
**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**

BRIDGEBIO ONCOLOGY THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Certificate of Incorporation)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

001-41955
(Commission File Number)

39-3690783
(I.R.S. Employer
Identification Number)

**256 E. Grand Avenue, Suite 104
South San Francisco, CA 94080
(650) 405-4770**

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Pedro J. Beltran
Chief Executive Officer
256 E. Grand Avenue, Suite 104
South San Francisco, CA 94080
(650) 405-4770

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

Copies to:

Maggie L. Wong
Alicia M. Tschirhart
Goodwin Procter LLP
525 Market Street
San Francisco, CA 94105
Telephone: (415) 733-6000

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

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

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

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

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

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

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

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

Large accelerated filer ☐

Non-accelerated filer ☒

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. ☐

This post-effective amendment will become effective in accordance with the provisions of Section 8(c) of the Securities Act of 1933, as amended. 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, 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 August 29, 2025, BridgeBio Oncology Therapeutics, Inc. (the “Company”) filed a registration statement with the U.S. Securities and Exchange Commission (the “SEC”) on Form S-1 (File No. [333-289940](#)) (the “Registration Statement”), which was initially declared effective by the SEC on September 10, 2025.

This Post-Effective Amendment No. 2 to Form S-1 on Form S-3 (this “Post-Effective Amendment”) to the Registration Statement is being filed to convert the Registration Statement into a registration statement on Form S-3.

The information included in this filing amends the Registration Statement and the prospectus contained therein. No additional securities are being registered under this Post-Effective Amendment. All applicable registration fees were paid at the time of the original filing of the Registration Statement on August 29, 2025.

SUBJECT TO COMPLETION DATED SEPTEMBER 1, 2026

PRELIMINARY PROSPECTUS

BridgeBio Oncology Therapeutics, Inc.

63,054,549 Shares of Common Stock by the Selling Securityholders

This prospectus relates to the offer and sale from time to time by the selling securityholders named in this prospectus (the “Selling Securityholders”) of up to 63,054,549 shares of common stock, par value \$0.0001 per share of BridgeBio Oncology Therapeutics, Inc. (the “Common Stock”) consisting of (i) up to 24,343,711 shares of Common Stock (the “PIPE Shares”) issued in a private placement pursuant to subscription agreements entered into on February 28, 2025 (the “PIPE Financing”), (ii) up to 4,648,186 shares of Common Stock issued to the Sponsor (as defined below) and certain initial shareholders of Helix (as defined below) in connection with the Business Combination (as defined below), (iii) up to 32,155,445 shares of Common Stock issued or issuable to certain equity holders of the Company pursuant to the Business Combination and (iv) 1,907,207 shares of Common Stock issuable upon exercise of stock options at exercise prices ranging from \$1.02 to \$7.88 per share (the “Options”), issued to certain of our affiliates upon conversion of stock options in TheRas, Inc. dba BridgeBio Oncology Therapeutics in connection with 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, except with respect to amounts received by us upon exercise of the Options to the extent such Options are exercised for cash. 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 offer and sale of certain securities described above to satisfy certain registration rights we have granted. Our registration of the securities covered by this prospectus does not mean that either we or the Selling Securityholders will issue, offer or sell, as applicable, any of the securities. The Selling Securityholders and any of their permitted transferees may offer and sell 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 under 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 Global Market under the symbol “BBOT”. On August 31, 2026, the closing price of our Common Stock was \$8.80 per share.

We are an “emerging growth company” and a “smaller reporting company” as that term is defined under the U.S. federal securities laws and, as such, are subject to certain reduced public company reporting requirements. See “*Prospectus Summary-Implications of Being an Emerging Growth Company and a Smaller Reporting Company*.” This prospectus complies with the requirements that apply to an issuer that is an emerging growth company and a smaller reporting company.

Investing in our securities involves certain risks. See the section entitled “[Risk Factors](#)” section beginning on page 7 of this prospectus, in any applicable prospectus supplement and any related free writing prospectus, and in our SEC filings that are incorporated by reference herein. You should read the entire prospectus carefully before you make your investment decision.

Neither the SEC 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 , 2026.

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 nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

TABLE OF CONTENTS

INTRODUCTORY NOTE AND FREQUENTLY USED TERMS	Page ii
ABOUT THIS PROSPECTUS	iv
PROSPECTUS SUMMARY	1
THE OFFERING	4
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
RISK FACTORS	7
USE OF PROCEEDS	8
DESCRIPTION OF CAPITAL STOCK	9
SECURITIES ACT RESTRICTIONS ON RESALE OF SECURITIES	12
SELLING SECURITYHOLDERS	14
PLAN OF DISTRIBUTION	23
LEGAL MATTERS	27
EXPERTS	27
WHERE YOU CAN FIND MORE INFORMATION	27
INCORPORATION BY REFERENCE	27

INTRODUCTORY NOTE AND FREQUENTLY USED TERMS

On August 11, 2025 (the “Closing Date”), Helix Acquisition Corp. II., a Cayman Islands exempted company (“Helix”), consummated the previously announced Business Combination pursuant to the terms of the business combination agreement, dated February 28, 2025 and amended on June 17, 2025 (as amended, the “Business Combination Agreement”), with Helix II Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Helix (“Merger Sub”), and TheRas, Inc. (d/b/a BridgeBio Oncology Therapeutics), a Delaware corporation (“TheRas”).

Pursuant to the Merger Agreement, on the Closing Date, (i) immediately prior to the consummation of the Business Combination, Helix filed a Certificate of Corporate Domestication and a Certificate of Incorporation with the Delaware Secretary of State and filed an application to de-register with the Registrar of Companies of the Cayman Islands (collectively, the “Domestication”), (ii) upon effectiveness of the Domestication, Helix became a Delaware corporation and changed its corporate name to “BridgeBio Oncology Therapeutics, Inc.” (the “Company” or “BBOT”), and (iii) Merger Sub merged with and into TheRas (the “Merger”), with TheRas surviving the Merger as a direct, wholly-owned subsidiary of the Company (collectively, the Merger and Domestication, along with certain other transactions in the Business Combination Agreement, the “Business Combination”).

Unless the context otherwise requires, references in this prospectus to “TheRas”, the “Company”, “us”, “we”, “our” and any related terms prior to the closing of the Business Combination are intended to mean TheRas, and references to “BBOT”, the “Company”, “us”, “we”, “our” and any related terms after the closing of the Business Combination, are intended to mean the Company and its consolidated subsidiaries.

In addition, in this document, unless otherwise stated or the context otherwise requires, references to:

“**2016 Plan**” means the TheRas, Inc. 2016 Equity Incentive Plan, as amended.

“**2025 Plan**” means the BridgeBio Oncology Therapeutics, Inc. 2025 Stock Option and Incentive Plan.

“**2025 ESPP**” means the BridgeBio Oncology Therapeutics, Inc. 2025 Employee Stock Purchase Plan.

“**2025 Inducement Plan**” means the BridgeBio Oncology Therapeutics, Inc. 2025 Inducement Plan.

“**Business Combination**” means, collectively, the Merger, the Domestication and the other transactions contemplated by the Business Combination Agreement.

“**Business Combination Agreement**” means the Business Combination Agreement, dated as of February 28, 2025 (as amended by Amendment No. 1 to the Business Combination Agreement, dated as of June 17, 2025, and as it may be further amended, restated, supplemented or otherwise modified from time to time) by and among Helix, Merger Sub, and BBOT.

“**Bylaws**” means the bylaws of Company which became effective upon the Domestication.

“**Charter**” means the certificate of incorporation of Company which became effective upon the Domestication.

“**Company**” means Helix after the consummation of the Domestication, which was renamed BridgeBio Oncology Therapeutics, Inc.

“**Closing**” means the closing of the Business Combination.

[Table of Contents](#)

“**Closing Date**” means August 11, 2025.

“**DGCL**” means the General Corporation Law of Delaware.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

“**EMA**” means the European Medicines Agency.

“**FDA**” means the U.S. Food and Drug Administration.

“**Helix**” means Helix Acquisition Corp. II (which prior to the Domestication was an exempted company incorporated under the laws of the Cayman Islands and following the Domestication is now a corporation incorporated under the laws of the State of Delaware).

“**Nasdaq**” means the Nasdaq Stock Market LLC.

“**SEC**” means the Securities and Exchange Commission.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Sponsor**” means Helix Holdings II LLC, a Cayman Islands limited liability company.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC using the “shelf” registration process. Under this shelf registration process, the Selling Securityholders may, from time to time, sell the securities offered by them described in this prospectus. We will not receive any proceeds from the sale by such Selling Securityholders of the securities offered by them described in this prospectus. This prospectus also relates to the issuance by us of the shares of Common Stock issuable upon exercise of the Options. We will receive proceeds from any exercise of the Options for cash.

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. Neither we nor the Selling Securityholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

We may also provide a prospectus supplement or post-effective amendment to the registration statement to add information to, or update or change information contained in, this prospectus. 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 sections of this prospectus entitled “*Where You Can Find More Information.*”

Neither we nor the Selling Securityholders have authorized anyone to provide any information or to make any representations other than those contained in this prospectus, any accompanying prospectus supplement or any free writing prospectus we have prepared. We and the Selling Securityholders take no 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 securities 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, 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 below under “*Where You Can Find More Information.*”

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 companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUMMARY

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” included elsewhere in this prospectus. Unless the context otherwise requires, the terms “BBOT,” “the Company,” “we,” “us” and “our” in this prospectus refer to BridgeBio Oncology Therapeutics, Inc. and its consolidated subsidiaries.

Overview

BBOT is a clinical-stage biotechnology company advancing a next-generation pipeline of novel small-molecule therapeutics targeting RAS and Phosphoinositide 3-kinase (“PI3K”). Our mission is to accelerate scientific and medical breakthroughs and deliver well-tolerated medicines with greater efficacy and safety to people with the deadliest cancers. We are advancing our next-generation RAS-pathway targeted small molecules with a focus on optimized target coverage for patients with tumors driven by RAS and PI3Kα and a synergistic portfolio that is designed to enable targeted KRAS combinations.

