BCTG Merger Sub Inc., a Delaware corporation, or BCTG Merger Sub, and Tango Therapeutics, Inc. (now known as Tango Therapeutics Sub, Inc.), a Delaware corporation, or Old Tango. Prior to consummation of the Business Combination, Old Tango changed its name from “Tango Therapeutics, Inc.” to “Tango Therapeutics Sub, Inc.” and in connection with the Business Combination, BCTG changed its name to “Tango Therapeutics, Inc.” (the former name of Old Tango).

Pursuant to the Merger Agreement, on the Closing Date, BCTG Merger Sub merged with and into Old Tango, or the Merger, with Old Tango surviving the Merger as a wholly-owned subsidiary of BCTG, and BCTG changed its name to “Tango Therapeutics, Inc.”, or New Tango.

Unless the context otherwise requires, references in this prospectus to “we,” “us,” “our,” and the “Company” refer to Tango Therapeutics, Inc., and its consolidated subsidiaries (including Old Tango).

In addition, in this prospectus, unless otherwise stated or the context otherwise requires:

- “Founders Shares” means the outstanding shares of BCTG’s Common Stock held by the Sponsor, its directors and affiliates of its management team since June 2020 and includes the Private Shares.
- “Merger Consideration” and “Merger Consideration Shares” means the 55,000,000 shares of Common Stock issued as part of the consideration for the Business Combination.
- “Private Placement” means the private placement consummated simultaneously with BCTG’s initial public offering in which BCTG issued to the Sponsor the Private Shares.
- “Private Shares” means the shares of Common Stock of BCTG issued in the Private Placement to the Sponsor.
- “Sponsor” means BCTG Holdings, LLC, a Delaware limited liability company.
- “Tango” or “New Tango” means Tango Therapeutics, Inc., a Delaware corporation, (f/k/a BCTG Acquisition Corp.) following the closing of the Business Combination.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using the “shelf” registration process. Under this shelf registration process, the Selling Securityholders and their permitted transferees may, from time to time, sell the shares of common stock offered by them described in this prospectus. We will not receive any proceeds from the sale by the Selling Securityholders of the shares of common stock offered by them described in this prospectus.

The Selling Securityholders and their permitted transferees may use the shelf registration statement to sell such shares of common stock from time to time through any means described in the section entitled “*Plan of Distribution.*” More specific terms of any shares of common stock that the Selling Securityholders and their permitted transferees offer and sell may be provided in a prospectus supplement that describes, among other things, the specific amounts and prices of the shares of common stock being offered and the terms of the offering.

A prospectus supplement may add, update or change information included in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. You should rely only on the information contained in, or incorporated by reference into, this prospectus, and any applicable prospectus supplement. You should read both this prospectus and any applicable prospectus supplement or post-effective amendment to the registration statement together with the additional information to which we refer you in the section of this prospectus entitled “*Where You Can Find More Information.*”

Neither we nor the Selling Securityholders have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus or any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Securityholders take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

This prospectus is an offer to sell only the shares of common stock offered hereby and only under circumstances and in jurisdictions where it is lawful to do so. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities, in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement is accurate only as of the date on the front of those documents 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 or any applicable prospectus supplement, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

For investors outside the United States: neither we nor the Selling Securityholders have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of this prospectus outside the United States.

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 in this prospectus under “*Where You Can Find More Information.*”

[Table of Contents](#)

This prospectus contains references to trademarks, trade names and service marks belonging to other entities. Solely for convenience, trademarks, trade names and service marks referred to in this prospectus may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entities.

THE COMPANY

This summary highlights selected information from this prospectus and does not contain all of the information that is important to you in making an investment decision. This summary is qualified in its entirety by the more detailed information included elsewhere in this prospectus. Before making your investment decision with respect to our securities, you should carefully read this entire prospectus, including the information under “Risk Factors.”

Overview

We are a precision oncology company leveraging our state-of-the-art target discovery platform to identify novel targets and develop new drugs directed at tumor suppressor gene loss in defined patient populations with high unmet medical need. Tumor suppressor gene loss remains a largely untouched target space specifically because these genetic events cannot be directly targeted. Empowered by recent advances in CRISPR technology, we are now able to employ a unique functional genomics approach and apply the principles of synthetic lethality to target the loss of specific tumor suppressor genes at scale. We believe this will result in establishing a sustainable pipeline designed to deliver meaningful clinical benefit to patients. Our novel small molecules are designed to be selectively active in cancer cells with specific tumor suppressor gene loss, killing those cancer cells while being relatively inert in normal cells. We also are extending this target space beyond the classic, cell-autonomous effects of tumor suppressor gene loss to include the discovery of novel targets that reverse the effects of tumor suppressor gene loss that prevent the immune system from recognizing and killing cancer cells (immune evasion). We believe this approach will provide the ability to deliver the deep, sustained target inhibition necessary for prolonged tumor regression and meaningful clinical benefit as a result of the unique ability of synthetic lethal targeting to spare normal cells.

Our lead program, TNG908, a protein arginine methyl transferase 5, or PRMT5, inhibitor is synthetic lethal with MTAP deletion, and is being developed as a treatment for cancers with MTAP deletions. MTAP deletions occur in 10% to 15% of all human cancers. In preclinical studies, TNG908 demonstrated 15-fold greater potency in cells with MTAP deletions than those without and showed strong regressions in multiple cancer types. In the first quarter of 2022, the U.S. Food and Drug Administration (FDA) cleared the Investigational New Drug (IND) application and granted Fast Track designation to TNG908. Additionally, in the third quarter of 2022, the FDA granted Orphan Drug Designation to TNG908 for the treatment of malignant peripheral nerve sheath tumors (MPNST). We are actively enrolling, and have begun dosing, patients in the TNG908 Phase 1/2 clinical trial, which will evaluate safety and efficacy in multiple indications, with specific cohorts for non-small cell lung cancer, MPNST, mesothelioma and cholangiocarcinoma, with glioblastoma planned for the dose expansion phase. The clinical trial also includes a histology-agnostic cohort for all other MTAP-deleted solid tumors. We expect to have initial safety and efficacy data in the first half of 2023.

Given the large number of patients with MTAP-deleted cancers, we are investing in our PRMT5 franchise to develop a product candidate with increased potency, MTAP-deletion selectivity, as well as longer target coverage. TNG462, our next-generation PRMT5 inhibitor, is 45-fold more potent in cells with an MTAP deletion than those without and induces deep tumor regressions in preclinical models of multiple cancer types. We plan to file an IND for TNG462 in the first half of 2023. The clinical development path for TNG462 is expected to be similar to TNG908, evaluating safety and efficacy in multiple tumor types in a Phase 1/2 clinical trial. Glioblastoma will be excluded from the Phase 1/2 clinical trial as TNG462 does not cross the blood-brain barrier in preclinical non-human primate models.

Our development candidate, TNG260, an inhibitor of an undisclosed synthetic lethal target (Target 3), reverses the immune evasion effect of serine-threonine kinase 11 (STK11) loss-of-function mutations. In syngeneic models with an STK11 mutation and an intact immune system, the combination of TNG260 with an anti-PD1 antibody resulted in sustained complete tumor regressions and the induction of immune memory against re-implantation of tumors. We expect to file an IND for TNG260 in the first half 2023.

Table of Contents

We are also developing a ubiquitin-specific protease 1, or USP1, inhibitor that is synthetic lethal with BRCA1 and BRCA2-mutant tumors. In vitro and in vivo preclinical data for USP1 demonstrated potent anti-tumor activity. We expect this molecule to have both single agent activity in PARPi-naïve and PARPi-resistant BRCA1/2 mutant cancers and to synergize with PARP inhibitors. We anticipate declaring a development candidate in the second half of 2022 and filing an IND for this program in 2023.

Corporate Information

Our principal corporate office is located at 201 Brookline Avenue, Suite 901, Boston, MA 02215, and our telephone number is 857-320-4900. Our website address is <https://tangotx.com>. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an “emerging growth company,” under the JOBS Act. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of delayed adoption of new or revised accounting standards and, therefore, we will be subject to the same requirements to adopt new or revised accounting standards as private entities. As an emerging growth company, we may take advantage of certain exemptions and reduced reporting requirements under the JOBS Act. Subject to certain conditions, as an emerging growth company and a smaller reporting company:

- we may present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations in our periodic reports and registration statements;
- we may avail ourselves of the exemption from providing an auditor’s attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- we may provide reduced disclosure about our executive compensation arrangements; and
- we may not require nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments.

