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

**Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

UNITY Biotechnology, Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

26-4726035
(I.R.S. Employer
Identification No.)

**285 East Grand Ave.
South San Francisco, CA 94080
(650) 416-1192**
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Anirvan Ghosh, Ph.D.
Chief Executive Officer
Unity Biotechnology, Inc.
285 East Grand Avenue
South San Francisco, CA 94080
(650) 416-1192**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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

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

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

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

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

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

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

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

Large accelerated filer
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.

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

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

Subject to Completion, dated December 6, 2023

PROSPECTUS



Unity Biotechnology, Inc.

2,271,580 Shares of Common Stock

This prospectus relates to the resale by the selling stockholders named in this prospectus from time to time of up to 2,271,580 shares of our common stock, par value \$0.0001 per share. These 2,271,580 shares of common stock consist of:

- 2,143,000 shares of our common stock (the "New Warrant Shares") issuable upon exercise of the warrants (the "New Warrants") that were issued pursuant to the inducement offer letter agreement, dated as of November 9, 2023, with the holders of certain existing warrants of the Company (the "Inducement Letter"); and
- 128,580 shares of our common stock (the "Placement Agent Warrant Shares") issuable upon exercise of the warrants (the "Placement Agent Warrants") that were issued to H.C. Wainwright & Co., LLC ("Wainwright"), or its designees, as part of Wainwright's compensation for serving as exclusive placement agent in connection with the Inducement Letter, pursuant to the Engagement Letter (as defined herein).

The New Warrants and the Placement Agent Warrants were issued in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act") and Regulation D promulgated thereunder. We are registering the offer and resale of the New Warrant Shares issuable upon the exercise of the New Warrants to satisfy a provision in that Inducement Letter, pursuant to which we agreed to register the resale of the shares of common stock issuable upon the exercise of the New Warrants. We are also registering the Placement Agent Warrant Shares for resale from time to time pursuant to this prospectus.

Our registration of the shares of common stock covered by this prospectus does not mean that the selling stockholders will offer or sell any of such shares of common stock. The selling stockholders named in this prospectus, or their donees, pledgees, transferees or other successors-in-interest, may resell the shares of common stock covered by this prospectus through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the possible methods of sale that may be used by the selling stockholders, you should refer to the section of this prospectus entitled "Plan of Distribution."

We will not receive any of the proceeds from the sale of common stock by the selling stockholders. However, we will receive proceeds from the exercise of the New Warrants and Placement Agent Warrants if such securities are exercised for cash. We intend to use those proceeds, if any, for working capital, operating expenses to include clinical trial progression, and general corporate purposes.

Any shares of common stock subject to resale hereunder will have been issued by us and acquired by the selling stockholders prior to any resale of such shares pursuant to this prospectus.

No underwriter or other person has been engaged to facilitate the sale of the common stock in this offering. We will bear all costs, expenses and fees in connection with the registration of the common stock. The selling stockholders will bear all commissions and discounts, if any, attributable to their respective sales of our common stock.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "UBX." On December 5, 2023, the closing sale price of our common stock on the Nasdaq Global Select Market was \$1.83 per share.

Investment in our common stock involves risk. See "[Risk Factors](#)" contained in this prospectus on page 5, in our periodic reports filed from time to time with the Securities and Exchange Commission, which are incorporated by reference in this prospectus and in any applicable prospectus supplement. You should carefully read this prospectus and the documents we incorporate by reference, before you invest in our common stock.

We are an "emerging growth company" and a "smaller reporting company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings. See the discussion in the section titled "Prospectus Summary - Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

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

The date of this prospectus is _____, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of the registration statement that we filed with the Securities and Exchange Commission (the “SEC”) pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the shares of our common stock covered by this prospectus. As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus.

This prospectus and the documents incorporated by reference into this prospectus include important information about us, the securities being offered and other information you should know before investing in our securities. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares of common stock are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” in this prospectus.