Our pipeline consists of three orally bioavailable small molecule inhibitors that were designed and optimized within BBOT with the goal to provide patients with significant benefit over standard of care. Additionally, we believe BBOT has the opportunity to provide further benefit to patients with KRAS mutant tumors through combination of our inhibitors. We believe our pipeline has the opportunity to address a large number of patients afflicted with metastatic cancer.

BBOT’s pipeline is poised to close key activity gaps in the RAS-focused therapeutic space

~250K annual incident patients in the US

Program/Target	Mechanism of Action	Status	Clinical Readouts
BBO-8520 KRAS^{G12C} (ON / OFF)	- First direct inhibitor of KRAS^{G12C} (ON) - Inhibits both KRAS^{G12C} GTP (active) and GDP (inactive) states - Differentiates from KRAS^{G12C} GDP (inactive)-only inhibitors	Phase 1 monotherapy and PD-1 combination	KRAS ^{G12C} NSCLC
BBO-11818 Pan-KRAS (ON / OFF)	- Direct inhibitor of KRAS^{G12X} (ON/OFF) - Potent pan-KRAS inhibitor - Directly binds mutant KRAS	Phase 1	KRAS ^{G12X} NSCLC KRAS ^{G12X} PDAC KRAS ^{G12X} CRC
BBO-10203 RAS:PI3Kα Breaker	- Blocks specific interaction between RAS and PI3Kα - RAS driver agnostic (KRAS, HRAS and NRAS) - Selectively blocks PI3K / AKT effector signaling in the tumor - Decreased risk for hyperglycemia / hyperinsulinemia	Phase 1	PIK3CA ^{mut} BC HER2 ^{AMP} BC KRAS ^{mut} NSCLC KRAS ^{mut} PDAC KRAS ^{mut} CRC

Note: Projections are subject to inherent limitations and ongoing development results. Actual results may differ from expectations. The timing of regulatory submissions is subject to additional discussions with regulators.



BBO-8520 is an orally bioavailable small molecule direct inhibitor targeting both the ON and OFF states of KRAS. The U.S. Food and Drug Administration (FDA) has granted Fast Track designation to BBO-8520 for the treatment of adult patients with previously treated, KRAS G12C-mutated metastatic non-small cell lung cancer (“NSCLC”). ONKORAS-101 is an open-label, multi-center Phase 1a/1b study designed to evaluate the safety, tolerability, preliminary antitumor activity, and pharmacokinetics of BBO-8520 as a single agent and in

combination with pembrolizumab in patients with KRASG12C mutant NSCLC. BBO-8520 in combination with pembrolizumab, at active dose levels, demonstrated promising efficacy data and a distinct safety profile, including a potentially differentiated liver toxicity profile. Updated clinical data are expected in the second half of 2026 and an internal combination study with BBO-10203 opened in April 2026.

BBO-11818 is an orally bioavailable small molecule pan-KRAS inhibitor that targets mutant KRAS in both the ON and OFF states. On April 20, 2026 we announced that BBOT was granted U.S. FDA Fast Track designation for BBO-11818 for the treatment of adult patients with advanced KRAS-mutant PDAC. Updated Phase 1 clinical data are expected in the second half of 2026. An internal combination study with BBO-10203 opened in July 2026.

BBO-10203 is an orally bioavailable small molecule with a novel mechanism of action designed to inhibit the physical interaction between RAS and PI3K α , inhibiting RAS-driven PI3K α -AKT signaling in tumors. Updated clinical data are expected in the second half of 2026.

Corporate Information

Our business was established in August 2016 by BridgeBio Pharma Inc. (“BridgeBio Pharma”) under the name, TheRas, Inc. We operated as part of BridgeBio Pharma through April 30, 2024. TheRas entered into the Business Combination Agreement with Helix listed on Nasdaq under the ticker symbol “HLXB.” On August 11, 2025, pursuant to the Merger, Helix II Merger Sub, Inc., a wholly owned subsidiary of Helix, merged with and into TheRas, with TheRas surviving the merger as a wholly-owned subsidiary of Helix. In connection with the Merger, Helix changed its name to BridgeBio Oncology Therapeutics, Inc., and the combined company became listed on Nasdaq under the new ticker symbol “BBOT.” Our principal executive offices are located at 256 E. Grand Avenue, Suite 104, South San Francisco, CA 94080. Our telephone number is (650) 405-4770.

Our web page address is <https://bbotx.com>. Our investor relations website is located at <https://investors.bbotx.com>. We make available free of charge on our investor relations website under “SEC Filings” our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, including exhibits, our directors’ and officers’ Section 16 Reports and any amendments to those reports after filing or furnishing such materials to the SEC. References to our website address do not constitute incorporation by reference of the information contained on the website, and the information contained on the website is not part of this document or any other document that we file with or furnish to the SEC.

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

The Jumpstart Our Business Startups Act (the “JOBS Act”), was enacted in April 2012 with the intention of encouraging capital formation in the United States and reducing the regulatory burden on newly public companies that qualify as “emerging growth companies.” We are an emerging growth company within the meaning of the JOBS Act. As an emerging growth company, we may take advantage of certain exemptions from various public reporting requirements, including (i) being permitted to present only two years of audited financial statements and selected financial data 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, including this prospectus, subject to certain exceptions, (ii) not being required to have our internal control over financial reporting be audited by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the “Sarbanes-Oxley Act”), (iii) certain reduced disclosure requirements related to the disclosure of executive compensation in this prospectus and in our periodic reports and proxy statements, (iv) not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board (the “PCAOB”) regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, and

(v) exemptions from the requirement that we hold a nonbinding advisory vote on executive compensation and any golden parachute payments. We may take advantage of these exemptions until we are no longer an emerging growth company.

We will remain an emerging growth company until the earliest to occur of (i) the last day of the fiscal year in which we have more than \$1.235 billion in annual revenue; (ii) the date we qualify as a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates; (iii) the date on which we have issued, in any three-year period, more than \$1.0 billion in non-convertible debt securities; and (iv) December 31, 2029 (the last day of the fiscal year ending after the fifth anniversary Helix’s initial public offering in February 2024).

We have elected to take advantage of certain of the reduced disclosure obligations in this prospectus and may elect to take advantage of other reduced reporting requirements in our future filings with the SEC. As a result, the information that we provide to holders of our Common Stock may be different than what you might receive from other public reporting companies in which you hold equity interests.

We have elected to avail ourselves of the provision of the JOBS Act that permits emerging growth companies to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. As a result, we will not be subject to new or revised accounting standards at the same time as other public companies that are not emerging growth companies.

We are also a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting common stock held by non-affiliates is \$250 million or more measured on the last business day of our second fiscal quarter, or our annual revenues are less than \$100 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is \$700 million or more measured on the last business day of our second fiscal quarter.

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*.”

Resale of Common Stock

Shares of Common Stock Offered by the Selling Securityholders	Up to 63,054,549 shares of Common Stock consisting of (i) up to 24,343,711 PIPE Shares, (ii) up to 4,648,186 shares of Common Stock issued in connection with the Business Combination, (iii) up to 32,155,445 shares of Common Stock issued or issuable to equity holders of the Company pursuant to the Business Combination and (iv) 1,907,207 shares of Common Stock issuable upon exercise of stock options at exercise prices ranging from \$1.02 to \$7.88 per share, issued to certain of our affiliates upon conversion of Options in connection with the Business Combination.
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, except to the extent the Options are exercised for cash. We may receive an aggregate of up to \$8.37 million, assuming the exercise in full of the Options for cash. We expect to use the net proceeds from the exercise of the Options, if any, for general corporate purposes. See “Use of Proceeds” in this prospectus for more information.
Market for our Common Stock	Our Common Stock is listed on Nasdaq under the symbol “BBOT”.
Risk Factors	See “Risk Factors” section of this prospectus and other information included and incorporated by reference in this prospectus for a discussion of factors you should consider before investing in our securities.
For additional information concerning the offering, see “Plan of Distribution” beginning on page 23.	

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus may constitute “forward-looking statements” for purposes of the federal securities laws. Our forward-looking statements include, but are not limited to, statements regarding our or our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intends,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements in this prospectus may include, but are not limited to:

- expectations related to the success, cost and timing of product development activities, including timing of initiation, completion and data readouts for clinical trials and the potential approval of our product candidates, including the progress and results of the ONKORAS-101, BREAKER-101 and KONQUER-101 clinical trials;
- the clinical and therapeutic potential of BBO-8520, BBO-10203 and BBO-11818;
- the size and growth potential of the markets for our product candidates;
- the therapeutic and curative potential of our product candidates;
- projected financial information, anticipated growth rate and market opportunities;
- our ability to maintain the listing of our Common Stock on Nasdaq;
- potential liquidity and trading volatility of our Common Stock;
- our ability to raise financing in the future;
- success in retaining or recruiting, or changes required in, officers, key employees or directors;
- our ability to obtain and maintain regulatory approval of current and potential future product candidates;
- our ability to obtain and maintain intellectual property protection for our technologies and our product candidates;
- the rate and degree of market acceptance of current and any potential future product candidates;
- regulatory developments in the United States and international jurisdictions;
- potential liability lawsuits and penalties related to our technologies, product candidates and current and future relationships with third parties;
- our ability to attract and retain key scientific and management personnel;
- our ability to effectively manage the growth of operations;
- our ability to compete effectively with existing competitors and new market entrants;
- our ability to implement and maintain effective internal controls;
- the impact of supply chain disruptions;
- unfavorable global economic conditions, including inflationary pressures, market volatility, acts of war and civil and political unrest; and
- other factors detailed under the section entitled “Risk Factors”.