We will remain an emerging growth company until the earliest of (i) December 31, 2025, (ii) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more, (iii) the last day of the fiscal year in which we are deemed to be a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year, provided we have been subject to the Exchange Act for at least 12 calendar months and have filed at least one annual report pursuant to the Exchange Act or (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. We may choose to take advantage of some but not all of these exemptions.

We are also a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates is less than \$700 million and our annual revenue was less than \$100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

THE OFFERING

The following summary of the offering contains basic information about the offering and our Common Stock and is not intended to be complete. It does not contain all the information that may be important to you. For a more complete understanding of our Common Stock, please refer to the section titled "Description of Capital Stock."

| | |
|--|---|
| Shares of Common Stock that may be offered and sold from time to time by the Selling Securityholders named herein | Up to 68,034,602 shares of Common Stock consisting of (i) 18,610,000 shares of Common Stock issued in a private placement consummated concurrently with the Merger and (ii) 49,424,602 shares of Common Stock issued to certain former shareholders of Tango Therapeutics Sub, Inc. at the closing of the Business Combination. |
| Common stock outstanding | 88,067,254 shares of Common Stock as of September 14, 2022. |
| Use of proceeds | All of the shares of Common Stock offered by the Selling Securityholders pursuant to this prospectus will be sold by the Selling Securityholders for their respective accounts. We will not receive any of the proceeds from these sales. |
| Market for our common stock | Our Common Stock is listed on the Nasdaq Capital Market under the symbol "TNGX." |
| Risk factors | Any investment in the Common Stock offered hereby is speculative and involves a high degree of risk. You should carefully consider the information set forth under "Risk Factors" in this prospectus. |

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements relate to, among others, our plans, objectives and expectations for our business, operations and financial performance and condition, and can be identified by terminology such as “may,” “will,” “could,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “project,” “seek,” “endeavor,” “target,” “continue” and similar expressions that do not relate solely to historical matters. Forward-looking statements are based on management’s belief and assumptions and on information currently available to management. Although we believe that the expectations reflected in forward-looking statements are reasonable, such statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by forward-looking statements.

Forward-looking statements include, but are not limited to, statements about:

- initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of IND filings, active enrollment in clinical trials, and initiation and completion of studies or clinical trials and related preparatory work, and the period during which the results of the clinical trials (including initial and final trial results) will become available;
- our ability to discover and develop product candidates efficiently (including the advancement of development candidates on the timelines identified);
- our ability and the potential to manufacture our drug substances and product candidates successfully for preclinical use, for clinical trials and on a larger scale for commercial use, if approved;
- the ability and willingness of our third-party strategic collaborators to license and to continue research and development activities relating to our development candidates and product candidates;
- our ability to obtain funding for our operations necessary to complete further research, development and commercialization of our product candidates (and that existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital expenditure requirements at least into the second half of 2024);
- our ability to obtain and, if approved, maintain regulatory approval of our product candidates;
- our ability to commercialize our products, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, and strategic plans for our business and product candidates;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;
- estimates of our future expenses, capital requirements, and our need for additional financing;
- the potential benefits of strategic collaboration agreements, our ability to enter into strategic collaborations or arrangements, and our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of product candidates (if approved) and any other approved products;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;

Table of Contents

- our financial performance, including the expectation that we will continue to incur operating losses and negative cash flow;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our ability to produce our products or product candidates with advantages in turnaround times or manufacturing cost;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- the impact of laws and regulations;
- developments relating to our competitors and industry;
- the effect of the on-going COVID-19 pandemic, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations, including but not limited to our preclinical studies and clinical trials and any future studies or trials; and
- other risks and uncertainties, including those under the caption “*Risk Factors*.”

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

We may from time-to-time provide estimates, projections and other information concerning our industry, our business and the markets for our programs, product candidates and collaborations. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from our own internal estimates and research as well as from reports, research surveys, studies, and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus and the documents that we reference therein and have filed with the SEC as exhibits thereto completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements. These estimates involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors, including those discussed under “Item 1A: Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K, our subsequent Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K, and the section of any accompanying prospectus supplement entitled “*Risk Factors*.”

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks set forth in our filings with the SEC that are incorporated by reference herein and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described in the documents incorporated herein by reference, including our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K and the other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

USE OF PROCEEDS

All of the shares of Common Stock offered by the Selling Securityholders pursuant to this prospectus will be sold by the Selling Securityholders for their respective accounts. We will not receive any of the proceeds from these sales.

DESCRIPTION OF CAPITAL STOCK

The following summary of certain provisions of Tango's securities does not purport to be complete and is subject to the Second Amended and Restated Certificate of Incorporation, or the Certificate of Incorporation or Charter, the Amended and Restated Bylaws, or the Bylaws, and the provisions of applicable law. Copies of the Certificate of Incorporation and the Bylaws are attached to this prospectus as Exhibits 3.1 and 3.2, respectively.

Authorized and Outstanding Stock

The Charter authorizes the issuance of 210,000,000 shares, consisting of 200,000,000 shares of Common Stock, \$0.001 par value per share, and 10,000,000 shares of preferred stock, \$0.001 par value, all of which shares of preferred stock will be undesignated. As of September 14, 2022, there were 88,067,254 shares of Common Stock outstanding and no shares of preferred stock outstanding.

Common Stock

The Charter provides the following with respect to the rights, powers, preferences and privileges of the Common Stock.

Voting Power

Except as otherwise required by law or as otherwise provided in any certificate of designation for any series of preferred stock, the holders of Common Stock possess all voting power for the election of Tango's directors and all other matters requiring stockholder action. Holders of Common Stock are entitled to one vote per share on matters to be voted on by stockholders.

Dividends

Holders of Common Stock will be entitled to receive such dividends, if any, as may be declared from time to time by Tango's board of directors in its discretion out of funds legally available therefor. In no event will any stock dividends or stock splits or combinations of stock be declared or made on Common Stock unless the shares of Common Stock at the time outstanding are treated equally and identically.

Liquidation, Dissolution and Winding Up

In the event of Tango's voluntary or involuntary liquidation, dissolution, distribution of assets or winding-up, the holders of the Common Stock will be entitled to receive an equal amount per share of all of Tango's assets of whatever kind available for distribution to stockholders, after the rights of the holders of the preferred stock have been satisfied.

Preemptive or Other Rights

Our Common Stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

Registration Rights

Certain of our stockholders, or Holders, hold registration rights pursuant to the Amended and Restated Registration and Stockholder Rights Agreement. Stockholders holding a majority-in-interest of such registrable securities are entitled to make a written demand for registration under the Securities Act of all or part of their registrable securities.

Table of Contents

In particular, the Amended and Restated Registration and Stockholder Rights Agreement provides for the following registration rights:

- *Shelf registration/demand registration rights.* At any time and from time to time when an effective shelf registration statement is on file with the SEC, a Holder may request to sell all or any portion of such Holder's Registrable Securities by means of an underwritten takedown off of the shelf registration statement, except that Tango is only obligated to effect such underwritten shelf takedown if such offering will include Registrable Securities proposed to be sold by the requesting Holder, either individually or together with other requesting Holders, with a total offering price reasonably expected to exceed, in the aggregate, \$20.0 million. Additionally, Tango is not required to effect more than one underwritten shelf takedown in any six-month period.
- *Piggyback registration rights.* Subject to exceptions for certain offerings and registration statements, if at any time, Tango proposes to file a registration statement under the Securities Act, in connection with an offering of its equity securities or securities or other obligations exercisable or exchangeable for, or convertible into, its equity securities, either for its own account or for the account of stockholders of Tango, the Holders are entitled to include their Registrable Securities in such registration statement.
- *Expenses and indemnification.* The fees, costs and expenses of registrations pursuant to the registration rights granted to the Holders under the Amended and Restated Registration and Stockholder Rights Agreement will be borne by Tango, except that underwriting discounts and selling commissions, brokerage fees, and certain other incremental selling expenses will be borne by the holders of the shares being registered. The Amended and Restated Registration and Shareholder Rights Agreement contains customary cross-indemnification provisions, under which Tango is obligated to indemnify holders of Registrable Securities in the event of material misstatements or omissions in the registration statement attributable to Tango, and holders of Registrable Securities are obligated to indemnify Tango for material misstatements or omissions attributable to them.