You should rely only on this prospectus and the information incorporated or deemed to be incorporated by reference in this prospectus. We have not, and the selling stockholders have not, authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise indicated, information contained or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry’s future performance are necessarily uncertain due to a variety of factors, including those described in “Risk Factors” beginning on page 5 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our securities. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our securities, including the information discussed under “Risk Factors” in this prospectus and the documents incorporated by reference and our financial statements and related notes that are incorporated by reference in this prospectus. In this prospectus, unless the context indicates otherwise, “Unity,” the “Company,” the “registrant,” “we,” “us,” “our,” or “ours” refer to Unity Biotechnology, Inc.

Overview

Our mission is to slow, halt, or reverse diseases of aging. Our initial focus is on creating senolytic medicines to selectively eliminate senescent cells and thereby treat diseases of aging, such as ophthalmologic diseases, with the opportunity to explore neurology and other therapeutic areas. Our lead program is UBX1325, a senolytic Bcl-xL inhibitor, being studied in our Phase 2b ASPIRE clinical trial evaluating UBX1325 head-to-head against aflibercept in previously treated patients with active diabetic macular edema, or DME, who are not achieving optimal benefit from standard of care. We have completed our Phase 2 BEHOLD study in DME and our Phase 2 ENVISION study in wet age-related macular degeneration, or nAMD.

Diseases of aging cause considerable economic, personal, and societal burden. As individuals age, the prevalence of chronic disease increases, with 80% of older Americans having at least one chronic disease and 50% having two or more. Diseases of aging negatively impact quality of life, are typically chronic, and progress from the time of onset until death. It is estimated that providing healthcare for people over the age of 65 costs four to five times more than for younger individuals. According to the United States Census Bureau, this elderly population of Americans is expected to increase nearly 50% by 2050, increasing the economic burden of aging dramatically. Any success increasing longevity without treating underlying diseases of aging would only serve to increase this burden.

We believe that by creating medicines that target fundamental aging mechanisms, including in ophthalmology, we can reduce the economic, personal, and societal burden of aging and enhance quality of life.

Targeting Cellular Senescence and Other Biologies of Aging

We believe that the accumulation of senescent cells is a fundamental mechanism of aging and a driver of many common diseases of aging. Cellular senescence is a natural biological state in which a cell permanently halts division. These cells are referred to as senescent. Senescent cells accumulate with age, secreting large quantities of more than 100 proteins, including inflammatory factors, proteases, fibrotic factors, and growth factors, that disturb the tissue micro-environment. This collection of secreted proteins is referred to as the Senescence Associated Secretory Phenotype, or SASP. In addition to its effects on tissue function, the SASP contains factors that induce senescence in neighboring cells, setting off a cascade of events that culminates in the formation of the functionally aged and/or diseased tissue that underlies a variety of age-related diseases.

We are developing senolytic medicines, including in ophthalmology, to eliminate senescent cells and thereby lower the production of the SASP, which we believe addresses a root cause of age-related diseases. Many existing therapeutics, such as antibodies, target single SASP factors, but fail to remove the cells that continually produce these factors. By stopping the production of the SASP at its source, we believe senolytic medicines could have a more durable impact by slowing, halting, or reversing particular diseases of aging, and shift the treatment paradigm from chronic to intermittent dosing. Less frequent dosing may significantly reduce treatment burden and also improve drug tolerability and patient adherence.

November 2023 Inducement Letter

On November 9, 2023, the Company entered into an inducement offer letter agreement (the “Inducement Letter”) with certain holders of certain of the Company’s existing warrants to purchase up to an aggregate of 2,143,000 shares of common stock, which warrants were issued to such holders on August 22, 2022 (the “Existing Warrants”), having an exercise price of \$8.50 per share. Pursuant to the Inducement Letter, the holders of the Existing Warrants agreed to exercise for cash their Existing Warrants at a reduced exercise price of \$2.045 per share in consideration of the Company’s agreement to issue the New Warrants to purchase up to an aggregate of 2,143,000 shares of the Company’s common stock at an exercise price of \$1.92 per share (as adjusted from time to time) in a private placement (the “Private Placement”).