These forward-looking statements are based on information available as of the date of this prospectus and current expectations, forecasts and assumptions, and involve a number of judgments, risks and uncertainties. These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this prospectus are more fully described under the heading “*Risk Factors*” and elsewhere in this prospectus. The risks described under the heading “*Risk Factors*” are not exhaustive. New risk factors emerge from time to time and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on its business, or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements attributable to us or persons acting on their behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, in addition to the risks and uncertainties discussed above under “*Cautionary Note Regarding Forward-Looking Statements*,” you should carefully consider the risks factors incorporated herein by reference to our most recent Annual Report on Form 10-K and in any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, we file after the date of this prospectus, all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in any applicable prospectus supplement. The occurrence of one or more of the events or circumstances described in these risk factors, alone or in combination with other events or circumstances, may have a material adverse effect on our business, reputation, revenue, financial condition, results of operations and future prospects, in which event the market price of our common stock could decline, and you could lose part or all of your investment. Unless otherwise indicated, reference in this section and elsewhere in this prospectus to our business being adversely affected, negatively impacted or harmed will include an adverse effect on, or a negative impact or harm to, the business, reputation, financial condition, results of operations, revenue and our future prospects. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

USE OF PROCEEDS

All of the securities 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.

Assuming the exercise of all outstanding Options for cash, we will receive an aggregate of approximately \$8.37 million, but will not receive any proceeds from the sale of the shares of Common Stock issuable upon such exercise. We expect to use the net proceeds from the exercise of the Options, if any, for working capital and general corporate purposes. We will have broad discretion over the use of any proceeds from the exercise of the Options. There is no assurance that the holders of the Options will elect to exercise for cash any or all such Options.

The Selling Securityholders will pay any underwriting discounts and commissions and expenses incurred by the Selling Securityholders for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Securityholders in disposing of the securities. We will bear the costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

DESCRIPTION OF CAPITAL STOCK

The following summary of the material terms of our securities is not intended to be a complete summary of the rights and preferences of such securities, and is qualified by reference to the Charter and the Bylaws, which are exhibits to the registration statement of which this prospectus is a part. We urge you to read each of the Charter and the Bylaws described herein in their entirety for a complete description of the rights and preferences of our securities.

Authorized and Outstanding Stock

The Charter authorizes the issuance of 510,000,000 shares of capital stock, consisting of (i) 500,000,000 shares of common stock, par value \$0.0001 per share (the “Common Stock”) and (ii) 10,000,000 shares of undesignated preferred stock, par value \$0.0001 per share (the “Preferred Stock”).

Common Stock

The Charter provides that:

- The holders of Common Stock shall have the exclusive right to vote for the election of directors of the Company and on all other matters requiring stockholder action, each outstanding share entitling the holder thereof to one vote on each matter properly submitted to the stockholders of the Company for their vote; provided that such holders shall not be entitled to vote on any amendment to the Charter (or on any amendment to a certificate of designations of any series of Preferred Stock) that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of Preferred Stock if the holders of such affected series of Preferred Stock are entitled to vote, either separately or together with the holders of one or more other such series, on such amendment pursuant to the Charter (or pursuant to a certificate of designations of any series of Preferred Stock);
- dividends may be declared and paid or set apart for payment upon common stock out of any assets or funds of the Company legally available for the payment of dividends, but only when and as declared by the board of directors or any authorized committee thereof; and
- upon the voluntary or involuntary liquidation, dissolution or winding up of the Company, the net assets of the Company shall be distributed pro rata to the holders of Common Stock.

Preferred Stock

The Charter provides that shares of Preferred Stock may be issued from time to time in one or more series. Our board of directors is authorized to fix the voting rights, if any, designations, powers, preferences and relative, participating, optional, special and other rights, if any, and any qualifications, limitations and restrictions thereof, applicable to the shares of each series. Our board of directors is able, without stockholder approval, to issue Preferred Stock with voting and other rights that could adversely affect the voting power and other rights of the holders of the Common Stock and could have anti-takeover effects. The ability of our board of directors to issue Preferred Stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control of us or the removal of existing management. The Company has no Preferred Stock outstanding at the date hereof. Although the Company does not currently intend to issue any shares of Preferred Stock, it cannot assure you that the Company will not do so in the future.

Dividends

Under the Charter, holders of Common Stock are entitled to receive ratable dividends, if any, as may be declared from time-to-time by our board of directors out of legally available assets or funds. There are no current plans to pay cash dividends on Common Stock for the foreseeable future.

Voting Power

Except as otherwise required by law or as otherwise provided in any certificate of designation for any series of Preferred Stock, under the current Charter and the Bylaws, the holders of Common Stock possess or will possess, as applicable, all voting power for the election of our directors and all other matters requiring stockholder action and are entitled or will be entitled, as applicable, to one vote per share on matters to be voted on by stockholders. Subject to certain limited exceptions, the holders of Common Stock shall at all times vote together as one class on all matters submitted to a vote of the holders of Common Stock under the Charter.

Preemptive or Other Rights

The Charter does not provide for any preemptive or other similar rights.

Election of Directors

Our board of directors currently consists of eight directors and is divided into three classes designated as Class I, Class II and Class III. Class I directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2029. Class II and Class III directors will initially serve for a term expiring at the annual meeting of stockholders to be held in 2027 and 2028, respectively. At each succeeding annual meeting of stockholders, directors will be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting of the stockholders. There will be no limit on the number of terms a director may serve on our board of directors.

Under the Charter, directors are elected by a plurality voting standard, whereby each of our stockholders may not give more than one vote per share towards any one director nominee. There are no cumulative voting rights.

Annual Stockholder Meetings

Annual stockholder meetings will be held at a date, time and place, if any, as exclusively selected by our board of directors. To the extent permitted under applicable law, the Company may conduct meetings by means of remote communication.

Dissenters' Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders have appraisal rights in connection with a merger or consolidation of the Company. Pursuant to the DGCL, stockholders who properly request and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery.

Stockholders' Derivative Actions

Under the DGCL, any of our stockholders may bring an action in the Company's name to procure a judgment in the Company's favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of the Company's shares at the time of the transaction to which the action relates or such stockholder's stock thereafter devolved by operation of law.

Limitations on Liability and Indemnification of Officers and Directors

The Charter and Bylaws provide for the indemnification of current and former officers and directors of the Company to the fullest extent permitted by Delaware law. The Company has entered into agreements with our officers and directors to provide contractual indemnification in addition to the indemnification provided for in the Charter.

The Company purchased a policy of directors' and officers' liability insurance that insures our officers and directors against the cost of defense, settlement or payment of a judgment in some circumstances and insures us against our obligations to indemnify our officers and directors. In connection with the Closing, Helix purchased a tail policy with respect to liability coverage for the benefit of our current officers and directors on the same or

substantially similar terms of Helix's prior policy. The Company will maintain such tail policy for a period of six years following the Closing.

These provisions may discourage current and future stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against officers and directors, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent the Company pays the costs of settlement and damage awards against officers and directors pursuant to these indemnification provisions.

The Company believes that these provisions, the directors' and officers' liability insurance and the indemnity agreements are necessary to attract and retain talented and experienced officers and directors.

Certain Anti-Takeover Provisions of Delaware Law, Charter and Bylaws

The Charter, Bylaws and the DGCL contains provisions, as summarized in the following paragraphs that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors. These provisions are intended to avoid costly takeover battles, reduce the Company's vulnerability to a hostile change of control and enhance the ability of our board of directors to maximize stockholder value in connection with any unsolicited offer to acquire the Company. However, these provisions may have an anti-takeover effect and may delay, deter, or prevent a merger or acquisition of the Company by means of a tender offer, a proxy contest or other takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the prevailing market price for the shares of Common Stock held by stockholders.

Exclusive Forum

The Company's organizational documents establish that, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of, or a claim based on, a breach of a fiduciary duty owed by any current or former director, officer or other employee or stockholder of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or the Charter or Bylaws (including the interpretation, validity or enforceability thereof) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (iv) any action asserting a claim governed by the internal affairs doctrine; provided, however, that the exclusive forum provision will not apply to any causes of action arising under the Securities Act, or the Exchange Act, or to any claim for which the federal courts have exclusive jurisdiction. Unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, the Exchange Act, or the respective rules and regulations promulgated thereunder.

Advance Notice of Director Nominations and New Business

We have established advance notice requirements for nominations for elections to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

Listing of Securities

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

Registration Rights

At the Closing, the Company entered into an Amended and Restated Registration Rights Agreement, with certain stockholders, pursuant to which, among other things, such stockholders have specified rights to require the Company to register all or a portion of their shares of Common Stock under the Securities Act and provide customary demand as well as piggyback registration rights. The Company also entered into Subscription Agreements with certain investors which also contain certain registration rights.

SECURITIES ACT RESTRICTIONS ON RESALE OF SECURITIES

Resales under Rule 144

Under the Securities Act, securities may be sold only if the sale is registered under the Securities Act or qualifies for an exemption from registration, including an exemption under Rule 144 under the Securities Act (“Rule 144”). Rule 144(b)(1) provides a safe harbor pursuant to which certain persons may sell shares of common stock that constitute “restricted securities” as defined in Rule 144 without registration under the Securities Act. “Restricted securities” include, among other things, securities acquired directly or indirectly from the issuer, or from an affiliate of the issuer, in a transaction or chain of transactions not involving any public offering. In general, the conditions that must be met for a person to sell securities pursuant to Rule 144(b)(1) are as follows: (i) the person selling the shares must not be an affiliate of ours at the time of the sale, and must not have been an affiliate of ours during the preceding three months, and (2) either (A) at least one year must have elapsed since the date of acquisition of the restricted securities from us or any of its affiliates or (B) if we satisfies the current public information requirements set forth in Rule 144, at least six months have elapsed since the date of acquisition of the restricted securities from us or any of its affiliates.