Securities of Tango shall cease to be Registrable Securities when (i) a registration statement with respect to the sale of such securities shall have become effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, (ii) such securities are freely saleable under Rule 144 under the Securities Act without any volume limitations or (iii) such securities shall have ceased to be outstanding.

The Amended and Restated Registration and Stockholder Rights Agreement shall terminate on the earlier of (i) the 10th anniversary of the date of the agreement and (ii) with respect to any Holder, on the date that such Holder no longer holds any Registrable Securities.

The foregoing description of the Amended and Restated Registration and Stockholder Rights Agreement does not purport to be complete and is qualified in its entirety by the full text of the Amended and Restated Registration and Stockholder Rights Agreement, a copy of which is attached hereto as Exhibit 10.3 and is incorporated herein by reference.

Anti-Takeover Provisions

Proposed Charter and Amended By-laws

Our Charter and Amended By-laws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. Among other provisions, the Charter and Amended By-laws include the following:

- permit Tango's board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change of control;

Table of Contents

- provide that the authorized number of directors may be changed only by resolution of Tango’s board of directors;
- provide that, subject to the rights of any series of preferred stock to elect directors, directors may be removed only with cause by the holders of at least 66 2/3% of all of our then-outstanding shares of the capital stock entitled to vote generally at an election of directors;
- provide that, subject to the rights of any series of preferred stock to fill director vacancies, all director vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder’s notice;
- provide that Special Meetings of Tango’s stockholders may be called by Tango’s board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;
- provide that Tango’s board of directors will be divided into three classes of directors, with the classes to be as nearly equal as possible, and with the directors serving three-year terms, therefore making it more difficult for stockholders to change the composition of our board of directors; and
- not provide for cumulative voting rights, therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose; and
- provide that any amendment of our Charter must first be approved by a majority of Tango’s board of directors, and if required by law or our Charter, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and Charter must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class. The Amended By-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of a majority of the outstanding shares entitled to vote on the amendment.

The combination of these provisions will make it more difficult for the existing stockholders to replace Tango’s board of directors as well as for another party to obtain control of Tango’s by replacing Tango’s board of directors. Because Tango’s board of directors has the power to retain and discharge its officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for Tango’s board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of Tango’s board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce Tango’s vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for Tango’s shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock.

Delaware Anti-Takeover Law

Tango has opted out of Section 203 of the DGCL. Section 203 of the DGCL prohibits a Delaware corporation from engaging in a “business combination” with an “interested stockholder” (i.e. a stockholder owning 15% or more of company’s voting stock) for three years following the time that the “interested stockholder” becomes such, subject to certain exceptions.

Limitations on Liability and Indemnification of Officers and Directors

The Charter limits the liability of the directors of Tango to the fullest extent permitted by the DGCL, and the Amended By-laws provide that we will indemnify them to the fullest extent permitted by such law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. Under the terms of such indemnification agreements, we are required to indemnify each of our directors and officers, to the fullest extent permitted by the laws of the state of Delaware, if the basis of the indemnitee's involvement was by reason of the fact that the indemnitee is or was a director or officer of Tango or any of its subsidiaries or was serving at Tango's request in an official capacity for another entity. We must indemnify our officers and directors against all reasonable fees, expenses, charges and other costs of any type or nature whatsoever, including any and all expenses and obligations paid or incurred in connection with investigating, defending, being a witness in, participating in (including on appeal), or preparing to defend, be a witness or participate in any completed, actual, pending or threatened action, suit, claim or proceeding, whether civil, criminal, administrative or investigative, or establishing or enforcing a right to indemnification under the indemnification agreement. The indemnification agreements also require us, if so requested, to advance within ten days of such request all reasonable fees, expenses, charges and other costs that such director or officer incurred, provided that such person will return any such advance if it is ultimately determined that such person is not entitled to indemnification by us. Any claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Exclusive Jurisdiction of Certain Actions

The Bylaws require, to the fullest extent permitted by law, unless Tango consents in writing to the selection of an alternative forum, that derivative actions brought in the name of Tango, actions against directors, officers and employees for breach of fiduciary duty, actions asserting a claim arising pursuant to any provision of the DGCL or the Certificate of Incorporation or the Bylaws, actions to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or the Bylaws and actions asserting a claim against Tango governed by the internal affairs doctrine may be brought only in the Court of Chancery in the State of Delaware and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel. Although we believe this provision benefits Tango by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers.

In addition, the Bylaws require that, unless Tango consents in writing to the selection of an alternative forum, the United States District Court for the District of Massachusetts shall be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act. Tango has chosen the United States District Court for the District of Massachusetts as the exclusive forum for such Securities Act causes of action because Tango's principal executive offices are located in Boston, Massachusetts.

Listing of Securities

Our Common Stock is listed on the Nasdaq Capital Market under the symbol "TNGX".

Transfer Agent

The transfer agent for our Common Stock is Computershare Trust Company, N.A.

SELLING SECURITYHOLDERS

This prospectus relates to the resale by the Selling Securityholders from time to time of up to an aggregate of 68,034,602 shares of common stock, consisting of up to an aggregate of 18,610,000 shares of our common stock that were issued to the PIPE Investors in the PIPE Financing and up to 49,424,602 shares of common stock issued to certain former shareholders of Tango Therapeutics Sub, Inc. at the closing of the Business Combination. The Selling Securityholders may from time to time offer and sell any or all of the securities set forth below pursuant to this prospectus and any accompanying prospectus supplement. When we refer to the “Selling Securityholders” in this prospectus, we mean the persons listed in the table below, their permitted transferees and others who later come to hold any of the Selling Securityholders’ interest in the common stock other than through a public sale.

The following table sets forth, as of the date of this prospectus, the names of the Selling Securityholders, the aggregate number of shares of common stock beneficially owned, the aggregate number of shares of common stock that the Selling Securityholders may offer pursuant to this prospectus and the number of shares of common stock beneficially owned by the Selling Securityholders after the sale of the securities offered hereby. The percentage of beneficial ownership of after the offered securities are sold is calculated based on 88,067,254 shares of common stock outstanding as of September 14, 2022.

We have determined beneficial ownership in accordance with the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated below, to our knowledge, the persons and entities named in the tables have sole voting and sole investment power with respect to all securities that they beneficially own, subject to community property laws where applicable.

We cannot advise you as to whether the Selling Securityholders will in fact sell any or all of such common. In addition, the Selling Securityholders may sell, transfer or otherwise dispose of, at any time and from time to time, the common stock in transactions exempt from the registration requirements of the Securities Act after the date of this prospectus. For purposes of this table, we have assumed that the Selling Securityholders will have sold all of the securities covered by this prospectus upon the completion of the offering.

Selling Securityholder information for each additional Selling Securityholder, if any, will be set forth by prospectus supplement to the extent required prior to the time of any offer or sale of such Selling Securityholder’s shares pursuant to this prospectus. Any prospectus supplement may add, update, substitute, or change the information contained in this prospectus, including the identity of each Selling Securityholder and the number of shares registered on its behalf. A Selling Securityholder may sell or otherwise transfer all, some or none of such shares in this offering. See “*Plan of Distribution*.” Unless otherwise noted, the business address of each of those listed in the table below is 201 Brookline Ave, Suite 901, Boston, MA 02215.

| Name of Selling Securityholder | Before the Offering | | After the Offering | |
|--|--|---|--|---|
| | Number of Shares of Common Stock Beneficially Owned | Number of Shares of Common Stock Being Offered | Number of Shares of Common Stock Beneficially Owned | Percentage of Outstanding Shares of Common Stock |
| Alan Huang ⁽¹⁾ | 135,887 | 135,887 | — | — |
| Alyeska Master Fund, L.P. ⁽²⁾ | 635,471 | 200,000 | 435,471 | * |
| Avoro Life Sciences Fund LC ⁽³⁾ | 1,550,000 | 750,000 | 800,000 | * |
| Entities affiliated with Bain Capital Life Sciences ⁽⁴⁾ | 1,921,790 | 1,000,000 | 921,790 | 1.1% |
| Entities Affiliated with Baker Bros. Advisors LP ⁽⁵⁾ | 750,000 | 750,000 | — | — |
| Barbara Weber ⁽⁶⁾ | 1,367,592 | 1,367,592 | — | — |
| BCTG Holdings, LLC ⁽⁷⁾ | 6,988,450 | 6,988,450 | — | — |
| Benjamin Cravatt ⁽⁸⁾ | 17,400 | 17,400 | — | — |
| BlackRock, Inc. ⁽⁹⁾ | 500,000 | 500,000 | — | — |
| Blackwell Partners LLC—Series A ⁽²⁹⁾ | 14,547 | 14,547 | — | — |