The Company engaged Wainwright to act as its exclusive placement agent in the Private Placement, and the Company agreed to pay Wainwright a cash fee equal to 7.0% of the aggregate gross proceeds received from the exercise of the Existing Warrants, pursuant to that certain engagement letter by and between the Company and Wainwright, dated as of October 16, 2023 (the “Engagement Letter”).

Pursuant to the Engagement Letter, the Company also agreed to issue Wainwright (or its designees) the Placement Agent Warrants to purchase up to an aggregate of 128,580 shares of the Company’s common stock. The Placement Agent Warrants have an exercise price of \$2.5563 per share and otherwise have substantially identical terms to the New Warrants.

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

As a company with less than \$1.235 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act (the “JOBS Act”) enacted in April 2012. An “emerging growth company” may take advantage of exemptions from some of the reporting requirements that are otherwise applicable to public companies. These exceptions include:

- being permitted to present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the “Sarbanes-Oxley Act”);
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until the last day of our fiscal year following the fifth anniversary of our first sale of common equity securities pursuant to an effective registration statement under the Securities Act. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer,” our annual gross revenue exceeds \$1.235 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have elected to avail ourselves of this exemption.

We are also a “smaller reporting company” as defined in the Item 10(f)(1) of Regulation S-K. 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 common stock held by non-affiliates is more than \$250 million 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 common stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Corporate Information

We were founded on March 30, 2009, as a Delaware corporation under the name Forge, Inc. On January 28, 2015, we changed our name to Unity Biotechnology, Inc. Our principal executive offices are located at 285 East Grand Avenue, South San Francisco, California 94080, and our telephone number is (650) 416-1192. Our website address is www.unitybiotechnology.com. The information on, or that can be accessed through, our website is not part of this prospectus. We have included our website address as an inactive textual reference only.

THE OFFERING

Common Stock to be Offered by the Selling Stockholders	Up to 2,271,580 shares of common stock, which are comprised of (i) 2,143,000 New Warrant Shares and (ii) 128,580 Placement Agent Warrant Shares.
Use of Proceeds	All shares of our common stock offered by this prospectus are being registered for the accounts of the selling stockholders and we will not receive any proceeds from the sale of these shares. However, we will receive proceeds from the exercise of the New Warrants and Placement Agent Warrants if such warrants are exercised for cash. We intend to use those proceeds, if any, for working capital, operating expenses to include clinical trial progression, and general corporate purposes. See “Use of Proceeds” beginning on page 8 of this prospectus for additional information.
Registration Rights	Under the terms of the Inducement Letter, we agreed to file this registration statement with respect to the New Warrant Shares issuable pursuant to the exercise of the New Warrants, as applicable, as soon as reasonably practicable (and in any event within 30 calendar days of the date of the Inducement Letter), and to use commercially reasonable efforts to have the registration statement declared effective within 90 calendar days after the date of the Inducement Letter and to keep the registration statement effective at all times until no holder of the New Warrants owns any New Warrants or New Warrant Shares.
Plan of Distribution	<p>The selling stockholders named in this prospectus, or their pledgees, donees, transferees, distributees, beneficiaries or other successors-in-interest, may offer or sell the shares of common stock from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders may also resell the shares of common stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions.</p> <p>See “Plan of Distribution” beginning on page 12 of this prospectus for additional information on the methods of sale that may be used by the selling stockholders.</p>
Nasdaq Global Select Market Symbol	Our common stock is listed on the Nasdaq Global Select Market under the symbol “UBX.”
Risk Factors	Investing in our common stock involves significant risks. See “Risk Factors” beginning on page 5 of this prospectus and the documents incorporated by reference in this prospectus.

RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information contained in this prospectus and in the documents we incorporate by reference, you should carefully consider the risks discussed under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 as well as our Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC, before making a decision about investing in our securities. The risks and uncertainties in the documents incorporated by reference are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common stock could decline and you could lose part or all of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain “forward-looking statements,” which include information relating to future events, future financial performance, strategies, expectations, competitive environment and regulation. Words such as “may,” “should,” “could,” “would,” “predicts,” “potential,” “continue,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” and similar expressions, as well as statements in future tense, are intended to identify forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results and may not be accurate indications of when such performance or results will actually be achieved. Forward-looking statements are based on information we have when those statements are made or our management’s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- our plans to develop and commercialize UBX1325 (foselutoclax) or any future product candidates;
- our expectations regarding the potential benefits, activity, effectiveness, and safety of our drug candidates;
- our ongoing and planned clinical trials, including expectations with regard to the results of our clinical studies, preclinical studies and research and development programs, including the timing and availability of data from such studies;
- our predictions about the results of future or ongoing clinical trials, including predictions based on results from a clinical trial;
- our preclinical, clinical and regulatory development plans for our drug candidates, including the timing or likelihood of regulatory filings and approvals for our drug candidates;
- our expectations with regard to our ability to acquire, discover and develop additional drug candidates and advance such drug candidates into, and successfully complete, clinical studies;
- our expectations regarding the potential market size and size of the potential patient populations for our drug candidates, if approved for commercial use;
- our intentions and our ability to establish collaborations and/or partnerships;
- the timing and amount of any milestone payments we are obligated to make pursuant to our existing license agreements and any future license or collaboration agreements that we may enter into;
- our commercialization, marketing and manufacturing capabilities and expectations;
- our intentions with respect to the commercialization of our drug candidates;
- the pricing and reimbursement of our drug candidates, if approved;
- the implementation of our business model and strategic plans for our business and drug candidates, including additional indications that we may pursue;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates, including the projected terms of patent protection;
- estimates of our expenses, future revenue, capital requirements, our needs for additional financing, and our ability to obtain additional capital;
- the lingering effects of the COVID-19 pandemic and the effects of any future pandemic on our clinical trials and business;
- our ability to maintain compliance with the minimum required closing bid price for continued listing on the Nasdaq Global Select Market;

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- developments and projections relating to our competitors and our industry, including competing therapies;
- our financial performance;
- macroeconomic trends and uncertainty, including high interest rates, rising inflation, the government closure of Silicon Valley Bank and liquidity concerns at other financial institutions, and the potential for local and/or global economic recession; and
- other factors, including risks and uncertainties listed under the caption “Risk Factors” in our filings with the SEC.

You should read this prospectus and any related free-writing prospectus and the documents incorporated by reference in this prospectus with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. The forward-looking statements contained or incorporated by reference in this prospectus are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

All shares of our common stock offered by this prospectus are being registered for the accounts of the selling stockholders and we will not receive any proceeds from the sale of these shares. However, we will receive proceeds from the exercise of the New Warrants and Placement Agent Warrants if such warrants are exercised for cash. We intend to use those proceeds, if any, for working capital, operating expenses to include clinical trial progression, and general corporate purposes.

SELLING STOCKHOLDERS

Unless the context otherwise requires, as used in this prospectus, “selling stockholders” includes the selling stockholders listed below and donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the selling stockholders as a gift, pledge or other non-sale related transfer.

Information About Selling Stockholders Offering

The shares of common stock being offered by the selling stockholders are (i) the New Warrant Shares issuable upon exercise of the New Warrants issued pursuant to the Inducement Letter and (ii) the Placement Agent Warrant Shares issuable upon exercise of the Placement Agent Warrants issued pursuant to the Engagement Letter. For additional information regarding the issuances of the New Warrants and the Placement Agent Warrants, see “Prospectus Summary—November 2023 Inducement Letter” above. We are registering the New Warrant Shares and the Placement Agent Warrant Shares in order to permit the selling stockholders to offer the shares for resale from time to time.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the shares of common stock and securities convertible or exercisable into shares of common stock, as of December 5, 2023, assuming exercise of the securities exercisable into shares of common stock held by the selling stockholders on that date, if applicable, without regard to any limitations on conversions or exercises.