Rule 144(b)(2) provides a safe harbor pursuant to which persons who are affiliates of ours may sell shares of its stock, whether restricted securities or not, without registration under the Securities Act if certain conditions are met. In general, the conditions that must be met for a person who is an affiliate of ours (or has been within three months prior to the date of sale) to sell shares of stock of ours pursuant to Rule 144(b)(2) are as follows (1) if the shares being sold are restricted securities, at least six months must have elapsed since the date of acquisition of the shares of stock from us or any of its affiliates, (2) the seller must comply with volume limitations, manner of sale restrictions and notice requirements and (3) we must satisfy the current public information requirements set forth in Rule 144. In order to comply with the volume limitations, a seller may not sell, in any three month period, more than the following number of shares:

- 1.0% of the shares of our common stock then outstanding as shown by the most recent report or statement published by us;
- the average weekly reported volume of trading in our common stock on all national securities exchanges and/or reported through the automated quotation system of a registered securities association during the four calendar weeks preceding the filing of the notice required to be filed by the seller under Rule 144 or if no such notice is required, the date of receipt of the order to execute the transaction by the broker or the date of execution of the transaction directly with a market maker; or
- the average weekly volume of trading in such securities reported pursuant to an effective transaction report plan or an effective national market system plan, as defined in Regulation NMS under the Exchange Act, during the four week period described in the preceding bullet.

Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies

Rule 144 is not available for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company unless the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and material required to be filed, as applicable, during the preceding twelve months (or such shorter period that the issuer was required to file such reports and materials), other than Form 8-K reports; and

[Table of Contents](#)

- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

We are no longer a shell company, and as a result, once the conditions set forth in the exceptions listed above are satisfied, Rule 144 will become available for the resale of shares of common stock.

Rule 145

The shares of common stock to be issued to certain persons or entities pursuant to the registration statement of which this prospectus forms a part will be subject to the provisions of Rule 145 under the Securities Act (“Rule 145”). Under Rule 145, a person or entity that is an affiliate of a party to a merger, acquisition or reclassification (the “merger”) at the time they are submitted for vote or consent is deemed to be an underwriter in connection with any transaction to publicly offer or sell securities acquired in the merger unless the following conditions are met:

- the conditions set forth under “Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies” are met; and
- either (i) the sale occurs at least 90 days after the securities were acquired in the merger and the conditions applicable to resales under Rule 144(b)(2), other than the notice requirement, are satisfied or (ii) for a person who is not an affiliate of ours on the date of sale (and has not been an affiliate of ours within three months prior to the date of sale), either (A) at least one year has elapsed since the securities were acquired in the merger or (B) if we satisfy the current public information requirements set forth in Rule 144, at least six months have elapsed since the securities were acquired in the merger.

Securities subject to Rule 145 may be resold pursuant to a registration statement registering their resale which is also registering the resales of the securities acquired in the merger.

SELLING SECURITYHOLDERS

This prospectus relates to the possible offer and resale by the Selling Securityholders of up to 63,054,549 Common Stock, consisting of up to (i) 24,343,711 PIPE shares issued in the PIPE Financing at a per share price of \$10.7173 per share, (ii) 4,648,186 shares of Common Stock issued to the Sponsor and certain initial shareholders of Helix in connection with the Business Combination, (iii) 32,155,445 shares of Common Stock issued or issuable to certain equity holders of the Company pursuant to the Business Combination and (iv) 1,907,207 shares of Common Stock issuable upon exercise of stock options at exercise prices ranging from \$1.02 to \$7.88 per share, issued to certain of our affiliates. Sales of the foregoing shares of Common Stock, which comprise a significant portion of our public float, by the Selling Securityholders, or the perception that such sales may occur, could have a significant negative impact on the trading price of our Common Stock.

The Selling Securityholders may from time to time offer and sell any or all of the Common Stock set forth below pursuant to this prospectus. When we refer to the “*Selling Securityholders*” in this prospectus, we mean the persons listed in the table below, and the pledgees, donees, transferees, assignees, successors and others who later come to hold any of the Selling Securityholders’ interest in the Common Stock after the date of this prospectus such that registration rights shall apply to those securities.

The following table is prepared based on information provided to us by the Selling Securityholders. It sets forth the name and address of the Selling Securityholders, the aggregate number of Common Stock that the Selling Securityholders may offer pursuant to this prospectus, and the beneficial ownership of the Selling Securityholders both before and after the offering. We have based percentage ownership after this offering on 79,196,710 shares of common stock outstanding as of the Closing Date.

We cannot advise you as to whether the Selling Securityholders will in fact sell any or all of such Common Stock. 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. Any changed or new information given to us by the Selling Securityholders, including regarding the identity of, and the securities held by, each Selling Securityholder, will be set forth in a prospectus supplement or amendments to the registration statement of which this prospectus is a part, if and when necessary.

Please see the section entitled “*Plan of Distribution*” for further information regarding the Selling Securityholders’ method of distributing these securities. For information regarding transactions between us and the Selling Securityholders, see the section entitled “*Certain Relationships and Related Person Transactions*.”

Unless otherwise indicated below, the address of each Selling Securityholder listed in the tables below is c/o BridgeBio Oncology Therapeutics, Inc., 256 E. Grand Avenue, Suite 104, South San Francisco, CA 94080.

Name of Selling Securityholder	Common Stock Beneficially Owned Prior to this Offering	Common Stock to be Sold in this Offering	Common Stock Owned After this Offering	Percent
Aisling Capital V, LP (1)	564,625	564,625	—	—
ADAR1 Partners, LP (2)	828,960	797,775	31,185	*
Aedan Lev Weinstein (3)	93,307	93,307	—	—
Albert A. Holman III (4)	30,000	30,000	—	—
Andrew Philips (5)	30,000	30,000	—	—
BC Global Opportunities IX, LP (6)	4,365,747	3,265,747	1,100,000	*
BlackRock Global Funds World Healthscience Fund (7)	1,547,964	1,547,964	—	—
BlackRock Health Sciences Opportunities Portfolio (8)	1,060,002	209,287	850,715	*

Table of Contents

Name of Selling Securityholder	Common Stock Beneficially Owned Prior to this Offering	Common Stock to be Sold in this Offering	Common Stock Owned After this Offering	Percent
BlackRock Health Sciences Trust (9)	77,112	15,582	61,530	*
BP Fund LLC Series I (10)	46,653	46,653	—	—
BridgeBio Pharma LLC (11)	13,878,554	13,878,554	—	—
Casdin Private Growth Equity Fund II, L.P. (12)	282,312	282,312	—	—
Citadel CEMF Investments Ltd. (13)	2,528,762	1,399,512	1,129,250	1.4
Compass SAV II LLC (14)	27,059	27,059	—	—
Compass Offshore SAV II PCC Limited (15)	17,261	17,261	—	—
Cormorant Private Healthcare Fund III, LP (16)	2,187,536	760,496	1,427,040	1.8
Cormorant Private Healthcare Fund IV, LP (17)	1,905,046	1,905,046	—	—
Cormorant Private Healthcare Fund V, LP (18)	3,305,470	2,401,870	903,600	1.1
Cormorant Global Healthcare Master Fund, LP (19)	5,952,356	5,882,996	69,360	*
Davos Equities LLC (20)	93,307	93,307	—	—
Entities affiliated with Deerfield Management Company, L.P. (21)	4,885,446	4,885,446	—	—
Eli Wallace (22)	224,447	657,790	—	—
Eventide Healthcare Innovation Fund I LP (23)	1,082,362	1,082,362	—	—
Frank McCormick (24)	142,933	150,367	—	—
GV 2023, L.P. (25)	2,823,126	2,823,126	—	—
Helix Holdings II LLC (26)	4,528,186	4,528,186	—	—
Integrated Core Strategies (US) LLC (27)	1,148,141	466,535	681,606	*
Jeffery G. Murphy Revocable Living Trust DTD 12/27/1996 (28)	93,307	93,307	—	—
John P. Schmid (29)	30,000	30,000	—	—
Mark C. McKenna (30)	30,000	30,000	—	—
Mekn Investment LLC (31)	46,653	46,653	—	—
Napoli 2015 Quogue Holdings LLC (32)	46,653	46,653	—	—
Naz II Holding LLC (33)	93,307	93,307	—	—
Novo Holdings A/S (34)	1,866,141	1,866,141	—	—
Octagon Investments Master Fund LP (35)	1,043,110	793,110	250,000	*
Omega Fund VII, L.P. (36)	3,289,661	3,289,661	—	—
Paradigm BioCapital Advisors LP (37)	219,831	219,831	—	—
Paradigm BioCapital International Fund Ltd. (38)	1,646,310	1,646,310	—	—
Pedro Beltran (39)	160,320	469,849	—	—
Praveen Tipirneni (40)	82,889	85,924	—	—
Sio Partners LP (41)	50,385	50,385	—	—
Sio Partners Offshore Ltd (42)	35,923	35,923	—	—
Spearhead Insurance Solutions IDF, LLC - Series ADAR1 (43)	136,880	135,295	1,585	*
StemPoint Capital LP (44)	186,614	186,614	—	—
TheRas Aggregator, LP (45)	2,626,946	2,626,946	—	—
Wellington Biomedical Innovation Master Investors (Cayman) II L.P. (46)	2,818,348	2,818,348	—	—
Wellington Biotechnology Long/Short Fund (Bermuda) L.P. (47)	83,958	83,958	—	—
Wellington Biotechnology Long/Short Fund, L.P. (48)	93,320	93,320	—	—
Yong Ben (49)	123,378	469,849	—	—

* Indicates beneficial ownership less than 1%.