[Table of Contents](#)

| Name of Selling Securityholder | Before the Offering | | After the Offering | |
|---|---|--|---|--|
| | Number of Shares of Common Stock Beneficially Owned | Number of Shares of Common Stock Being Offered | Number of Shares of Common Stock Beneficially Owned | Percentage of Outstanding Shares of Common Stock |
| Entities affiliated with Boxer Capital ⁽¹⁰⁾ | 6,973,166 | 6,973,166 | — | — |
| Casdin Partners Master Fund, L.P. ⁽¹¹⁾ | 3,987,910 | 3,987,910 | — | — |
| Charles M. Baum ⁽¹²⁾ | 40,600 | 40,600 | — | — |
| Citadel CEMF Investments Ltd. ⁽¹³⁾ | 100,000 | 100,000 | — | — |
| Entities affiliated with Cormorant ⁽¹⁴⁾ | 4,099,184 | 4,099,184 | — | — |
| Daniella Beckman ⁽¹⁵⁾ | 63,867 | 63,867 | — | — |
| Entities Affiliated with EcoR1 Capital, LLC ⁽¹⁶⁾ | 500,000 | 500,000 | — | — |
| Entities Affiliated with Farallon Partners, L.L.C. ⁽¹⁷⁾ | 300,000 | 300,000 | — | — |
| Entities Affiliated with FMR LLC ⁽¹⁸⁾ | 4,000,000 | 4,000,000 | — | — |
| Fifth Avenue Private Equity 15 LLC ⁽¹⁹⁾ | 708,384 | 708,384 | — | — |
| Foresite Capital Fund V, L.P. ⁽²⁰⁾ | 500,000 | 500,000 | — | — |
| Harvard Management Private Equity Corporation ⁽²¹⁾ | 708,385 | 708,385 | — | — |
| Entities affiliated with Hillhouse Capital Management, Ltd. ⁽²²⁾ | 4,373,982 | 4,373,982 | — | — |
| Gilead Sciences, Inc. ⁽²³⁾ | 4,854,443 | 4,854,443 | — | — |
| Jamie G. Christensen ⁽²⁴⁾ | 40,600 | 40,600 | — | — |
| Janus Henderson Biotech Innovation Master Fund Limited ⁽²⁵⁾ | 600,000 | 600,000 | — | — |
| Jeffrey H. Hager ⁽²⁶⁾ | 27,400 | 27,400 | — | — |
| Logos Global Master Fund, LP ⁽²⁷⁾ | 200,000 | 200,000 | — | — |
| Mike Varney Advisors ⁽²⁸⁾ | 2,500 | 2,500 | — | — |
| Nantahala Capital Partners II Limited Partnership ⁽²⁹⁾ | 16,677 | 16,677 | — | — |
| Nantahala Capital Partners Limited Partnership ⁽²⁹⁾ | 6,162 | 6,162 | — | — |
| Nantahala Capital Partners SI, LP ⁽²⁹⁾ | 35,686 | 35,686 | — | — |
| NCP QR LP ⁽²⁹⁾ | 7,346 | 7,346 | — | — |
| NCP RFM LP ⁽²⁹⁾ | 18,376 | 18,376 | — | — |
| NexTx Insights, LLC ⁽³⁰⁾ | 17,400 | 17,400 | — | — |
| Entities Affiliated with The Pellini Family Trust ⁽³¹⁾ | 172,872 | 172,872 | — | — |
| Peter Olson ⁽³²⁾ | 2,500 | 2,500 | — | — |
| PH Investments, LLC ⁽³³⁾ | 442,739 | 442,739 | — | — |
| Entities Affiliated with Portland Investment ⁽³⁴⁾ | 354,192 | 354,192 | — | — |
| RA Capital Healthcare Fund, L.P. ⁽³⁵⁾ | 2,250,000 | 1,000,000 | 1,250,000 | 1.4% |
| Richard Heyman ⁽³⁶⁾ | 40,600 | 40,600 | — | — |
| Samsara BioCapital, L.P. ⁽³⁷⁾ | 700,000 | 700,000 | — | — |
| SCubed Capital, LLC ⁽³⁸⁾ | 531,288 | 531,288 | — | — |
| Sheila Gujrathi ⁽³⁹⁾ | 47,400 | 47,400 | — | — |
| Silver Creek CS SAV, L.L.C. ⁽²⁹⁾ | 1,206 | 1,206 | — | — |
| Sobrato Capital ⁽⁴⁰⁾ | 354,486 | 354,486 | — | — |
| Southpoint Master Fund, LP ⁽⁴¹⁾ | 3,000,000 | 1,000,000 | 2,000,000 | 2.3% |
| Third Rock Ventures IV, L.P. ⁽⁴²⁾ | 19,363,975 | 19,363,975 | — | — |
| Troy Wilson ⁽⁴³⁾ | 17,400 | 17,400 | — | — |
| Woodline Partners LP ⁽⁴⁴⁾ | 100,000 | 100,000 | — | — |

* Less than one percent

(1) Consists of 135,887 shares of common stock. Dr. Huang is our Chief Scientific Officer.

Table of Contents

- (2) Alyeska Investment Group, L.P., the investment manager of Alyeska Master Fund, L.P. (“Alyeska”), has voting and investment control of the shares of common stock held by Alyeska. Anand Parekh is the Chief Executive Officer of Alyeska Investment Group, L.P. and may be deemed to be the beneficial owner of such shares. Mr. Parekh, however, disclaims any beneficial ownership of the shares held by Alyeska. The registered address of Alyeska Master Fund, L.P. is at c/o Maples Corporate Services Limited, P.O. Box 309, Ugland House, South Church Street George Town, Grand Cayman, KY1-1104, Cayman Islands. Alyeska Investment Group, L.P. is located at 77 W. Wacker, Suite 700, Chicago IL 60601.
- (3) Behzad Aghazadeh serves as the portfolio manager and Managing Partner of Avoro Life Sciences Fund LLC. The address of Avoro Life Sciences Fund LLC and Behzad Aghazadeh is 110 Greene Street, Suite 800 NY, NY 10012.
- (4) The shares reported under “Number of Shares of Common Stock Beneficially Owned” before the offering, consist of (i) the following shares of Common Stock purchased in the PIPE Financing: (a) 1,713,138 shares of common stock and 208,652 shares of common stock purchased by Bain Capital Life Sciences Fund II, L.P., or BCLS II, and BCIP Life Sciences Associates, LP, respectively, or BCIPLS, and together with BCLS II, the Bain Capital Life Science Entities. The shares reported under “Number of Shares of Common Stock Being Offered” consist of 891,428 shares held by BCLS II and 108,572 shares held by BCIPLS. Bain Capital Life Science Investors, LLC, or BCLSI, whose managers are Jeffrey Schwartz and Adam Koppel, is the manager of the general partner of BCLS II and governs the investment strategy and decision-making process with respect to investments held by BCIPLS. As a result, each of BCLSI, Mr. Schwartz and Dr. Koppel may be deemed to share voting and dispositive power with respect to the shares of common stock held by the Bain Capital Life Sciences Entities. The address of the Bain Capital Life Sciences Entities is c/o Bain Capital Life Sciences, LP, 200 Clarendon Street, Boston, MA 02116.
- (5) Consists of (i) 55,202 shares of common stock held directly by 667, L.P. , or 667, and (ii) 694,798 shares of common stock held directly by Baker Brothers Life Sciences, L.P., or Life Sciences, and together with 667, the BBA Funds. Baker Bros. Advisors LP, or BBA, is the investment adviser to the BBA Funds and has the sole voting and investment power with respect to the securities held by the BBA Funds and thus may be deemed to beneficially own such securities. Baker Bros. Advisors (GP) LLC, or BBA GP, is the sole general partner of BBA and thus may be deemed to beneficially own the securities held by the BBA Funds. The principals of BBA GP are Julian C. Baker and Felix J. Baker, who may be deemed to beneficially own the securities held by the BBA Funds. The business address of BBA, BBA GP, Julian C. Baker and Felix J. Baker is 860 Washington Street, 3rd Floor, New York, NY 10014. The BBA Funds’ respective general partners relinquished to BBA all discretion and authority with respect to the investment and voting power over securities held by the BBA Funds, and thus BBA has complete and unlimited discretion and authority with respect to the BBA Funds’ investments and voting power over investments. Therefore, the BBA Funds should not be deemed to be beneficial owners of the securities directly held by them.
- (6) Consists of 1,367,592 shares of common stock. Dr. Weber is our President and Chief Executive Officer and a member of our board of directors.
- (7) A board consisting of Aaron Davis, Christopher Fuglesang and Andrew Ellis makes voting and dispositive decisions with respect to the securities owned by BCTG Holdings, LLC. Each individual above disclaims beneficial ownership over the shares owned by BCTG Holdings LLC except to the extent of their pecuniary interest therein. The address of BCTG Holdings, LLC is 12860 El Camino Real, Ste 300 San Diego, CA 92130.
- (8) The address for Benjamin Cravatt, Ph.D. is 5751 Chelsea Avenue, La Jolla, CA 92037.
- (9) The registered holder of the referenced shares to be registered is the following fund under management by a subsidiary of BlackRock, Inc.: BlackRock Health Sciences Trust II. BlackRock, Inc. is the ultimate parent holding company of such subsidiary. On behalf of such subsidiary, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such fund, have voting and investment power over the shares held by the fund which is the registered holder of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such fund. The address of such fund and such portfolio managers is 60 State Street 19th/20th Floor, Boston, MA 02109. Shares shown include only the securities being registered for resale and may not incorporate all shares deemed to be beneficially held by the registered holder or BlackRock, Inc.

