statement shall become effective on such date as the Commission acting, pursuant to said Section 8(a), may determine.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 **REGISTRATION STATEMENT**

UNDER THE SECURITIES ACT OF 1933

Standard BioTools Inc.

(Exact name of registrant as specified in its charter)

Delaware	77-0513190		
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)		
South San Fra (65	r Place, Ste 2000 ncisco, California 94080 6)) 266-6000 including area code, of registrant's principal executive offices)		
President and 2 Towe South San Fra (65	chael Egholm Chief Executive Officer r Place, Ste 2000 ncisco, California 94080 (0) 266-6000 hone number, including area code, of agent for service)		
	Copies to:		
Robert F. Kornegay Zachary B. Myers Wilson Sonsini Goodrich & Rosati, Professional Corporation 650 Page Mill Road Palo Alto, California 94304 (650) 493-9300	Nicholas Khadder General Counsel Standard BioTools Inc. 2 Tower Place, Ste 2000 South San Francisco, California 94080 (650) 266-6000		
	ncement of proposed sale to the public)		
If the only securities being registered on this Form are being offered pursuant to dividend of	or interest reinvestment plans, please check the following box: \Box		
If any of the securities being registered on this Form are to be offered on a delayed or contionly in connection with dividend or interest reinvestment plans, check the following box.	inuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered ⊠		
If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) statement number of the earlier effective registration statement for the same offering. \qed	under the Securities Act, please check the following box and list the Securities Act registration		
If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securitie earlier effective registration statement for the same offering. \Box	es Act, check the following box and list the Securities Act registration statement number of the		
If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective Rule 462(e) under the Securities Act, check the following box. \qed	ve amendment thereto that shall become effective upon filing with the Commission pursuant to		
If this Form is a post-effective amendment to a registration statement filed pursuant to Gen to Rule 413(b) under the Securities Act, check the following box. \Box	eral Instruction I.D. filed to register additional securities or additional classes of securities pursuant		
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated file definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and	er, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the d "emerging growth company" in Rule 12b-2 of the Exchange Act.		
Large accelerated filer \Box	Accelerated filer		
Non-accelerated filer	Smaller reporting company		
If an emerging growth company, indicate by check mark if the registrant has elected not to standards provided pursuant to Section $7(a)(2)(B)$ of Securities Act. \square			
	y be necessary to delay its effective date until the registrant shall file a further amendment ive in accordance with Section 8(a) of the Securities Act of 1933 or until the registration		

The information in this prospectus is not complete and may be changed. The securities may not be sold 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 May 17, 2022

PROSPECTUS



Standard BioTools Inc.

75,164,397 Shares of Common Stock Offered by the Selling Securityholders

The selling securityholders identified herein may from time to time offer or sell up to 75,164,397 shares of our common stock, \$0.001 par value per share ("Common Stock"), which may be issued upon conversion of Series B Convertible Preferred Stock. On April 4, 2022, we issued 127,780 shares of our Series B-1 Convertible Preferred Stock, \$0.001 per share (the "Series B-1 Preferred Stock") and 127,779 shares of our Series B-2 Convertible Preferred Stock, \$0.001 per share (the "Series B-2 Preferred Stock" and with the Series B-1 Preferred Stock, the "Series B Preferred Stock") to the selling securityholders. The Series B Preferred Stock was acquired by the selling securityholders in a private placement and upon the conversion of term loans, which are more fully described in the section entitled "Description of Transaction." To the extent that any selling securityholders resell any securities, the selling securityholders may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling securityholders and the amount and terms of the securities being offered. You should read this prospectus and any applicable prospectus supplement before you invest. We will not receive any proceeds from the sale of our Common Stock by the selling securityholders.

We are registering the resale of shares of our Common Stock in connection with the selling securityholder's registration rights pursuant to a registration rights agreement entered into by us and the selling securityholders, described under the heading "Description of Transaction," but the registration of those shares does not necessarily mean that any of those shares will be offered or sold by the selling securityholders pursuant to this prospectus or at all.