Table of Contents

- (1) Consists of 564,625 shares of Common Stock held by Aisling Capital V, LP (“Aisling V”). The securities are held directly by Aisling Capital V, LP (“Aisling V”) and held indirectly by Aisling Capital Partners V, LP (“Aisling GP V”), as general partner of Aisling V, Aisling Capital Partners V LLC (“Aisling Partners V”), as general partner of Aisling GP V, and each of the individual managing members of Aisling Partners V. The individual managing members (collectively, the “Managers”) of Aisling Partners V are Dr. Andrew Schiff and Steve Elms. Aisling GP V, Aisling Partners V and the Managers share voting and dispositive power over the shares directly held by Aisling V. Each of Aisling GP V, Aisling Partners V and the Managers may be deemed to be the beneficial owner of the securities listed above only to the extent of its pecuniary interest therein and each of Aisling GP V, Aisling Partners V and the Managers disclaim beneficial ownership other than to the extent of each of its pecuniary interest in the shares of Common Stock held by Aisling V. The address for this entity is 489 5th Avenue, 10th Floor, New York, NY 10017.
- (2) Reflects 828,960 shares of Common Stock held by ADAR1 Partners, LP of which 797,775 shares of Common Stock held by ADAR1 Partners, LP are being registered and offered pursuant to this registration statement. Daniel P. Schneeberger may be deemed to beneficially own the shares of Common Stock held by ADAR1 Partners, LP and disclaims beneficial ownership of the shares of Common Stock held by ADAR1 Partners LP. The address for this entity is 3503 Wild Cherry Drive, Building 9, Austin TX 78738.
- (3) Consists of 93,307 shares of Common Stock held by Aedan Lev Weinstein. The address for this entity is 59 Calle Kings Ct #202, San Juan, PR 00911.
- (4) Consists of 30,000 shares of Common Stock held by Albert A. Holman III. The address for this individual is c/o Cormorant Asset Management, LP, 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (5) Consists of 30,000 shares of Common Stock held by Andrew Philips. The address for this individual is c/o Cormorant Asset Management, LP, 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (6) Reflects 4,365,747 shares of Common Stock held by BC Global Opportunities IX, LP of which 3,265,747 shares of Common Stock held by BC Global Opportunities IX, LP are being registered and offered pursuant to this registration statement. BC Capital Management Limited is the General Partner of BC Global Opportunities IX, LP. Tan Kuangming as the shareholder and director of BC Capital Management Limited may be deemed to beneficially own the shares of Common Stock held by BC Global Opportunities IX, LP. The address for this entity is Room 1202-07, 12 Floor, Nan Fung Tower, No. 88 Connaught Road Central, Central, Hong Kong.
- (7) Consists of 1,547,964 shares of Common Stock held by BlackRock Global Funds World Healthscience Fund. The registered holders of the referenced shares to be registered are the following funds and accounts under management by subsidiaries of BlackRock, Inc.: BlackRock Health Sciences Trust, BlackRock Health Sciences Opportunities Portfolio, BlackRock Global Funds World Healthsciences Fund, BlackRock Health Sciences Term Trust and Pacific Select Fund- Health Sciences Portfolio. BlackRock, Inc. is the ultimate parent holding company of such subsidiaries. On behalf of such subsidiaries, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such funds and accounts, have voting and investment power over the shares held by the funds and accounts which are the registered holders of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such funds and accounts. The address of such funds and accounts, such subsidiaries and such portfolio managers and/or investment committee members is 50 Hudson Yards, New York, NY 10001. Shares shown include only the securities being registered for resale and may not incorporate all shares deemed to be beneficially held by the registered holders or BlackRock, Inc.
- (8) Reflects 1,060,002 shares of Common Stock held by BlackRock Health Sciences Opportunities Portfolio, of which 209,287 shares of Common Stock held by BlackRock Health Sciences Opportunities Portfolio are being registered and offered pursuant to this registration statement. The registered holders of the referenced shares to be registered are the following funds and accounts under management by subsidiaries of BlackRock, Inc.: BlackRock Health Sciences Trust, BlackRock Health Sciences Opportunities Portfolio, BlackRock Global Funds World Healthsciences Fund, BlackRock Health Sciences Term Trust and Pacific Select Fund- Health Sciences Portfolio. BlackRock, Inc. is the ultimate parent holding company of such subsidiaries. On behalf of such subsidiaries, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such funds and

Table of Contents

accounts, have voting and investment power over the shares held by the funds and accounts which are the registered holders of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such funds and accounts. The address of such funds and accounts, such subsidiaries and such portfolio managers and/or investment committee members is 50 Hudson Yards, New York, NY 10001. Shares shown include only the securities being registered for resale and may not incorporate all shares deemed to be beneficially held by the registered holders or BlackRock, Inc.

- (9) Reflects 77,112 shares of Common Stock held by BlackRock Health Sciences Trust, of which 15,582 shares of Common Stock held by BlackRock Health Sciences Trust are being registered and offered pursuant to this registration statement. The registered holders of the referenced shares to be registered are the following funds and accounts under management by subsidiaries of BlackRock, Inc.: BlackRock Health Sciences Trust, BlackRock Health Sciences Opportunities Portfolio and BlackRock Global Funds World Healthsciences Fund. BlackRock, Inc. is the ultimate parent holding company of such subsidiaries. On behalf of such subsidiaries, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such funds and accounts, have voting and investment power over the shares held by the funds and accounts which are the registered holders of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such funds and accounts. The address of such funds and accounts, such subsidiaries and such portfolio managers and/or investment committee members is 50 Hudson Yards, New York, NY 10001. Shares shown include only the securities being registered for resale and may not incorporate all shares deemed to be beneficially held by the registered holders or BlackRock, Inc.
- (10) Consists of 46,653 shares of Common Stock held by BP Fund LLC Series 1. Mark Mashburn as the President of BO Fund LLC Series 1 may be deemed to beneficially own the shares of Common Stock held by BP Fund LLC Series 1. The address for this entity is PO Box 363866, San Juan, PR 00936.
- (11) Consists of 13,805,126 shares of Common Stock to be held by BridgeBio Pharma LLC and 73,428 shares of Common Stock issuable upon the exercise of Options. Voting and investment power over the shares held by BridgeBio Pharma LLC is exercised by its parent entity, BridgeBio Pharma, Inc. The board of directors of BridgeBio Pharma, Inc. consists of Neil Kumar, Ph.D., Eric Aguiar, M.D., Jennifer E. Cook, Douglas A. Dachille, Ronald J. Daniels, Andrea J. Ellis, Fred Hassan, Charles Homcy, M.D., Andrew W. Lo, Ph.D., Frank P. McCormick, Ph.D., F.R.S., D.Sc., James C. Momtazee, Ali J. Satvat, Randal W. Scott, Ph.D., and Hannah A. Valentine, M.D. None of the members of the board of directors of BridgeBio Pharma, Inc. or BridgeBio Pharma LLC has individual voting or investment power with respect to such shares. The address for BridgeBio Pharma LLC and the individuals listed above is c/o BridgeBio Pharma, Inc., 3160 Porter Drive, Suite 250, Palo Alto, California 94304.
- (12) Consists of 282,312 shares of Common Stock held by Casdin Private Growth Equity Fund II, L.P. Casdin Capital, LLC serves as the investment manager of Casdin Private Growth Equity Fund II, L.P. The general partner of Casdin Private Growth Equity Fund II, L.P. is Casdin Private Growth Equity Fund II GP, LLC. Eli Casdin is the managing member of both Casdin Capital, LLC and Casdin Private Growth Equity Fund II GP, LLC and may be deemed to have voting and dispositive power over the shares held by the fund. The address of Casdin Capital, LLC, as the investment manager, is 1350 Avenue of the Americas, Suite 2600, New York, NY 10019.
- (13) Reflects 2,528,762 shares of Common Stock held by Citadel CEMF Investments Ltd. of which 1,399,512 shares of Common Stock held by Citadel CEMF Investments Ltd. are being registered pursuant to this registration statement. Citadel Advisors LLC is the portfolio manager of Citadel CEMF Investments Ltd. Citadel Advisors Holdings LP (“CAH”) is the sole member of Citadel Advisors LLC. Citadel GP LLC (“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 or direct the vote of, and/or shared power to dispose or to direct the disposition over, the shares of Common Stock covered by this registration statement. The foregoing should not be construed in and of itself as an admission by 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 Investments Ltd. is c/o Citadel Enterprise Americas LLC, 830 Brickell Plaza, Floor 15, Miami, FL 33131.