Table of Contents

- (10) Consists of (i) 6,871,642 shares of common Stock held by Boxer Capital, LLC and (ii) 101,524 shares of common stock held by MVA Investors, LLC. Boxer Asset Management, Inc. and Joseph Lewis hold shared voting and dispositive power over the shares held by Boxer Capital, LLC. Each individual and entity above disclaims beneficial ownership over the shares owned by Boxer Capital except to the extent of its or their pecuniary interest therein. Aaron I. Davis is the Chief Executive Officer of MVA Investors, LLC. Mr. Davis disclaims beneficial ownership over the shares owned by MVA Investors, LLC except to the extent of his pecuniary interest therein. Mr. Davis is a member of our board of directors. The address is 12860 El Camino Real, Suite 300, San Diego, CA 92130.
- (11) The shares reflected as beneficially owned by Casdin Partners Master Fund, LP in the above, are owned directly by Casdin Partners Master Fund, LP and may be deemed to be indirectly beneficially owned by (i) Casdin Capital, LLC, the investment adviser to Casdin Partners Master Fund, LP, (ii) Casdin Partners GP, LLC, the general partner of Casdin Partners Master Fund LP, and (iii) Eli Casdin, the managing member of Casdin Capital, LLC and Casdin Partners GP, LLC. Each of Casdin Capital, LLC, Casdin Partners GP, LLC and Eli Casdin disclaims beneficial ownership of such securities except to the extent of their respective pecuniary interest therein. The address of each of Casdin Partners Master Fund, L.P., Casdin Capital, LLC, Casdin Partners GP, LLC and Eli Casdin is 1350 Avenue of the Americas, Suite 2600 New York, NY 10019.
- (12) The address for Dr. Baum is 6960 The Preserve Way, San Diego, CA 92130. Dr. Baum was previously a director of BCTG Acquisition Corp. prior to the Business Combination.
- (13) The shares are directly held by Citadel CEMF Investments Ltd., or Citadel CEMF. Citadel Advisors LLC, or Citadel Advisors, is the portfolio manager of Citadel CEMF. Citadel Advisors Holdings LP, or CAH, is the sole member of Citadel Advisors. Citadel GP LLC, or CGP, is the general partner of CAH. Kenneth Griffin owns a controlling interest in CGP. Mr. Griffin, as the owner of a controlling interest in CGP, may be deemed to have shared power to vote and/or shared power to dispose of the securities held by Citadel CEMF. This disclosure shall not be construed as an admission that Mr. Griffin or any of the Citadel related entities listed above is the beneficial owner of any securities of the Company other than the securities actually owned by such person (if any). The address of Citadel CEMF is c/o Citadel Advisors LLC, 601 Lexington Avenue, New York, NY 10022.
- (14) Consists of (i) 31,341 shares held by CRMA SPV LP, or CRMA, (ii) 590,894 shares held by Cormorant Global Healthcare Master Fund LP, or Cormorant Master Fund, (iii) 10,000 shares purchase by Cormorant Master Fund in the PIPE Financing and (iv) 2,476,949 held by Cormorant Private Healthcare Fund II, LP, or Cormorant Private Fund. Bihua Chen serves as the portfolio manager of each of CRMA, Cormorant Master Fund and Cormorant Private Fund and is the natural person who exercises voting and dispositive power over the shares. Ms. Chen disclaims any beneficial ownership of the securities held by CRMA, Cormorant Master Fund and Cormorant Private Fund other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address is c/o Cormorant Asset Management, LP, 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (15) Consists of 63,867 shares of common stock. Ms. Beckman is our Chief Financial Officer.
- (16) Consists of 57,743 shares held by EcoR1 Capital Fund, L.P. and 442,257 shares held by EcoR1 Capital Fund Qualified, L.P. (together with EcoR1 Capital Fund, L.P., the "EcoR1 Funds"). Oleg Nodelman directly or indirectly controls the EcoR1 Funds and as a result may be deemed to have voting and dispositive power over the securities held directly by the EcoR1 Funds. The address for the EcoR1 Funds is 357 Tehama Street, Suite 3, San Francisco, CA 94103.
- (17) Consists of 5,000 shares purchased by Farallon Capital (AM) Investors, L.P., 23,700 shares purchased by Farallon Capital F5 Master I, L.P., 15,900 shares purchased by Farallon Capital Institutional Partners II, L.P., 9,500, shares purchased by Farallon Capital Institutional Partners III, L.P., 82,400 shares purchased by Farallon Capital Institutional Partners, L.P., 113,300 shares purchased by Farallon Capital Offshore Investors II, L.P., 39,000 shares purchased by Farallon Capital Partners, L.P. and 11,200 shares purchased by Four Crossings Institutional Partners V, L.P. (collectively, the "FPLLC Entities"). Farallon Partners, L.L.C., or FPLLC, as the general partner of each of the FPLLC Entities and may be deemed to beneficially own such shares held by each of the FPLLC Entities. Farallon F5 (GP), L.L.C., or F5MI GP, as the general partner of Farallon Capital F5 Master I, L.P., or F5MI, may be deemed to beneficially own such shares held

Table of Contents

by F5MI. Farallon Institutional (GP) V, L.L.C., or FCIP V GP, as the general partner of Four Crossings Institutional Partners V, L.P., or FCIP V, may be deemed to beneficially own such shares held by FCIP V. Each of Philip D. Dreyfuss, Michael B. Fisch, Richard B. Fried, Nicolas Giauque, David T. Kim, Michael G. Linn, Rajiv A. Patel, Thomas G. Roberts, Jr., William Seybold, Andrew J. M. Spokes, John R. Warren and Mark C. Wehrly (collectively, the “Farallon Managing Members”), as a (i) managing member or senior managing member, as the case may be, of FPLLC or (ii) manager or senior manager, as the case may be, of F5MI GP and FCIP V GP, in each case with the power to exercise investment discretion, may be deemed to beneficially own such shares held by the FP LLC Entities, F5MI or FCIP V. Each of FPLLC, F5MI GP, FCIP V GP and the Farallon Managing Members disclaims beneficial ownership of any such shares. The address of each of the entities and individuals referenced in this footnote is c/o Farallon Capital Management, L.L.C., One Maritime Plaza, Suite 2100, San Francisco, CA 94111.