The third column lists the shares of common stock being offered pursuant to this prospectus by the selling stockholders.

This prospectus generally covers the resale of the sum of (i) the maximum number of New Warrant Shares and (ii) the maximum number of Placement Agent Warrant Shares.

The table below assumes that the outstanding New Warrants and Placement Agent Warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the Inducement Letter, without regard to any limitations on the exercise of the New Warrants and the Placement Agent Warrants. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the New Warrants and the Placement Agent Warrants, a selling stockholder may not exercise the New Warrants or the Placement Agent Warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% (or 9.99% at the election of the holder prior to the date of issuance), of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon the exercise of such New Warrants or Placement Agent Warrants which have not

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been exercised. The number of shares in the second and fourth columns do not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

<u>Name of Selling Stockholder</u>	<u>Number of shares of common stock owned prior to offering</u>	<u>Maximum number of shares of common stock to be sold pursuant to this prospectus</u>	<u>Number of shares of common stock owned after offering</u>	<u>Percentage of common stock owned after offering⁽¹¹⁾</u>
Armistice Capital, LLC ⁽¹⁾	1,714,000	857,000 ⁽²⁾	857,000	4.86%
Alyeska Master Fund, LP ⁽³⁾	2,346,650	1,286,000 ⁽⁴⁾	1,060,650	5.87%
James Cappuccio ⁽⁵⁾	24,430	24,430 ⁽⁶⁾	0	*
Michael Vasinkevich ⁽⁵⁾	82,452	82,452 ⁽⁷⁾	0	*
Noam Rubinstein ⁽⁵⁾	16,072	16,072 ⁽⁸⁾	0	*
Craig Schwabe ⁽⁵⁾	4,340	4,340 ⁽⁹⁾	0	*
Charles Worthman ⁽⁵⁾	1,286	1,286 ⁽¹⁰⁾	0	*

* Less than 1%

- (1) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund”), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the Selling Stockholder from exercising that portion of the warrants that would result in the Selling Stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.
- (2) Represents 857,000 New Warrant Shares.
- (3) Alyeska Investment Group, L.P., Alyeska Fund GP, LLC and Anand Parekh (collectively, “Alyeska”) are the beneficial owners of 2,346,650 shares of common stock, which includes (i) 1,060,650 shares of common stock issued upon the exercise of the Existing Warrants in connection with the Inducement Letter, and (ii) the New Warrants to purchase 1,286,000 shares of our common stock, which warrants are subject to a beneficial ownership limitation that precludes Alyeska from exercising any portion of them to the extent that, following the exercise, the Alyeska’s beneficial ownership of common stock would exceed 9.99% of the total number of outstanding shares. The address of Alyeska is 77 West Wacker Drive, 7th Floor, Chicago, Illinois 60601. Consequently, as of the date set forth above, Alyeska may not necessarily be able to exercise all of these warrants due to the limitation. The number shares of common stock set forth in the above table does not reflect the application of this limitation.
- (4) Represents 1,286,000 New Warrant Shares.
- (5) The selling stockholder was issued compensation warrants as a designee of Wainwright in connection with the Inducement Letter, pursuant to the Engagement Letter. Each selling stockholder has sole voting and dispositive power over the securities held. The business address is c/o H.C. Wainwright & Co., LLC, 430 Park Avenue, 3rd Floor, New York, New York 10022. Each selling stockholder may not exercise the Placement Agent Warrants to the extent such exercise would cause each selling stockholder, together with his affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding common stock following such exercise, or, upon notice to us, 9.99% of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of such securities which have not been so exercised.
- (6) Represents 24,430 Placement Agent Warrant Shares.
- (7) Represents 82,452 Placement Agent Warrant Shares.
- (8) Represents 16,072 Placement Agent Warrant Shares.
- (9) Represents 4,340 Placement Agent Warrant Shares.
- (10) Represents 1,286 Placement Agent Warrant Shares.
- (11) The percentage of common stock owned by the selling stockholders after this offering is based upon 16,784,969 shares of common stock outstanding as of December 5, 2023.