This prospectus describes the general manner in which the shares of our Common Stock may be offered and sold by the selling securityholders. The selling securityholders or their permitted transferees or other successors-in-interest may, but are not required to, sell the shares of our Common Stock offered by this prospectus from time to time in a number of different ways and at varying prices. The selling securityholders may offer and sell the shares of Common Stock to or through underwriters, dealers or agents, or directly to investors, on a continuous or delayed basis. For additional information on the possible methods of sale that may be used by the selling securityholders, see "Plan of Distribution" and "Selling Securityholders." We do not know when or in what amount the selling securityholders may offer the shares of Common Stock for sale. We have agreed to pay certain expenses in connection with the registration of the shares of Common Stock. The selling securityholders will pay all underwriting discounts and selling commissions, if any, in connection with the sale of the shares of Common Stock. Any prospectus supplement or free writing prospectus may add, update, or change information contained in this prospectus. You should read this prospectus, any prospectus supplement and any free writing prospectus, together with the documents incorporated by reference herein and therein, before you make an investment decision.

Our Common Stock is listed on the Nasdaq Global Select Market under the symbol "LAB." On May 16, 2022, the last reported sale price of our Common Stock on the Nasdaq Global Select Market was \$2.17 per share. Each prospectus supplement will indicate whether the securities offered thereby will be listed on any securities exchange.

Investing in these securities involves risks. You should read carefully this prospectus, the documents incorporated by reference in this prospectus and any prospectus supplement before you invest. Please carefully read the information under the headings "Risk Factors" beginning on page 3 of this prospectus and "Item 1A – Risk Factors" of our most recent report on Form 10-K or 10-Q that is incorporated by reference in this prospectus before you invest in our securities.

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

The date of this prospectus is

, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf registration process, the selling securityholders may from time to time sell the securities described in this prospectus in one or more offerings.

You should rely only on the information contained in, or incorporated by reference into, this prospectus or contained in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with information that is different from that contained, or incorporated by reference, in this prospectus, any applicable prospectus supplement or in any related free writing prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus and any applicable prospectus supplement or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the applicable prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

You should also read and consider the information in the documents to which we have referred you under the captions "Where You Can Find More Information" and "Incorporation by Reference" in this prospectus.

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 who come into possession of this prospectus and any free writing prospectus related to this offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any such free writing prospectus applicable to that jurisdiction.

PROSPECTUS SUMMARY

This summary highlights selected information that is presented in greater detail elsewhere, or incorporated by reference, in this prospectus. It does not contain all of the information that may be important to you and your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including the matters set forth under the section of this prospectus captioned "Risk Factors" and the financial statements and related notes and other information that we incorporate by reference herein, including our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. Unless the context indicates otherwise, references in this prospectus to "Standard BioTools Inc.," "we," "our" and "us" refer, collectively, to Standard BioTools Inc., a Delaware corporation, and its subsidiaries taken as a whole. This prospectus includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this prospectus are the property of their respective owners.

Company Overview

Standard BioTools Inc., or Standard BioTools, previously known as Fluidigm Corporation, is driven by a bold vision – unleashing tools to accelerate breakthroughs in human health. Standard BioTools has an established portfolio of essential, standardized next-generation technologies that help biomedical researchers develop medicines faster and better. As a leading solutions provider, we provide reliable and repeatable insights in health and disease using our proprietary mass cytometry and microfluidics technologies that help transform scientific discoveries into better patient outcomes. Standard BioTools works with leading academic, government, pharmaceutical, biotechnology, plant and animal research, and clinical laboratories worldwide, focusing on the most pressing needs in translational and clinical research, including oncology, immunology, and immunotherapy.

Corporate Information

We were incorporated in California in May 1999 as Mycometrix Corporation, changed our name to Fluidigm Corporation in April 2001, reincorporated in Delaware in July 2007, and subsequently changed our name to Standard BioTools Inc. in April 2022. Our principal executive offices are located at 2 Tower Place, South San Francisco, California 94080. Our telephone number is (650) 266-6000. Our website address is www.fluidigm.com. We make available on our website, free of charge, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). Our SEC reports can be accessed through the investor relations page of our website located at http://investors.fluidigm.com. The SEC also maintains an Internet site at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

The contents of our website are not a part of, and are not incorporated by reference into, this Registration Statement on Form S-3 or any other report or document we file with the SEC. Any reference to our website is intended to be an inactive textual reference only.