- (18) Consists of 215,400 share purchased by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, 1,200 by Fidelity Capital Trust: Fidelity Flex Small Cap Fund—Small Cap Growth Subportfolio, 1,059,748 by Fidelity Growth Company Commingled Pool, 1,006,711 by Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund, 210,485 by Fidelity Mt. Vernon Street Trust: Fidelity Growth Company K6 Fund, 223,056 by Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund, 499,400 by Fidelity Securities Fund: Fidelity Small Cap Growth Fund, 113,500 by Fidelity Securities Fund: Fidelity Small Cap Growth K6 Fund and 670,500 by Fidelity Select Portfolios: Biotechnology Portfolio. These accounts are managed by direct or indirect subsidiaries of FMR LLC. Abigail P. Johnson is a Director, the Chairman, the Chief Executive Officer and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders’ voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders’ voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act (“Fidelity Funds”) advised by Fidelity Management & Research Company (“FMR Co”), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds’ Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds’ Boards of Trustees.
- (19) Bessemer Trust Company, N.A., or BTNA, as the sole Advisor to Fifth Avenue Private Equity 15 LLC, or PE 15, has the power to dispose of the securities held by PE 15. BTNA’s principal office is located at 1271 Avenue of the Americas, New York, NY 10020. BTNA’s decisions regarding such securities will be made by a consensus of its five private equity team professionals, or the PE Team. PE 15’s board of managers, which consists of five individuals, has power to vote the securities reported in Item 1(a) on behalf of PE 15. The power to vote the securities cannot be exercised by less than a majority of a quorum of the board members consisting of at least three of the members. Under the so-called “rule of three”, if voting and dispositive decisions regarding an entity’s securities are made by three or more individuals, and a voting or dispositive decision requires the approval of a majority of those individuals, then none of the individuals is deemed a beneficial owner of the entity’s securities. Accordingly, neither the individuals comprising the PE Team nor the individuals comprising the board of managers have been listed here.
- (20) The shares are owned directly by Foresite Capital Fund V, L.P., or Fund V. Foresite Capital Management V, LLC, or FCM V, is the general partner of Fund V and may be deemed to have sole voting and dispositive power over these shares. James Tananbaum is the sole managing member of FCM V and may be deemed to have sole voting and dispositive power over these shares. Each reporting person disclaims the existence of a “group.” Each of FCM V and Mr. Tananbaum disclaims beneficial ownership of these shares except to the extent of any pecuniary interest therein, and the filing of this report is not an admission that FCM V or Mr. Tananbaum is the beneficial owner of these shares for purposes of Section 16 or any other purpose. The address for Fund V is 900 Larkspur Landing Circle, Suite 150 Larkspur, CA 94930.

Table of Contents

- (21) Harvard Management Private Equity Corporation is a wholly-owned subsidiary of President and Fellows of Harvard College (Harvard), a Massachusetts corporation. Harvard has delegated investment authority over the securities being registered for resale to Harvard Management Company Inc. Narv Narvekar, Chief Executive Officer of Harvard Management Company Inc., located at 600 Atlantic Ave, Boston, MA 02210, may be deemed to have voting and investment power over the securities held by Harvard Management Private Equity Corporation.
- (22) Consists of (i) 16,100 shares of common stock purchased in the PIPE Financing by YHG Investment, L.P., or YHG, (ii) 483,900 shares of common stock purchased in the PIPE Financing by HHLR Fund, L.P., or HHLR Fund, and (iii) 3,873,982 shares of common stock held by HH AUT-IV Holdings Limited, or HH AUT. Each of YHG and HHLR Fund is a Cayman Islands exempted limited partnership. HHLR Advisors, Ltd., an exempted Cayman Islands company, acts as the sole general partner of YHG and acts as the sole management company of HHLR Fund, and is deemed to be the beneficial owner of, and to control the voting power of, the shares held by YHG and HHLR Fund. HH AUT is an exempted company with limited liability registered in the Cayman Islands. HH AUT is ultimately managed and controlled by Hillhouse Investment Management, Ltd. Only shares held by HH AUT are subject to a contractual lockup for 180 days following the Closing Date. The registered address of HH AUT shall be at 89 Nexus Way, Camana Bay, P.O. Box 31106, Grand Cayman, KY1-1205, Cayman Islands.
- (23) Represents 3,604,443 shares issued as Merger Consideration and 1,250,000 shares issued in the PIPE Investment. The address for Gilead Sciences, Inc. is 333 Lakeside Drive, Foster City, California 94404.
- (24) The address for Dr. Christensen is 12780 Via Vieve, San Diego, CA 92130. Dr. Christensen was previously a director of BCTG Acquisition Corp. prior to the Business Combination.
- (25) The shares are held by Janus Henderson Biotech Innovation Master Fund Limited, or Janus. Each of Andy Acker and Dan Lyons, acting as portfolio managers as delegated by Janus Capital Management LLC, who acts as investment adviser to Janus has the ability to make decisions with respect to the voting and disposition of the shares held by Janus. The address for Janus is 151 Detroit Street, Denver, CO 80206.
- (26) The address for Mr. Hager is 133381 Benchley Road, San Diego, CA 92130.
- (27) Arsani William is the managing partner & Chief Investment Officer who exercises voting and dispositive power over the shares held by Logos Global Master Fund, LP. The address for each of Logos Global Master Fund, LP and Mr. William is 1 Letterman Dr., Ste D-700, San Francisco, CA 94129.
- (28) The address for Mike Varney Advisors is 709 N Granados Ave, Solana Beach, CA 92075.
- (29) Nantahala Capital Management, LLC is a Registered Investment Adviser and has been delegated the legal power to vote and/or direct the disposition of such securities on behalf of the Selling Securityholder as a General Partner or Investment Manager and would be considered the beneficial owner of such securities. The above shall not be deemed to be an admission by the record owners or the Selling Securityholder that they are themselves beneficial owners of these securities for purposes of Section 13(d) of the Exchange Act or any other purpose. Wilmot Harkey and Daniel Mack are managing members of Nantahala Capital Management, LLC and may be deemed to have voting and dispositive power over the shares held by the Selling Securityholder. The address for the Selling Securityholder is 130 Main St. 2nd Floor, New Canaan, CT 06840.
- (30) Steven L. Bender has the power to vote or dispose of the shares held by NexTx Insights, LLC. The address of NexTx Insights, LLC is 1759 Oceanside Blvd, Ste C, #1267, Oceanside CA, 92054.
- (31) Consists of (i) 84,929 shares of common stock held directly by Michael Pellini, (ii) 20,000 shares of common stock purchased in the PIPE Financing by Dr. Pellini, and (iii) 67,943 shares held directly by The Pellini Family Trust, of which Dr. Pellini is the trustee and has voting and investment control with respect to these shares. The address for each of Dr. Pellini and The Pellini Family Trust is 33841 Niguel Shores Drive, Dana Point, CA 92629.
- (32) The address for Peter Olson is 4763 Robbins St, San Diego, CA 92122.
- (33) PH Investments LLC managed by managing members Amos B. Hostetter, Jr. and Barbara W. Hostetter and managing directors Melinda E. Barber, Benjamin A. Gomez and John W. Vander Vort, The address for PH Investments LLC is Pilot House, Lewis Wharf, Boston MA 02110.

Table of Contents

- (34) Consists of 159,386 shares owned by Portland Investment – EP, LLC, or Portland EP, and 194,806 shares owned by Portland Investment – PIA, LLC, or Portland PIA. William Kane, the Corporate Director of each of Portland EP and Portland PIA has the power to vote or dispose of the shares held by Portland EP and Portland PIA. The address for each of Mr. Kane, Portland EP and Portland PIA is 101 Merrimac St Suite 800, Boston, MA 02114.
- (35) RA Capital Management, L.P. is the investment manager for RA Capital Healthcare Fund, L.P., or RACHF. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky and Rajeev Shah are the managing members. Each of Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the shares held by RACHF. Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of the persons and entities listed above is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.
- (36) Dr. Heyman was previously a director of BCTG Acquisition Corp. prior to the Business Combination.
- (37) The shares are registered and held by Samsara BioCapital, L.P. Dr. Srinivas Akkaraju, MD, PhD is the reporting person and the managing member of Samsara BioCapital GP, LLC, the general partner of Samsara BioCapital, L.P. The reporting person disclaims beneficial ownership of this securities except to the extent of the reporting person's pecuniary interest therein. The address is 628 Middlefield Road, Palo Alto, CA 94301.
- (38) Mark Stevens, as Managing Partner, has the power to vote or dispose of the shares held by SCubed Capital, LLC. The address for each of SCubed Capital, LLC and Mr. Stevens is Apres Ski Way #701, Steamboat Springs, CO 80487.
- (39) The address for Dr. Gujrathi is 1395 Rancho Santa Fe, CA 92067.
- (40) The address for Sobrato Capital, a DBA of Sobrato Family Holdings, LLC, a California limited liability company is 599 Castro Street, Suite 400, Mountain View, CA 94041.
- (41) Shares reported herein are held by Southpoint Master Fund, LP for which Southpoint Capital Advisors LP serves as the investment manager and Southpoint GP, LP serves as the general partner. Southpoint Capital Advisors LLC serves as the general partner of Southpoint Capital Advisors LP and Southpoint GP, LLC serves as the general partner of Southpoint GP, LP. John S. Clark II serves as managing member of both Southpoint Capital Advisors LLC and Southpoint GP, LLC. Each of the Reporting Persons disclaims beneficial ownership of the shares reported herein. The address for Southpoint Master Fund, LP is 1114 Avenue of the Americas, 22nd Floor, New York, NY 10036.
- (42) The general partner of Third Rock Ventures IV, L.P. is Third Rock Ventures GP IV, L.P. The general partner of Third Rock Ventures GP IV, L.P. is TRV GP IV, LLC. Abbie Celniker, Ph.D., Robert Tepper, M.D., Craig Muir and Cary Pfeffer, M.D. are the managing members of TRV GP IV, LLC who collectively make voting and investment decisions with respect to shares held by Third Rock Ventures IV, L.P. Dr. Reid Huber is a partner at Third Rock Ventures, LLC, and a member of our board of directors. The address of Third Rock Ventures IV, L.P. is 29 Newbury Street, 3rd Floor, Boston MA 02116.
- (43) The address for Mr. Wilson is 5 Ponderosa Ln., Rolling Hills Estates, CA 90274.
- (44) Woodline Partners LP serves as the investment manager of Woodline Master Fund LP and may be deemed to be the beneficial owner of the shares of common stock. Woodline Master Fund LP disclaims any beneficial ownership of these shares. The address of Woodline Master Fund LP is 4 Embarcadero Center, Suite 3450, San Francisco, CA 94111.