Relationships with the Selling Stockholders

Each of James Cappuccio, Noam Rubinstein, Craig Schwabe, Michael Vasinkevich, and Charles Worthman, are associated persons of Wainwright, which served as our exclusive placement agent in connection with the Private Placement for which Wainwright received compensation.

Armistice Capital Master Fund Ltd. and Alyeska Master Fund, LP purchased securities on August 22, 2022 in the underwritten offering of our shares of common stock and the Existing Warrants.

PLAN OF DISTRIBUTION

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Global Select Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. A selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

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

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

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

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We are required to pay certain fees and expenses incurred by us incident to the registration of the securities.

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

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

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Haynes and Boone, LLP, New York, New York.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2022, as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the financial statements), which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and current reports and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC.

These documents are also available, free of charge, through the Investors & Media section of our website, which is located at www.unitybiotechnology.com. Information contained on our website is not incorporated by reference into this prospectus and you should not consider information on our website to be part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement. We incorporate by reference the documents listed below and any future information filed (rather than furnished) with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act between the date of this prospectus and the termination of this offering, provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any current report on Form 8-K:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, filed with the SEC on March 15, 2023;
- The information specifically incorporated by reference into our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, from our [Definitive Proxy Statement](#) on Schedule 14A, filed with the SEC on April 28, 2023;

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- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, filed with the SEC on [May 9, 2023](#), our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, filed with the SEC on [August 8, 2023](#), and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, filed with the SEC on [November 13, 2023](#);
- Our Current Reports on Form 8-K, filed with the SEC on [March 17, 2023](#), [March 27, 2023](#), [April 11, 2023](#) (as amended on Form 8-K/A on April 28, 2023), [April 24, 2023](#), [June 23, 2023](#), [September 6, 2023](#), [September 27, 2023](#), and [November 13, 2023](#); and
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on April 26, 2018, including any amendments or reports filed with the SEC for the purposes of updating this description.

These documents may also be accessed on our website at www.unitybiotechnology.com. Except as otherwise specifically incorporated by reference in this prospectus, information contained in, or accessible through, our website is not a part of this prospectus.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents by writing or telephoning us at the following address:

Unity Biotechnology, Inc.
285 Grand Avenue
South San Francisco, California 94080
(650) 416-1192
Attention: Investor Relations

2,271,580 Shares



COMMON STOCK

PROSPECTUS

**PART II:
INFORMATION NOT REQUIRED IN PROSPECTUS**

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various costs and expenses payable by us in connection with the sale of the securities being registered. All such costs and expenses shall be borne by us. Except for the Securities and Exchange Commission registration fee, all the amounts shown are estimates.

Securities and Exchange Commission registration fee	\$ 633.69
Printing and engraving costs	\$ 9,000.00
Legal fees and expenses	\$ 32,915.00
Accounting fees and expenses	\$ 20,000.00
Miscellaneous fees and expenses	\$ 1,000.00
Total	<u>\$ 65,548.69</u>

Item 15. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that 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), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

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

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director,

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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 status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Any underwriting agreement or distribution agreement that the registrant enters into with any underwriters or agents involved in the offering or sale of any securities registered hereby may require such underwriters or dealers to indemnify the registrant, some or all of its directors and officers and its controlling persons, if any, for specified liabilities, which may include liabilities under the Securities Act of 1933, as amended.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide for the indemnification provisions described above and elsewhere herein. We have entered into separate indemnification agreements with our directors and officers which may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. In addition, we have purchased a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment in some circumstances. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

Item 16. Exhibits

- (b) All schedules have been omitted because they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