The Offering

The selling securityholders named in this prospectus may offer and sell up to 75,164,397 shares of our Common Stock issuable upon conversion of shares of our Series B Preferred Stock, which is based on the initial conversion rate of 294.1176 per share. Our Common Stock is listed on the Nasdaq Global Select Market under the symbol "LAB." We will not receive any of the proceeds from sales by the selling securityholders of any of the shares of Common Stock covered by this prospectus. See "Use of Proceeds" on page 5 for more information.

Throughout this prospectus, when we refer to the shares of our Common Stock which are being registered on behalf of the selling securityholders, we are referring to the shares of Common Stock that have been issued to or are issuable upon the conversion of the Series B-1 Preferred Stock and Series B-2 Preferred Stock to the securityholders listed in "Selling Securityholders" on page 5. When we refer to the selling securityholders in this prospectus, we are referring to the investors in our private placement and, as applicable, any donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from the investors in our private placement as a gift, pledge, or other non-sale related transfer.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before you invest in our securities you should carefully consider those risk factors described under, but not limited to, the heading "Risk Factors" in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q and any subsequently filed Current Reports on Form 8-K (other than, in each case, information furnished rather than filed), which are incorporated by reference herein, and those risk factors that may be included in any applicable prospectus supplement, together with all of the other information included in this prospectus, any prospectus supplement and the documents we incorporate by reference. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. If any of these risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. In that case, the value of our securities could decline, and you could lose part or all of your investment.

FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "potentially," "likely," and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Forward-looking statements include, but are not necessarily limited to, those relating to: information concerning our possible or assumed future cash flow, revenue, sources of revenue and results of operations, cost of product revenue and product margin, operating and other income and expenses, unit sales and the selling prices of our products, business strategies, financing plans, expansion of our business, competitive position, industry environment, potential growth opportunities, market growth expectations, and the effects of competition and public health crises (including the COVID-19 pandemic) on our business, the global supply chain, and our customers, suppliers, and other business partners. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections captioned "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and include statements regarding the intent, belief or current expectations of our management that are subject to known and unknown risks, uncertainties and assumptions. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual re

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This prospectus and the documents incorporated by reference in this prospectus may contain market data that we obtain from industry sources. These sources do not guarantee the accuracy or completeness of the information. Although we believe that our industry sources are reliable, we do not independently verify the information. The market data may include projections that are based on a number of other projections. While we believe these assumptions to be reasonable and sound as of the date of this prospectus, actual results may differ from the projections.

DESCRIPTION OF TRANSACTION

Series B-1 and B-2 Convertible Preferred Stock Purchase Agreements

On April 4, 2022, Standard BioTools, Casdin Private Growth Equity Fund II, L.P. and Casdin Partners Master Fund, L.P. (collectively, "Casdin") and Viking Global Opportunities Illiquid Investments Sub-Master LP and Viking Global Opportunities Drawdown (Aggregator) LP (collectively, "Viking" and, together with Casdin, the "Purchasers" and each individually, a "Purchaser") completed the transactions contemplated by the Series B-1 Convertible Preferred Stock Purchase Agreement, dated January 23, 2022, by and between the Company and Casdin (the "Casdin Purchase Agreement"), and the Series B-2 Convertible Preferred Stock Purchase Agreement, dated January 23, 2022 (the "Viking Purchase Agreement" and collectively, the "Purchase Agreements"), by and between the Company and Viking. On April 4, 2022, and pursuant to the Purchase Agreements, the Company issued and sold (a) to Casdin, 112,500 shares of the Company's newly designated Series B-1 Convertible Preferred Stock, par value \$0.001 per share ("Series B-1 Preferred Stock,"), in exchange for \$112.5 million, and (b) to Viking, 112,500 shares of the Company's newly designated Series B-2 Convertible Preferred Stock, par value \$0.001 per share ("Series B-2 Preferred Stock"), in exchange for \$112.5 million (such transactions, collectively, the "Preferred Equity Transactions"). The rights, preferences and privileges of the Series B Preferred Stock is described below in the section entitled "Description of Capital Stock."