PLAN OF DISTRIBUTION

We are registering the possible offer and sale from time to time by the Selling Securityholders, or their permitted transferees, of up to an aggregate of 68,034,602 shares of common stock, consisting of up to an aggregate of 18,610,000 shares of our common stock that were issued to the PIPE Investors in the PIPE Financing and up to an aggregate of 49,424,602 shares of our common stock issued to certain former shareholders of Tango Therapeutics Sub, Inc. at the closing of the Business Combination. We are also registering any additional securities that may become issuable by reason of share splits, share dividends or other similar transactions.

We will not receive any proceeds from the sale of shares of common stock by the Selling Securityholders pursuant to this prospectus. The Selling Securityholders will pay any underwriting discounts and commissions and expenses incurred by the Selling Securityholders incurred by the Selling Securityholders in disposing of the securities. We will bear all other costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including, without limitation, all registration and filing fees, The Nasdaq Stock Market, or Nasdaq, listing fees and fees and expenses of our counsel and our independent registered public accountants.

The securities beneficially owned by the Selling Securityholders covered by this prospectus may be offered and sold from time to time by the Selling Securityholders. The term "Selling Securityholders" includes donees, pledgees, transferees or other successors-in-interest selling securities received after the date of this prospectus from a Selling Securityholder as a gift, pledge, partnership distribution or other transfer. The Selling Securityholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. Such sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and under terms then prevailing or at prices related to the then current market price or in negotiated transactions. Each Selling Securityholder reserves the right to accept and, together with its respective agents, to reject, any proposed purchase of securities to be made directly or through agents. The Selling Securityholders and any of their permitted transferees may sell their securities offered by this prospectus on any stock exchange, market or trading facility on which the securities are traded or in private transactions. If underwriters are used in the sale, such underwriters will acquire the shares for their own account. These sales may be at a fixed price or varying prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to prevailing market prices or at negotiated prices. The securities may be offered to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. The obligations of the underwriters to purchase the securities will be subject to certain conditions. The underwriters will be obligated to purchase all the securities offered if any of the securities are purchased.

Subject to the limitations set forth in any applicable registration rights agreement, the Selling Securityholders may use any one or more of the following methods when selling the securities offered by this prospectus:

- purchases by a broker-dealer as principal and resale by such broker-dealer for its own account pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- block trades in which the broker-dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- an over-the-counter distribution in accordance with the rules of the Nasdaq;
- through trading plans entered into by a Selling Securityholder pursuant to Rule 10b5-1 under the Exchange Act that are in place at the time of an offering pursuant to this prospectus and any applicable prospectus supplement hereto that provide for periodic sales of their securities on the basis of parameters described in such trading plans;
- through one or more underwritten offerings on a firm commitment or best efforts basis;
- settlement of short sales entered into after the date of this prospectus;

Table of Contents

- agreements with broker-dealers to sell a specified number of the securities at a stipulated price per share or warrant;
- in “at the market” offerings, as defined in Rule 415 under the Securities Act, at negotiated prices, at prices prevailing at the time of sale or at prices related to such prevailing market prices, including sales made directly on a national securities exchange or sales made through a market maker other than on an exchange or other similar offerings through sales agents;
- directly to purchasers, including through a specific bidding, auction or other process or in privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- through a combination of any of the above methods of sale; or
- any other method permitted pursuant to applicable law.

In addition, a Selling Securityholder that is an entity may elect to make a pro rata in-kind distribution of securities to its members, partners or stockholders pursuant to the registration statement of which this prospectus is a part by delivering a prospectus with a plan of distribution. Such members, partners or stockholders would thereby receive freely tradeable securities pursuant to the distribution through a registration statement. To the extent a distributee is an affiliate of ours (or to the extent otherwise required by law), we may file a prospectus supplement in order to permit the distributees to use the prospectus to resell the securities acquired in the distribution.

There can be no assurance that the Selling Securityholders will sell all or any of the securities offered by this prospectus. In addition, the Selling Securityholders may also sell securities under Rule 144 under the Securities Act, if available, or in other transactions exempt from registration, rather than under this prospectus. The Selling Securityholders have the sole and absolute discretion not to accept any purchase offer or make any sale of securities if they deem the purchase price to be unsatisfactory at any particular time.

The Selling Securityholders also may transfer the securities in other circumstances, in which case the transferees, pledgees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus. Upon being notified by a Selling Securityholder that a donee, pledgee, transferee, other successor-in-interest intends to sell our securities, we will, to the extent required, promptly file a supplement to this prospectus to name specifically such person as a selling securityholder.

With respect to a particular offering of the securities held by the Selling Securityholders, to the extent required, an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is part, will be prepared and will set forth the following information:

- the specific securities to be offered and sold;
- the names of the selling securityholders;
- the respective purchase prices and public offering prices, the proceeds to be received from the sale, if any, and other material terms of the offering;
- settlement of short sales entered into after the date of this prospectus;
- the names of any participating agents, broker-dealers or underwriters; and
- any applicable commissions, discounts, concessions and other items constituting compensation from the selling securityholders.

In connection with distributions of the securities or otherwise, the Selling Securityholders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with such transactions, broker dealers or other financial institutions may engage in short sales of the securities in the course of hedging the

Table of Contents

positions they assume with Selling Securityholders. The Selling Securityholders may also sell the securities short and redeliver the securities to close out such short positions. The Selling Securityholders may also enter into option or other transactions with broker-dealers or other financial institutions 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 Securityholders may also pledge securities to a broker-dealer or other financial institution, and, upon a default, such broker-dealer or other financial institution, may effect sales of the pledged securities pursuant to this prospectus (as supplemented or amended to reflect such transaction).

In order to facilitate the offering of the securities, any underwriters or agents, as the case may be, involved in the offering of such securities may engage in transactions that stabilize, maintain or otherwise affect the price of our securities. Specifically, the underwriters or agents, as the case may be, may over-allot in connection with the offering, creating a short position in our securities for their own account. In addition, to cover overallocments or to stabilize the price of our securities, the underwriters or agents, as the case may be, may bid for, and purchase, such securities in the open market. Finally, in any offering of securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allotted to an underwriter or a broker-dealer for distributing such securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. The underwriters or agents, as the case may be, are not required to engage in these activities, and may end any of these activities at any time.

The Selling Securityholders may solicit offers to purchase the securities directly from, and it may sell such securities directly to, institutional investors or others. In this case, no underwriters or agents would be involved. The terms of any of those sales, including the terms of any bidding or auction process, if utilized, will be described in the applicable prospectus supplement.

It is possible that one or more underwriters may make a market in our securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for our securities.

Our common stock is listed on the Nasdaq Capital Market under the symbol “TNGX”.