<u>Exhibit No.</u>	<u>Description</u>
4.1	<u>Form of Common Stock Certificate (incorporated by reference to Exhibit 4.2 to the Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 8, 2022)</u>
4.2	<u>Form of Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on August 22, 2022)</u>
4.3	<u>Amended and Restated Investors' Rights Agreement, dated as of March 15, 2018, by and among Unity Biotechnology, Inc. and the investors party thereto (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on April 5, 2018)</u>
4.4	<u>Description of the Company's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.5 to the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 15, 2023)</u>

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<u>Exhibit No.</u>	<u>Description</u>
4.5	Form of New Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on November 13, 2023)
5.1*	Opinion of Haynes and Boone, LLP.
23.1*	Consent of Ernst & Young LLP, independent registered public accounting firm.
23.2*	Consent of Haynes and Boone, LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (contained in the signature page to this registration statement).
107*	Calculation of Filing Fee.

* Filed herewith

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

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

Provided, however, that:

Paragraphs (1)(i), (1)(ii) and (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 Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B (§230.430B of this chapter):

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

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in South San Francisco, California, on December 6, 2023.

UNITY BIOTECHNOLOGY, INC.

By: /s/ Anirvan Ghosh, Ph.D.

Name: Anirvan Ghosh, Ph.D.

Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anirvan Ghosh, Ph.D., Alexander Nguyen, and Lynne Sullivan, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them, for him or her and in his or her name, place and stead, and in any and all capacities, to file and sign any and all amendments, including post-effective amendments, to this registration statement and any other registration statement for the same offering that is to be effective under Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Delaware and applicable federal securities laws.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Anirvan Ghosh</u> Anirvan Ghosh, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	December 6, 2023
<u>/s/ Lynne Sullivan</u> Lynne Sullivan	Chief Financial Officer (Principal Financial and Accounting Officer)	December 6, 2023
<u>/s/ Keith R. Leonard Jr.</u> Keith R. Leonard Jr.	Chairman of the Board of Directors	December 6, 2023
<u>/s/ Paul L. Berns</u> Paul L. Berns	Lead Independent Director	December 6, 2023
<u>/s/ Nathaniel E. David</u> Nathaniel E. David	Director	December 6, 2023

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Gilmore O'Neill</u> Gilmore O'Neill	Director	December 6, 2023
<u>/s/ Margo Roberts</u> Margo Roberts	Director	December 6, 2023
<u>/s/ Michael P. Samar</u> Michael P. Samar	Director	December 6, 2023
<u>/s/ Camille D. Samuels</u> Camille D. Samuels	Director	December 6, 2023

Unity Biotechnology, Inc.
285 East Grand Ave.
South San Francisco, CA 94080

Ladies and Gentlemen:

We have acted as counsel for Unity Biotechnology, Inc., a Delaware corporation (the "Company"), in connection with the filing with the Securities and Exchange Commission (the "Commission") on the date hereof, under the Securities Act of 1933, as amended (the "Securities Act"), of a registration statement on Form S-3 (the "Registration Statement") by the Company which registers the resale by the holders thereof of up to an aggregate of 2,271,580 shares of common stock of the Company, par value \$0.0001 per share (the "Common Stock"), comprised of (i) 2,143,000 shares of Common Stock (the "Investor Warrant Shares") issuable upon the exercise of warrants (the "Investor Warrants") issued to certain holders pursuant to that certain inducement letter, dated November 9, 2023 between the Company and the investors named therein (the "Inducement Letter"); and (ii) 128,580 shares of Common Stock (the "Placement Agent Warrant Shares") issuable upon exercise of warrants (the "Placement Agent Warrants") issued to H.C. Wainwright & Co., LLC (the "Placement Agent") or its designees as part of the Placement Agent's compensation for serving as exclusive placement agent in connection with the transactions contemplated by the Inducement Letter. The Investor Warrant Shares and the Placement Agent Warrant Shares are referred to herein collectively as the "Securities."