Table of Contents

- (14) Consists of 27,059 shares of Common Stock held by Compass SAV II LLC. Sio Capital Management, LLC is the investment manager for Compass SAV II LLC and Michael Castor is the managing member of such investment manager. Mr. Castor may be deemed the beneficial owner of the shares of Common Stock held by Compass SAV II LLC. Mr. Castor disclaims beneficial ownership of the shares of Common Stock held by Compass SAV II LLC, except to the extent of any pecuniary interest therein. The address for this entity is c/o Sio Capital Management, LLC, 600 Third Avenue, 2nd Floor, New York, NY 10016.
- (15) Consists of 17,261 shares of Common Stock held by Compass Offshore SAV II PCC Limited. Sio Capital Management, LLC is the investment manager for Compass Offshore SAV II PCC Limited and Michael Castor is the managing member of such investment manager. Mr. Castor may be deemed the beneficial owner of the shares of Common Stock held by Compass Offshore SAV II PCC Limited. Mr. Castor disclaims beneficial ownership of the shares of Common Stock held by Compass Offshore SAV II PCC Limited, except to the extent of any pecuniary interest therein. The address for this entity is c/o Sio Capital Management, LLC, 600 Third Avenue, 2nd Floor, New York, NY 10016.
- (16) Reflects 2,187,536 shares of Common Stock owned by Cormorant Private Healthcare Fund III, LP (“Fund III”) of which 760,496 shares of Common Stock held by Fund III are being registered and offered pursuant to this registration statement. Cormorant Asset Management, LP serves as the investment manager to Fund III and Cormorant Private Healthcare GP III, LLC (“GP III”) is the general partner of Fund III; Bihua Chen serves as the managing member of GP III and as the general partner of Cormorant Asset Management, LP. Accordingly, Ms. Chen has voting and investment discretion with respect to the shares held by Fund III. Ms. Chen disclaims any beneficial ownership of the securities held by Fund III other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address for Fund III, GP III and Cormorant Asset Management, LP is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (17) Consists of 1,905,046 shares of Common Stock owned by Cormorant Private Healthcare Fund IV, LP (“Fund IV”). Cormorant Asset Management, LP serves as the investment manager to Fund IV and Cormorant Private Healthcare GP IV, LLC (“GP IV”) is the general partner of Fund IV. Bihua Chen serves as the managing member of GP IV and as the general partner of Cormorant Asset Management, LP. Accordingly, Ms. Chen has voting and investment discretion with respect to the shares held by Fund IV. Ms. Chen disclaims any beneficial ownership of the securities held by Fund IV other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address for Fund IV, GP IV and Cormorant Asset Management, LP is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (18) Reflects 3,305,470 shares of Common Stock owned by Cormorant Private Healthcare Fund V, LP (“Fund V”) of which 2,401,870 shares of Common Stock held by Fund V are being registered and offered pursuant to this registration statement. Cormorant Asset Management, LP serves as the investment manager Fund V and Cormorant Private Healthcare GP V, LLC (“GP V”) is the general partner of Fund V. Bihua Chen serves as the managing member of GP V and as the general partner of Cormorant Asset Management, LP. Accordingly, Ms. Chen has voting and investment discretion with respect to the shares held by Fund V. Ms. Chen disclaims any beneficial ownership of the securities held by Fund V other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address for Fund V, GP V and Cormorant Asset Management, LP is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (19) Reflects 5,952,356 shares of Common Stock owned by Cormorant Global Healthcare Master Fund, LP (“Master Fund”) of which 5,882,996 shares of Common Stock held by Master Fund are being registered and offered pursuant to this registration statement. Cormorant Asset Management, LP serves as the investment manager to Master Fund and Cormorant Global Healthcare GP, LLC (“Global GP”) is the general partner of the Master Fund. Bihua Chen serves as the managing member of Global GP and as the general partner of Cormorant Asset Management, LP. Accordingly, Ms. Chen has voting and investment discretion with respect to the shares held by Master Fund. Ms. Chen disclaims any beneficial ownership of the securities held by Master Fund other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address for Master Fund, Global Fund and Cormorant Asset Management, LP is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (20) Consists of 93,307 shares of Common Stock held by Davos Equities LLC. David P. Nolan is the manager of Davos Equities LLC and Mr. Nolan may be deemed to beneficially own the shares of Common Stock held by Davos Equities LLC. The address of this entity is 200 Dorado Beach Dr #3722, Dorado, PR 00646.

Table of Contents

- (21) The shares of Common Stock beneficially owned consist of (A) 2,442,723 shares of Common Stock held by Deerfield Partners, L.P. and (B) 2,442,723 shares of Common Stock held by Deerfield Private Design Fund V, L.P. Deerfield Mgmt V, L.P. is the general partner of, and has shared voting power and shared dispositive power over the shares of Common Stock held by Deerfield Private Design Fund V, L.P. Deerfield Mgmt, L.P. is the general partner of, and has shared voting power and shared dispositive power over the shares of Common Stock held by Deerfield Partners, L.P. Deerfield Management Company, L.P. is the investment manager of both Deerfield Private Design Fund V, L.P. and Deerfield Partners, L.P. James E. Flynn is the sole manager of the general partner of each of Deerfield Mgmt V, L.P., Deerfield Mgmt, L.P. and Deerfield Management Company, L.P. Each of Deerfield Management Company, L.P. and Mr. Flynn have shared voting power and shared dispositive power over the shares of Common Stock held by Deerfield Private Design Fund V, L.P. and Deerfield Partners, L.P. The address for Deerfield Private Design Fund V, L.P. and Deerfield Partners, L.P. is c/o Deerfield Management Company, L.P., 345 Park Avenue South, 12th Floor, New York, New York 10010.
- (22) Reflects 224,447 shares of Common Stock underlying stock options exercisable within 60 days of August 29, 2025 which are beneficially owned by Eli Wallace as of such date, which does not include 20,822 shares of Common Stock underlying stock options that will vest upon the filing of the registration statement on Form S-8. 657,790 shares of Common Stock issuable upon the exercise of the Options held by Eli Wallace are being registered and offered pursuant to this registration statement.
- (23) Consists of 1,082,362 shares of Common Stock held by Eventide Healthcare Innovation Fund I LP. Finny Kuruvilla and Robin John may be deemed to beneficially own the shares of Common Stock held by Eventide Healthcare Innovation Fund I LP. The address of this entity is 1 International Place, Suite 4210, Boston, MA 02110.
- (24) Reflects 142,933 shares of Common Stock underlying stock options exercisable within 60 days of August 29, 2025 which are beneficially owned by Frank McCormick as of such date, which does not include 3,795 shares of Common Stock underlying stock options that will vest upon the filing of the registration statement on Form S-8. 150,367 shares of Common Stock issuable upon the exercise of the Options held by Frank McCormick are being registered and offered pursuant to this registration statement.
- (25) Consists of 2,823,126 shares of Common Stock held by GV 2023, L.P. GV 2023 GP, L.P. (the General Partner of GV 2023, L.P.), GV 2023 GP, L.L.C. (the General Partner of GV 2023 GP, L.P.), Alphabet Holdings LLC (the sole member of GV 2023 GP, L.L.C.), XXVI Holdings Inc. (the sole member of Alphabet Holdings LLC), and Alphabet Inc. (the controlling stockholder of XXVI Holdings Inc.) may each be deemed to share power to vote or dispose of the shares held directly by GV 2023, L.P. The principal business address for each of GV 2023, L.P., GV 2023 GP, L.P., GV 2023 GP, L.L.C., Alphabet Holdings LLC, XXVI Holdings Inc., and Alphabet Inc. is 1600 Amphitheatre Parkway, Mountain View, CA 94043.
- (26) Consists of 4,528,186 shares of Common Stock held by the Helix Holdings II (“Sponsor”). Bihua Chen is the manager of Sponsor and has voting and investment discretion with respect to the shares held of record by Sponsor. Ms. Chen disclaims any beneficial ownership of the securities held by the Sponsor other than to the extent of any pecuniary interest she may have therein, directly or indirectly. The address for Sponsor is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (27) Reflects 1,148,141 shares of Common Stock held by Integrated Core Strategies (US) LLC of which 466,535 shares of Common Stock held by Integrated Core Strategies (US) LLC are being registered and offered pursuant to this registration statement. The shares of Common Stock listed above may be deemed to be beneficially owned by Millennium Management LLC, Millennium Group Management LLC and Israel A. Englander (“Mr. Englander”) and/or other investment managers that may be controlled by Millennium Group Management LLC (the managing member of Millennium Management LLC) and Mr. Englander (the sole voting trustee of the managing member of Millennium Group Management LLC). The foregoing should not be construed in and of itself as an admission by Millennium Management LLC, Millennium Group Management LLC or Mr. Englander as to the beneficial ownership of the securities held by Integrated Core Strategies (US) LLC. The address for Integrated Core Strategies (US) LLC is c/o Millenium Management LLC, 399 Park Avenue, New York, NY 10022.

Table of Contents

- (28) Consists of 93,307 shares of Common Stock held by Jeffery G. Murphy Revocable Living Trust DTD 12/27/1996. Jeffrey G. Murphy may be deemed to beneficially own the shares of Common Stock and has the power to vote and dispose the shares of Common Stock held by Jeffrey G. Murphy Revocable Living Trust DTD 12/27/1996. The address for this entity is 6085 Timberidge Drive, Parkville, MO 64152.
- (29) Consists of 30,000 shares of Common Stock held by John P. Schmid. The address for this individual is c/o Cormorant Asset Management, LP, 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (30) Consists of 30,000 shares of Common Stock held by Mark C. McKenna. The address for this individual is c/o Cormorant Asset Management, LP, 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (31) Consists of 46,653 shares of Common Stock held by Mekk Investment LLC. Marie Kaiser Napoli may be deemed to beneficially own the shares of Common Stock held by Mekk Investment LLC. The address for this entity is 200 Dorado Beach Dr #3722, Dorado, PR 00646.
- (32) Consists of 46,653 shares of Common Stock held by Napoli 2015 Quogue Holdings LLC. Marie Kaiser Napoli and Paul Napoli may be deemed to beneficially own the shares of Common Stock held by Napoli 2015 Quogue Holdings LLC. The address for this entity is 200 Dorado Beach Dr #3812, Dorado, PR 00646.
- (33) Consists of 93,307 shares of Common Stock held by Naz II Holding LLC. The address for this entity is 53 Palmeras St, Suite 601, San Juan, PR 00911.
- (34) Consists of 1,866,141 shares of Common Stock held by Novo Holdings A/S (“Novo”). Novo has the sole power to vote and dispose these shares, and no person or entity is deemed to have any beneficial ownership or reportable pecuniary interest in the shares held by Novo. All decisions are made by a committee of three or more, all of whom are employees of Novo Holdings or its affiliates. The address for Novo is Tuborg Havnevej 19, DK 2900, Hellerup, Denmark.
- (35) Reflects 1,043,110 shares of Common Stock held by Octagon Investments Master Fund LP of which 793,110 shares of Common Stock held by Octagon Investments Master Fund LP are being registered and offered pursuant to this registration statement. Octagon Capital Advisors LP is the general partner of Octagon Investments Master Fund LP. Ting Jia, as the managing member of Octagon Capital Advisors LP, may be deemed to beneficially own the shares of Common Stock held by Octagon Investments Master Fund LP. The address for this entity is 654 Madison Avenue, 21st Floor, New York, NY 10065.
- (36) Consists of 3,289,661 shares of Common Stock held by Omega Fund VII, L.P. (“Omega Fund”). Omega Fund VII GP Manager, Ltd. (“Omega Ltd”) is the sole general partner of Omega Fund VII GP, L.P. (“Omega GP”), which is the sole general partner of Omega Fund; and each of Omega Ltd. and Omega GP may be deemed to own beneficially the shares held by Omega Fund. Claudio Nessi, Francesco Draetta and Otello Stampacchia are the directors of Omega Ltd. and, as a result, may be deemed to share voting and investment power over the shares held directly by Omega Fund. Each of Dr. Stampacchia, Mr. Draetta, Dr. Nessi, Omega Ltd. and Omega GP disclaim beneficial ownership of the shares held by Omega Fund except to the extent of their pecuniary interest therein. The business address of the Omega Fund and its affiliates is 888 Boylston Street, Suite 1111, Boston, MA 02199.
- (37) Consists of 219,831 shares of Common Stock held by Paradigm BioCapital Advisors LP, as discretionary investment manager on behalf of a separate account client solely with respect to the assets for which Paradigm BioCapital Advisors LP acts as its investment manager. The shares may be deemed to be indirectly beneficially owned by each of Paradigm BioCapital Advisors LP, Paradigm BioCapital Advisors GP LLC, and Senai Asefaw, M.D. Paradigm BioCapital Advisors GP LLC is the general partner of Paradigm BioCapital Advisors LP and Senai Asefaw, M.D. is the managing member of the Paradigm BioCapital Advisors GP LLC. The shares are managed by Paradigm BioCapital Advisors LP, with full investment and voting discretion, on behalf of one or more separately managed accounts managed by Paradigm BioCapital Advisors LP, or collectively, the Account. The foregoing statements shall not be construed as an admission that any of Paradigm BioCapital Advisors LP, Paradigm BioCapital Advisors GP LLC, Senai Asefaw, M.D. and the Account is a beneficial owner of the shares. The address for Paradigm BioCapital Advisors LP is 767 Third Avenue, 17th Floor, New York, NY 10017.
- (38) Consists of 1,646,310 shares of Common Stock held by Paradigm BioCapital International Fund Ltd. The shares may be deemed to be indirectly beneficially owned by each of Paradigm BioCapital Advisors LP, Paradigm BioCapital Advisors GP LLC, and Senai Asefaw, M.D. Paradigm BioCapital Advisors GP LLC is the general partner of Paradigm BioCapital Advisors LP and Senai Asefaw, M.D. is the managing member