The Selling Securityholders may authorize underwriters, broker-dealers or agents to solicit offers by certain purchasers to purchase the securities at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we or the Selling Securityholders pay for solicitation of these contracts.

A Selling Securityholder may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by any Selling Securityholder or borrowed from any Selling Securityholder or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from any Selling Securityholder in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment). In addition, any Selling Securityholder may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

Table of Contents

In effecting sales, broker-dealers or agents engaged by the Selling Securityholders may arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts or concessions from the Selling Securityholders in amounts to be negotiated immediately prior to the sale.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission, fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the gross proceeds of any offering pursuant to this prospectus and any applicable prospectus supplement.

If at the time of any offering made under this prospectus a member of FINRA participating in the offering has a “conflict of interest” as defined in FINRA Rule 5121, or Rule 5121, that offering will be conducted in accordance with the relevant provisions of Rule 5121.

To our knowledge, there are currently no plans, arrangements or understandings between the Selling Securityholders and any broker-dealer or agent regarding the sale of the securities by the Selling Securityholders. Upon our notification by a Selling Securityholder that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of securities through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file, if required by applicable law or regulation, a supplement to this prospectus pursuant to Rule 424(b) under the Securities Act disclosing certain material information relating to such underwriter or broker-dealer and such offering.

Underwriters, broker-dealers or agents may facilitate the marketing of an offering online directly or through one of their affiliates. In those cases, prospective investors may view offering terms and a prospectus online and, depending upon the particular underwriter, broker-dealer or agent, place orders online or through their financial advisors.

In offering the securities covered by this prospectus, the Selling Securityholders and any underwriters, broker-dealers or agents who execute sales for the Selling Securityholders may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. Any discounts, commissions, concessions or profit they earn on any resale of those securities may be underwriting discounts and commissions under the Securities Act.

The underwriters, broker-dealers and agents may engage in transactions with us or the Selling Securityholders, or perform services for us or the Selling Securityholders, in the ordinary course of business.

In order to comply with the securities laws of certain states, if applicable, the securities must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the securities 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.

The Selling Securityholders and any other persons participating in the sale or distribution of the securities will be subject to applicable provisions of the Securities Act and the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the securities by, the Selling Securityholders or any other person, which limitations may affect the marketability of the shares of the securities.

We will make copies of this prospectus available to the Selling Securityholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The Selling Securityholders may indemnify any agent, broker-dealer or underwriter that participates in transactions involving the sale of the securities against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the Selling Securityholders against certain liabilities, including certain liabilities under the Securities Act, the Exchange Act or other federal or state law. Agents, broker-dealers and underwriters

[Table of Contents](#)

may be entitled to indemnification by us and the Selling Securityholders against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents, broker-dealers or underwriters may be required to make in respect thereof.

LEGAL MATTERS

The validity of the shares of our common stock offered by this prospectus will be passed upon by Goodwin Procter LLP, Boston, Massachusetts.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2021 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

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

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "*Description of Capital Stock*." We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any stockholder upon request and without charge. Written requests for such copies should be directed to Tango Therapeutics, Inc., 201 Brookline Avenue, Suite 901, Boston, MA 02215, Attention: Corporate Secretary.

This prospectus is part of a registration statement on Form S-3 we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, (in each case, other than those documents or the portions of those documents not deemed to be filed) between the date hereof and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed:

- Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2021, filed with the SEC on March 28, 2022;
- The information specifically incorporated by reference into our Annual Report on [Form 10-K](#) for the year ended December 31, 2021 from our definitive proxy statement on [Schedule 14a](#) (other than information furnished rather than filed) filed with the SEC on April 26, 2022;
- Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on [May 11, 2022](#) and [August 10, 2022](#), respectively;
- Current Report on Form 8-K filed with the SEC on [June 10, 2022](#); and
- The description of our common stock contained in our Registration Statement on [Form 8-A](#) filed on September 2, 2020, including any amendments or reports filed for the purpose of updating such description.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date hereof and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed “filed” with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus or the registration statement of which this prospectus is a part.

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

201 Brookline Avenue, Suite 901
Boston, MA 02215
Attn: Corporate Secretary
(857) 320-4900
Attention: Investor Relations



Up to 68,034,602 Shares of Common Stock

PROSPECTUS

, 2022

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. *Other Expenses of Issuance and Distribution.*

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale and distribution of the securities being registered hereby. In addition, we may incur additional expenses in the future in connection with the offering of our securities pursuant to this prospectus. If required, any such additional expenses will be disclosed in a prospectus supplement. All amounts are estimates, except for the SEC registration fee.

| | <u>Amount</u> |
|---------------------------------|-------------------|
| SEC registration fee | \$ 109,635 |
| Accounting fees and expenses | \$ 32,500 |
| Legal fees and expenses | \$ 100,000 |
| Miscellaneous fees and expenses | \$ 125,000 |
| Total expenses | <u>\$ 367,135</u> |

We will pay the expenses, other than underwriting discounts and commissions and certain expenses incurred by the Selling Securityholders in disposing of the securities, associated with the sale of securities pursuant to this prospectus. The Selling Securityholders will bear all underwriting commissions and discounts, if any, attributable to their sale of the securities.

ITEM 15. *Indemnification of Directors and Officers*

Section 145 of the Delaware General Corporation Law, or DGCL, authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation and bylaws that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

Table of Contents

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and executive officers. These agreements provide that we will indemnify each of our directors, our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended, or the Securities Act.

ITEM 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

Exhibit Index

| Exhibit No. | Description |
|--------------------|--|
| 1.1* | Form of Underwriting Agreement |
| 2.1 | <u>Agreement and Plan of Merger, dated as of April 13, 2021, by and among BCTG Acquisition Corp., BCTG Merger Sub Inc. and Tango Therapeutics, Inc. (incorporated by reference to Annex A to the Proxy Statement/ Prospectus).</u> |
| 3.1 | <u>Second Amended and Restated Certificate of Incorporation of Tango Therapeutics, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's registration statement on Form S-1 filed with the SEC on September 10, 2021).</u> |
| 3.2 | <u>Amended and Restated Bylaws of Tango Therapeutics, Inc. (incorporated by reference to Exhibit 4.2 to the Registrant's registration statement on Form S-8 filed with the SEC on October 14, 2021).</u> |
| 4.1 | <u>Amended and Restated Registration and Stockholder Rights Agreement, dated August 10, 2021, by and among Tango Therapeutics, Inc. and the stockholders party thereto (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by the Registrant on August 13, 2021).</u> |
| 4.2 | <u>Specimen Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.5 to the Registration Statement on Form S-4/A filed by the Registrant on July 15, 2021).</u> |
| 5.1 | <u>Opinion of Goodwin Procter LLP (incorporated by reference to Exhibit 5.1 to the Registrant's registration statement on Form S-1 filed with the SEC on September 10, 2021).</u> |

Table of Contents

| Exhibit No. | Description |
|-------------|--|
| 23.1** | Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm. |
| 23.2 | Consent of Goodwin Procter LLP (included in Exhibit 5.1). |
| 24.1 | Power of Attorney (incorporated by reference to Exhibit 24.1 to the Registrant's registration statement on Form S-1 filed with the SEC on September 10, 2021). |

* To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with the offering of securities.

** Filed herewith.

ITEM 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement.

Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

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

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

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(A) 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

Table of Contents

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

- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston, State of Massachusetts, on September 21, 2022.

TANGO THERAPEUTICS, INC.

By: /s/ Barbara Weber
Name: Barbara Weber
Title: President and Chief Executive Officer

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

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|---|--------------------|
| <u>/s/ Barbara Weber</u> Barbara Weber | Director, President and Chief Executive Officer (Principal Executive Officer) | September 21, 2022 |
| <u>/s/ Daniella Beckman</u> Daniella Beckman | Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) | September 21, 2022 |
| <u>*</u> Alexis Borisy | Director | September 21, 2022 |
| <u>*</u> Lesley Calhoun | Director | September 21, 2022 |
| <u>*</u> Aaron Davis | Director | September 21, 2022 |
| <u>*</u> Reid Huber | Director | September 21, 2022 |
| <u>*</u> Malte Peters | Director | September 21, 2022 |
| <u>*</u> Mace Rothenberg | Director | September 21, 2022 |

*By: /s/ Barbara Weber
Barbara Weber
As Attorney-in-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Tango Therapeutics, Inc. of our report dated March 28, 2022 relating to the financial statements, which appears in Tango Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
September 21, 2022