In rendering the opinions expressed herein, we have examined and relied upon the originals, or copies certified to our satisfaction, of (i) the Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws of the Company, as of the date hereof ("Company Charter Documents"); (ii) the Registration Statement and all exhibits thereto; (iii) the Investor Warrants; (iv) the Placement Agent Warrants; (v) a specimen of the Company's Common Stock certificate; (vi) a certificate executed by an officer of the Company, dated as of the date hereof; and (vii) such other corporate records of the Company as we have deemed necessary or appropriate for purposes of the opinions hereafter expressed.

As to questions of fact material to the opinions expressed below, we have, without independent verification of their accuracy, relied to the extent we deemed reasonably appropriate upon the representations and warranties of the Company contained in such documents, records, certificates, instruments or representations furnished or made available to us by the Company.

In making the foregoing examinations, we have assumed (i) the genuineness of all signatures; (ii) the authenticity of all documents submitted to us as originals; (iii) the conformity to original documents of all documents submitted to us as certified or photostatic copies; (iv) that all agreements or instruments we have examined are the valid, binding and enforceable obligations of the parties thereto; and (v) that all factual information on which we have relied was accurate and complete.

We have also assumed that (i) the Company will continue to be incorporated and in existence and good standing in its jurisdiction of organization; (ii) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective; (iii) no stop order of the Commission preventing or suspending the use of the prospectus contained in the Registration Statement or any prospectus supplement will have been issued; (iv) a prospectus properly describing the Securities offered thereby will have been delivered to the purchaser(s) of the Securities as required in accordance with applicable law; (v) all Securities will be offered, issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the prospectus and any prospectus supplement; (vi) any definitive purchase, underwriting or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto and will be an enforceable obligation of the parties thereto; (vii) upon effectiveness of the Registration Statement, there will be sufficient shares of Common Stock authorized under the Company Charter Documents and not otherwise reserved for issuance; and (viii) there will not have occurred any change in law or in the Company Charter Documents of the Company adversely affecting the Securities or the rights of the holders thereof.

Based upon the foregoing and subject to the assumptions and qualifications stated herein, we are of the opinion that (i) the Investor Warrant Shares, when issued in accordance with the terms of the Investor Warrants, will be validly issued, fully paid and non-assessable; and (ii) the Placement Agent Warrant Shares, when issued in accordance with the terms of the Placement Agent Warrants, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited exclusively to the General Corporation Law of the State of Delaware (the "DGCL") and applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the DGCL and such provisions of the Delaware Constitution and we have not considered, and express no opinion on, any other laws or the laws of any other jurisdiction.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the heading "Legal Matters" in the prospectus constituting part of such Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Haynes and Boone, LLP

Haynes and Boone, LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of Unity Biotechnology, Inc. for the registration of 2,271,580 shares of its common stock and to the incorporation by reference therein of our report dated March 15, 2023, with respect to the financial statements of Unity Biotechnology, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Mateo, California
December 6, 2023

Calculation of Filing Fee Tables

Form S-3

Unity Biotechnology, Inc.

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common Stock, par value \$0.0001 per share	Rule 457(c)	2,271,580(2)	\$1.89(3)	\$4,293,286.20	\$0.00014760	\$633.69				
Fees Previously Paid												
Carry Forward Securities												
Carry Forward Securities	—	—	—	—		—			—	—	—	—
	Total Offering Amounts					\$4,293,286.20		\$633.69				
	Total Fees Previously Paid							—				
	Total Fee Offsets							—				
	Net Fee Due							\$633.69				

- (1) Pursuant to Rule 416 under the Securities Act of 1933 (the “Securities Act”), the shares being registered hereunder include such indeterminate number of shares of common stock, par value \$0.0001 per share, as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) Represents (i) 2,143,000 New Warrant Shares (as defined in the registration statement), and (ii) 128,580 Placement Agent Warrant Shares (as defined in the registration statement).
- (3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low prices of the common stock as reported on The Nasdaq Capital Market on December 5, 2023, which such date is within five business days of the filing of this registration statement, of \$1.89 per share.