Table of Contents

of the Paradigm BioCapital Advisors GP LLC. Paradigm BioCapital Advisors LP is the investment manager of Paradigm BioCapital International Fund Ltd. The foregoing statements shall not be construed as an admission that any of Paradigm BioCapital Advisors LP, Paradigm BioCapital Advisors GP LLC and Senai Asefaw, M.D. is a beneficial owner of the shares. The address for Paradigm BioCapital International Fund Ltd. is c/o Walkers Corporate Limited, 190 Elgin Avenue, George Town, Grand Cayman, KY1-9008, Cayman Islands.

- (39) Reflects 160,320 shares of Common Stock underlying stock options exercisable within 60 days of August 29, 2025 which are beneficially owned by Pedro Beltran as of such date, which does not include 14,882 shares of Common Stock underlying stock options that will vest upon the filing of the registration statement on Form S-8. 469,849 shares of Common Stock issuable upon the exercise of the Options held by Pedro Beltran are being registered and offered pursuant to this registration statement.
- (40) Reflects 82,889 shares of Common Stock underlying stock options exercisable within 60 days of August 29, 2025 which are beneficially owned by Praveen Tipirneni as of such date, which does not include 2,178 shares of Common Stock underlying stock options that will vest upon the filing of the registration statement on Form S-8. 85,924 shares of Common Stock issuable upon the exercise of the Options held by Praveen Tipirneni are being registered and offered pursuant to this registration statement.
- (41) Consists of 50,385 shares of Common Stock held by Sio Partners LP. Sio Capital Management, LLC is the investment manager for Sio Partners LP and Michael Castor is the managing member of such investment manager. Mr. Castor may be deemed the beneficial owner of the shares of Common Stock held by Sio Partners LP. Mr. Castor disclaims beneficial ownership of the shares of Common Stock held by Sio Partners LP, except to the extent of any pecuniary interest therein. The address for this entity is c/o Sio Capital Management, LLC, 600 Third Avenue, 2nd Floor, New York, NY 10016.
- (42) Consists of 35,923 shares of Common Stock held by Sio Partners Offshore Ltd. Sio Capital Management, LLC is the investment manager for Sio Partners Offshore Ltd and Michael Castor is the managing member of such investment manager. Mr. Castor may be deemed the beneficial owner of the shares of Common Stock held by Sio Partners Offshore Ltd. Mr. Castor disclaims beneficial ownership of the shares of Common Stock held by Sio Partners Offshore Ltd, except to the extent of any pecuniary interest therein. The address for this entity is c/o Sio Capital Management, LLC, 600 Third Avenue, 2nd Floor, New York, NY 10016.
- (43) Reflects 136,880 shares of Common Stock held by Spearhead Insurance Solutions IDF, LLC - Series ADAR1 of which 102,637 shares of Common Stock held by Spearhead Insurance Solutions IDF, LLC - Series ADAR1 are being registered and offered pursuant to this registration statement. Kenneth E. Foley may be deemed to beneficially own the shares of Common Stock held by Spearhead Insurance Solutions IDF, LLC - Series ADAR1 and disclaims beneficial ownership of the shares of Common Stock held by Spearhead Insurance Solutions IDF, LLC - Series ADAR1. The address for this entity is 3828 Kennett Pike, Ste 202, Greenville, DE 19807.
- (44) Consists of 186,614 shares of Common Stock held by StemPoint Capital LP. Michelle Ross may be deemed to beneficially own the shares of Common Stock held by StemPoint Capital LP. The address for this entity is 520 Madison Avenue, 19th Floor, New York, NY 10022.
- (45) Consists of 2,626,946 shares of Common Stock held by TheRas Aggregator, LP. The voting and dispositive power with respect to the shares of Common Stock held by TheRas Aggregator, LP are made collectively by the managers of the general partner, James Momtazee, Laura Furmanski, Neel Varshney and James P. Boylan. The address for this entity and the managers is 106 West 56th Street, 8th Floor, New York, NY 10019.
- (46) Consists of 2,818,348 shares of Common Stock held by Wellington Biomedical Innovation Master Investors (Cayman) II L.P. Wellington Management Company LLP ("WMC") has the power to vote and dispose the shares of Common Stock pursuant to WMC's investment management relationship with Wellington Biomedical Innovation Master Investors (Cayman) II L.P. WMC is a subsidiary of Wellington Management Group LLP ("WMG"). WMG is a Massachusetts limited liability partnership, privately held by 172 partners (as of July 1, 2020). There are no external entities with any ownership interest in the firm. Individual percentages of ownership are confidential; however, no single partner owns or has right to vote more than 5% of WMG's capital. The address for Wellington Biomedical Innovation Master Investors (Cayman) II L.P. is c/o Wellington Management Company LLP, 280 Congress Street, Boston MA 02210.

[Table of Contents](#)

- (47) Reflects 127,647 shares of Common Stock held by Wellington Biotechnology Long/Short Fund (Bermuda) L.P. of which 83,958 shares of Common Stock held by Wellington Biotechnology Long/Short Fund (Bermuda) L.P. are being registered pursuant to this registration statement. Wellington Management Company LLP (“WMC”) has the power to vote and dispose the shares of Common Stock pursuant to WMC’s investment management relationship with Wellington Biotechnology Long/Short Fund (Bermuda) L.P. WMC is a subsidiary of Wellington Management Group LLP (“WMG”). WMG is a Massachusetts limited liability partnership, privately held by 172 partners (as of July 1, 2020). There are no external entities with any ownership interest in the firm. Individual percentages of ownership are confidential; however, no single partner owns or has right to vote more than 5% of WMG’s capital. The address for Wellington Biotechnology Long/Short Fund (Bermuda) L.P. is c/o Wellington Management Company LLP, 280 Congress Street, Boston MA 02210.
- (48) Reflects 141,927 shares of Common Stock held by Wellington Biotechnology Long/Short Fund, L.P. of which 93,320 shares of Common Stock held by Wellington Biotechnology Long/Short Fund, L.P. are being registered pursuant to this registration statement. Wellington Management Company LLP (“WMC”) has the power to vote and dispose the shares of Common Stock pursuant to WMC’s investment management relationship with Wellington Biotechnology Long/Short Fund L.P. WMC is a subsidiary of Wellington Management Group LLP (“WMG”). WMG is a Massachusetts limited liability partnership, privately held by 172 partners (as of July 1, 2020). There are no external entities with any ownership interest in the firm. Individual percentages of ownership are confidential; however, no single partner owns or has right to vote more than 5% of WMG’s capital. The address for Wellington Biotechnology Long/Short Fund L.P. is c/o Wellington Management Company LLP, 280 Congress Street, Boston MA 02210.
- (49) Reflects 123,378 shares of Common Stock underlying stock options exercisable within 60 days of August 29, 2025 which are beneficially owned by Yong Ben as of such date, which does not include 14,882 shares of Common Stock underlying stock options that will vest upon the filing of the registration statement on Form S-8. 469,849 shares of Common Stock issuable upon the exercise of the Options held by Yong Ben are being registered and offered pursuant to this registration statement.

PLAN OF DISTRIBUTION

We will not receive any proceeds from the sale of shares of common stock by the Selling Securityholders pursuant to this prospectus, except with respect to any amounts received by us upon exercise of the Options to the extent the Options are exercised for cash. The Selling Securityholders will pay any underwriting discounts and commissions and expenses 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, 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 NYSE;
- 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;
- agreements with broker-dealers to sell a specified number of the securities at a stipulated price per share;
- 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

Table of Contents

- 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 the distribution of securities by any Selling Securityholder to its partners, members or securityholders;
- through a combination of any of the above methods of sale; or
- any other method permitted pursuant to applicable law.