Pursuant to the Purchase Agreements, and subject to customary exceptions, if the Company intends to issue or sell new equity securities, then each of the Purchaser Parties (as defined in the Casdin Purchase Agreement and Viking Purchase Agreement) have the right to participate in such equity offering on a pro rata basis for so long as such Purchaser Parties (as defined under each of their applicable Purchase Agreements), collectively, continue to beneficially own at least 25% of the Series B-1 Preferred Stock or Series B-2 Preferred Stock, as applicable (including shares of Common Stock issued on conversion of such Series B Preferred Stock), issued. Pursuant to the Purchase Agreements, until the later of (x) the first anniversary of the closing and (y) such time as such Purchaser beneficially owns securities representing less than 7.5% of the outstanding shares of our Common Stock (on an as-converted basis), each selling securityholder is subject to customary standstill restrictions. The Purchase Agreements also prohibit the selling securityholders from transferring the Series B Preferred Stock, or common stock issued upon conversion of such Series B Preferred Stock, in either case without the Company's consent for six months from April 4, 2022, except for certain permitted transfers. Thereafter, the selling securityholders are prohibited from transferring any shares of Series B Preferred Stock or Common Stock issued upon conversion of such Series B Preferred Stock held by such selling securityholder to certain purchasers, subject to certain exceptions. The foregoing summary of the Purchase Agreements and the transactions contemplated by the Purchase Agreements does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Purchase Agreements, which are attached as Annex B and Annex C of our definitive proxy statement filed with the SEC on February 24, 2022, respectively, and incorporated herein by reference.

Casdin and Viking Loan Agreements

On January 23, 2022, we entered into (i) a Loan Agreement, dated and effective as of January 23, 2022, by and among Casdin and the Company (the "Casdin Loan Agreement") and (ii) a Loan Agreement, dated and

effective as of January 23, 2022, by and among Viking and the Company (the "Viking Loan Agreement," and together with the Casdin Loan Agreement, the "Loan Agreements"). Each Loan Agreement provided for a \$12.5 million term loan to the Company (each, a "Term Loan" and collectively, the "Term Loans"). The Term Loans were fully drawn on January 24, 2022. Upon the issuance of the Series B Preferred Stock pursuant to the Purchase Agreements, the Term Loan under the Casdin Loan Agreement automatically converted into an aggregate of 15,280 shares of Series B-1 Preferred Stock and the Term Loan under the Viking Loan Agreement automatically converted into an aggregate of 15,279 shares of Series B-2 Preferred Stock, in accordance with the terms of the Casdin Loan Agreement or the Viking Loan Agreement, as applicable.

The description of the Loan Agreements contained herein is qualified in its entirety by reference to the text of each of the Loan Agreements, which were attached as Exhibit 10.1 to the Company's Current Report on Form 8-K/A filed with the SEC on February 11, 2022 and Exhibit 10.2 of our Current Report on Form 8-K filed with the SEC on January 24, 2022, respectively, and incorporated herein by reference.

Registration Rights Agreement

Also on January 23, 2022, the Company entered into a Registration Rights Agreement with the Purchasers, pursuant to which the Purchasers will have certain customary registration rights with respect to shares issuable under the Loan Agreements and the Purchase Agreements, including (i) any shares of common stock acquired by any Holder (as defined in the Registration Rights Agreement) pursuant to the conversion of the Series B Preferred Stock in accordance with the Certificates of Designations (as defined below) and (ii) any shares of common stock acquired by any Holder pursuant to preemptive rights under the Purchase Agreements.

The foregoing summary of the Registration Rights Agreement and the transactions contemplated by the Registration Rights Agreement does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Registration Rights Agreement, which is filed as Exhibit 10.5 to our Current Report on Form 8-K that was filed with the SEC on January 24, 2022 and is incorporated herein by reference.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of our securities by selling securityholders, but we may bear a portion of the expenses of the offerings of that Common Stock. We will also pay certain fees and expenses of legal counsels to the selling securityholders.

SELLING SECURITYHOLDERS

This prospectus relates to the possible resale by certain of our stockholders, who we refer to in this prospectus as the "selling securityholders," of up to 75,164,397 shares of our Common Stock that may be issued upon conversion of the 127,780 shares of Series B-1 Preferred Stock and 127,779 shares of Series B-2 Preferred Stock which were issued by us to the selling securityholders in connection with the Purchase Agreements and Loan Agreements. The following table provides the names of the selling securityholders and the number of shares of our Common Stock, assuming conversion of all shares of Series B Preferred Stock, without regard to any limitations on conversion, offered by such selling securityholders under this prospectus. The selling securityholders listed below have previously been granted registration rights with respect to the shares offered hereby pursuant to that Registration Rights Agreement dated as of January 23, 2022, by and between us and certain of our securityholders. The shares offered by this prospectus may be offered from time to time by the selling securityholders listed below. The selling securityholders are not obligated to sell any of their shares offered by this prospectus, and reserve the right to accept or reject, in whole or in part, any proposed sale of shares. The selling securityholders listed below may also offer and sell less than the number of shares indicated.

The selling securityholders are not making any representation that any shares covered by this prospectus will or will not be offered for sale. Other than the Purchase Agreements, Loan Agreements and the transactions contemplated thereby, the conversion of the Series B Preferred Stock and the other relationships described below, the selling securityholders and their affiliates have not had any material relationship with us within the past three years.

The table below sets forth the name of each selling securityholder, the number of shares of our Common Stock that may be beneficially owned by each selling securityholder (without regard to any limitations on conversion), the maximum number of shares of our Common Stock that may be offered pursuant to this prospectus as well as the number of shares of our Common Stock that will be held by each selling securityholder after the offering, assuming all of the offered shares are sold. In each case, the number of shares of our Common Stock shown in the table below is calculated based on an assumed conversion of the current number of shares of Series B-1 Preferred Stock or Series B-2 Preferred Stock held by the selling securityholder as of April 30, 2022 and the initial conversion rate of 294.1176 per share of Series B-1 Preferred Stock and Series B-2 Preferred Stock, assuming conversion as of April 30, 2022 and without regard to any limitations on conversion. The number of shares of our Common Stock into which the Series B-1 Preferred Stock and Series B-2 Preferred Stock is convertible is subject to adjustment under certain circumstances as further described in the section of this prospectus captioned "Description of Capital Stock" and subject to the terms of the Certificates of Designations (as defined below). Accordingly, the number of shares of our Common Stock issuable upon conversion of the Series B-1 Preferred Stock and Series B-2 Preferred Stock and beneficially owned and offered by the selling securityholders pursuant to this prospectus may change from that set forth in the below table. The number of shares and percentages of beneficial ownership set forth below are based on (i) 77,252,135 shares of our Common Stock outstanding as of April 30, 2022 and (ii) the assumed conversion of all shares of Series B Preferred Stock held by the selling securityholder as of April 30, 2022 into 75,164,397 shares of Common Stock. Except as otherwise described herein or in the footnotes below the table, beneficial ownership is determined under the SEC rules and regulations and generally includes voting or investment power over securities. We have prepared the table based on information given to us by, or on behalf of, the selling securityholders. The selling securityholders may have sold, transferred or otherwise disposed of some or all of the shares listed below in exempt or registered transactions since the date on which the information below was provided to us and may in the future sell, transfer or otherwise dispose of some or all of the shares in private placement transactions exempt from, or not subject to the registration requirements of, the Securities Act.

		Common Stock				
	Shares of Common Stock Beneficially Owned Before Shares of Cor Offering.(1) Stock Regist					
Selling Securityholder	Number	%	Stock Registered Hereby	Number	<u>%</u>	
Casdin Private Growth Equity Fund II, L.P.(3)	11,274,704	7.40%	11,274,704		_	
Casdin Partners Master Fund, L.P.(3)	26,307,642	17.26%	26,307,642	_	_	
Viking Global Opportunities Illiquid Investments Sub-Master LP ⁽⁴⁾	25,179,995	16.52%	25,179,995	_	—	
Viking Global Opportunities Drawdown (Aggregator) LP(4)	12,402,056	8.14%	12,402,056	_	_	

- (1) Assumes the conversion of all shares of our Series B Preferred Stock at the initial conversion rate of 294.1176 per share, without regard to limitations on conversion.
- (2) The selling securityholders have not informed us, and we do not know, when or in what amounts the selling securityholders may offer for sale the shares of Common Stock pursuant to this offering. For purposes of this table, we have assumed that the selling securityholders will have sold all of the shares covered by this prospectus upon the completion of this offering.