A Selling Securityholder that is an entity may elect to make an in-kind distribution of securities to its members, partners, stockholders or other equityholders pursuant to the registration statement of which this prospectus forms a part by delivering a prospectus. To the extent that such members, partners, stockholders or other equityholders are not affiliates of ours, such members, partners, stockholders or other equityholders would thereby receive freely tradable securities pursuant to a distribution pursuant to the registration statement of which this prospectus forms a part. To the extent that such members, partners, stockholders or other equityholders is an affiliate of ours (or to the extent otherwise required by law), we may file a prospectus supplement in order to permit such members, partners, stockholders or other equityholders to use the prospectus to resell the securities acquired in such 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.

Table of Contents

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 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 Nasdaq under the symbol “BBOT”.

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 (“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 (“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 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 securities offered by this prospectus will be passed upon by Goodwin Procter LLP, San Francisco, California.

EXPERTS

The financial statements of BridgeBio Oncology Therapeutics, Inc. incorporated by reference in this prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. We have also filed a registration statement on Form S-1, including exhibits, under the Securities Act, with respect to common stock offered by this prospectus. This prospectus is part of the registration statement, but does not contain all of the information included in the registration statement or the exhibits. Our SEC filings are available to the public on the internet at a website maintained by the SEC located at <http://www.sec.gov>.

We also maintain a website at <http://www.bbotx.com>. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. You may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus, to the extent that a statement contained in or omitted from this prospectus, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below which have been filed by us:

- Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2025, filed with the SEC on March 5, 2026;
- The information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2025 from our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on April 28, 2026;
- Quarterly Reports on Form 10-Q for the quarter ended [March 31, 2026](#), filed with the SEC on May 12, 2026 and for the quarter ended [June 30, 2026](#), filed with the SEC on August 11, 2026;
- Current Reports on Form 8-K filed with the SEC on [January 7, 2026](#), [March 26, 2026](#), [April 23, 2026](#), [April 29, 2026](#), and [June 22, 2026](#); and

[Table of Contents](#)

- The description of the registrant's Common Stock contained in (i) the Registration Statement on [Form 8-A](#) (File No. 001-41955), filed by the registrant with the SEC under Section 12(b) of the Exchange Act on February 8, 2024, including any amendments or reports filed for the purpose of updating such description and (ii) [Exhibit 4.2](#)—Description of Securities to our Annual Report on Form 10-K, as filed with the SEC on March 5, 2026.

All documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or documents that is not deemed filed under such provisions, (i) on or after the date of filing of the registration statement containing this prospectus and prior to the effectiveness of the registration statement and (ii) on or after the date of this prospectus until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus is a part has been withdrawn, shall be deemed incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of those documents and will be automatically updated and, to the extent described above, supersede information contained or incorporated by reference in this prospectus and previously filed documents that are incorporated by reference in this prospectus.

Nothing in this prospectus shall be deemed to incorporate information furnished but not filed with the SEC pursuant to Item 2.02, 7.01 or 9.01 of Form 8-K. Upon written or oral request, we will provide without charge to each person, including any beneficial owner, to whom a copy of the prospectus is delivered a copy of any or all of the reports or documents incorporated by reference herein (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

BridgeBio Oncology Therapeutics, Inc.
256 E. Grand Avenue, Suite 104
South San Francisco, CA 94080
Attn: Investor Relations
(650) 405-4770
Email: Investors@BBOTx.com

BridgeBio Oncology Therapeutics, Inc.
63,054,549 Shares of Common Stock by the Selling Securityholders

PROSPECTUS

, 2026

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.**

The following table sets forth the costs and expenses will be paid by us in connection with the issuance and distribution of the securities being registered. We will not receive any proceeds from the sale of shares of common stock by the Selling Securityholders pursuant to this prospectus, except with respect to amounts received by us, if any, upon the exercise of the Options to the extent such Options are exercised for cash. 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. 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.

	Amount
SEC registration fee	\$89,778.96*
Accounting fees and expenses	**
Legal fees and expenses	**
Miscellaneous fees and expenses	**
Total expenses	\$ **

* Previously paid.

** These fees will be determined based on the securities offered and the number of issuances and accordingly cannot be defined at this time.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145(a) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or other adjudicating court shall deem proper.

Table of Contents

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

Our Charter, which became effective upon completion of the Business Combination, provides that no director or officer of ours shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director or officer. In addition, our Charter provides that if the DGCL is amended to authorize the further elimination or limitation of the liability of directors or officers, then the liability of a director or officer of ours shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Our Charter further provides that any repeal or modification of such article by its stockholders or amendment to the DGCL will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director or officer, as applicable, serving at the time of such repeal or modification.

Our Bylaws provide that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that he or she is or was, or has agreed to become, the Company's director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our Bylaws also provides that we will advance expenses to such officer or director indemnified in connection with a legal proceeding, 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 and such officers to the fullest extent permitted by law and our Charter and our Bylaws.

We also maintain a general liability insurance policy, which will cover certain liabilities of directors and officers of ours arising out of claims based on acts or omissions in their capacities as directors or officers.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits

Number	Description
2.1	<u>Business Combination Agreement, by and among Helix Acquisition Corp. II, TheRas, Inc. and Helix II Merger Sub, Inc., dated as of February 28, 2025 (incorporated by reference to Annex A in the Registrant's proxy statement/prospectus filed on July 9, 2025).</u>
2.2	<u>Amendment No. 1 to Business Combination Agreement, by and among Helix Acquisition Corp. II, TheRas, Inc. and Helix Merger Sub, Inc., dated as of June 17, 2025 (incorporated by reference to Annex A in the Registrant's proxy statement/prospectus filed on July 9, 2025).</u>
3.1	<u>BridgeBio Oncology Therapeutics, Inc. Certificate of Incorporation (incorporated by reference to Exhibit 3.1 the Registrant's Current Report on Form 8-K filed on August 13, 2025).</u>

Table of Contents

Number	Description
3.2	<u>BridgeBio Oncology Therapeutics, Inc. Bylaws (incorporated by reference to Exhibit 3.2 in the Registrant's Current Report on Form 8-K filed on August 13, 2025).</u>
4.1	<u>Specimen Common Stock Certificate of BridgeBio Oncology Therapeutics, Inc. (incorporated by reference to Exhibit 4.1 in the Registrant's proxy statement/prospectus filed on July 9, 2025).</u>
4.2	<u>Description of Securities (incorporated by reference to Exhibit 4.2 in the Registrant's Annual Report on Form 10-K filed on March 5, 2026).</u>
5.1**	<u>Opinion of Goodwin Procter LLP (incorporated by reference to Exhibit 5.1 in the Registrant's Form S-1 (File No. 333-289940) filed on August 29, 2025).</u>
10.1	<u>Amended and Restated Registration Rights Agreement dated as of August 11, 2025 (incorporated by reference to Exhibit 10.1 in the Registrant's Current Report on Form 8-K filed on August 13, 2025).</u>
10.2	<u>Form of Subscription Agreement, dated February 28, 2025, by and between Helix Acquisition Corp. II and each PIPE Investor (incorporated by reference to Annex E in the Registrant's proxy statement/prospectus filed on July 9, 2025).</u>
10.3	<u>Lock-Up Agreement, dated as of August 11, 2025, by and between Helix Acquisition Corp. II, Helix Holdings II, LLC, certain investment vehicles of Cormorant Asset Management, LP, certain existing shareholders of the Company, and other persons and entities (incorporated by reference to Exhibit 10.3 in the Registrant's Current Report on Form 8-K filed on August 13, 2025).</u>
23.1*	<u>Consent of Deloitte & Touche, LLP as an independent registered public accounting firm.</u>
23.2**	<u>Consent of Goodwin Procter LLP (included in Exhibit 5.1 hereto).</u>
24.1**	<u>Power of Attorney (included on the signature page to the registration statement).</u>
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document).
107**	<u>Filing Fee Table.</u>

* Filed Herewith.

** Previously filed.

b) Financial Statement Schedules All schedules have been omitted as not applicable or not required under the rules of Regulation S-X.

ITEM 17. UNDERTAKINGS.

I. The undersigned registrant hereby undertakes:

A. 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;

Table of Contents

provided, however, that: Paragraphs (A)(1)(i), (A)(1)(ii) and (A)(1)(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 Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act, that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- B. 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.
- C. 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.
- D. That, for the purpose of determining liability under the Securities Act to any purchaser:

- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

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

- E. 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.

II. 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.

III. 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.

IV. The undersigned registrant hereby undertakes that:

- A. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- B. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 2 to the Registration Statement to Form S-1 on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in South San Francisco, California, on September 1, 2026.

BRIDGEBIO ONCOLOGY THERAPEUTICS, INC.By: /s/ Pedro J. Beltran

Name: Pedro J. Beltran

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post Effective Amendment No. 2 to the Registration Statement on Form S-1 on Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Pedro J. Beltran</u> Pedro J. Beltran	Chief Executive Officer and Director (Principal Executive Officer)	September 1, 2026
<u>/s/ Idan Elmelech</u> Idan Elmelech	Chief Operating Officer (Principal Financial Officer)	September 1, 2026
<u>/s/ Marc Cobo</u> Marc Cobo	Principal Accounting Officer	September 1, 2026
<u>*</u> Jake Bauer	Director	September 1, 2026
<u>*</u> Bihua Chen	Director	September 1, 2026
<u>*</u> Raymond Kelleher	Director	September 1, 2026
<u>*</u> Neil Kumar	Director	September 1, 2026
<u>*</u> Peter Lebowitz	Director	September 1, 2026
<u>*</u> Frank P. McCormick	Director	September 1, 2026
<u>*</u> Praveen Tipirneni	Director	September 1, 2026

* By: /s/ Pedro J. Beltran

Name: Pedro J. Beltran

Title: Attorney-in-fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement No. 333-289940 on Form S-3 of our report dated March 5, 2026 relating to the financial statements of BridgeBio Oncology Therapeutics, Inc., appearing in the Annual Report on Form 10-K of BridgeBio Oncology Therapeutics, Inc. for the year ended December 31, 2025. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP
San Francisco, California
September 1, 2026