- (3) Casdin Private Growth Equity Fund II, L.P. ("Casdin Private Growth Fund"), Casdin Capital, LLC ("Casdin Capital"), as investment adviser to Casdin Partners Master Fund, L.P. ("Casdin Master Fund") and Casdin Private Growth Fund, Casdin Partners GP, LLC ("Casdin Partners GP"), as the general partner of Casdin Master Fund, Casdin Private Growth Equity Fund II GP, LLC ("Casdin Private Growth GP"), as the general partner of Casdin Private Growth Fund, and Eli Casdin, as the managing member of Casdin Capital, Casdin Partners GP and Casdin Private Growth GP, share voting and dispositive power with respect to 89,446 shares of Series B-1 Preferred Stock held by Casdin Master Fund and 38,334 shares of Series B-1 Preferred Stock held by Casdin Private Growth Fund. The reported shares include shares of Common Stock issuable upon conversion of the Series B-1 Preferred Stock. Eli Casdin is a member of our board of directors. Casdin's address is 1350 Avenue of the Americas, Suite 2600, New York, NY 10019.
- (4) Represents shares of Common Stock that Viking Global Opportunities Illiquid Investments Sub-Master LP ("VGOP") and Viking Global Opportunities Drawdown (Aggregator) LP ("VGOD") have the right to acquire, in each case, upon conversion of shares of Series B-2 Preferred Stock held by each of VGOP and VGOD, without giving effect to a provision in the Series B-2 Certificate of Designations which provides that neither Viking nor its affiliates shall be entitled to convert shares of Series B-2 Preferred Stock unless such conversion would not result in Viking, together with its affiliates, beneficially owning more than 9.5% of the total number of shares of Common Stock outstanding (the "Blocker"). Without giving effect to the Blocker, 85,612 shares of Series B-2 Preferred Stock held by VGOP would be convertible into 25,179,995 shares of Common Stock and 42,167 shares of Series B-2 Preferred Stock held by VGOD would be convertible into 12,402,056 shares of Common Stock, for an aggregate of 37,582,051 shares of Common Stock. VGOP has the authority to dispose of and vote the shares directly owned by its general partner, Viking Global Opportunities Portfolio GP LLC ("Opportunities Portfolio GP"), and by Viking Global Investors LP ("VGI"), which provides managerial services to VGOP. VGOD has the authority to dispose of and vote the shares directly owned by it, which power may be exercised by its general partner, Viking Global Opportunities Drawdown Portfolio GP LLC ("VGOD Portfolio GP"), and by VGI, which provides managerial services to the VGOD. O. Andreas Halvorsen, David C. Ott and Rose Shabet, as Executive Committee members of Viking Global Partners LLC (the general partner of VGI), Opportunities Portfolio GP and VGOD Portfolio GP. Niking's address is c/o Viking Global Investors LP, 55 Railroad Avenue, Greenwich, Connecticut 06830.

In addition, we may name additional selling securityholders from time to time. Information about such additional selling securityholders, including their identities and the securities to be registered on their behalf, will be set forth in a prospectus supplement, in a post-effective amendment or in filings that we make with the SEC under the Exchange Act that are incorporated by reference in this prospectus.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Eighth Amended and Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), our Amended and Restated Bylaws (the "Bylaws") and our Certificates of Designations (as defined below), each of which are incorporated by reference as an exhibit to the Registration Statement on Form S-3. We encourage you to read our Certificate of Incorporation, our Bylaws, our Certificates of Designations and the applicable provisions of the Delaware General Corporation Law, for additional information.

Authorized Capital Shares

Our authorized capital stock consists of 400,000,000 shares of Common Stock, and 10,000,000 shares of preferred stock, \$0.001 par value per share ("Preferred Stock"). Out of the Preferred Stock, as of April 30, 2022, 128,267 shares have been designated Series B-1 Convertible Preferred Stock and 128,267 shares have been

designated Series B-2 Convertible Preferred Stock. As of April 30, 2022, there were 77,252,135 shares of Common Stock outstanding, 127,780 shares of Series B-1 Convertible Preferred Stock outstanding and 127,779 shares of Series B-2 Convertible Preferred Stock outstanding.

Common Stock

The holders of our Common Stock are entitled to one vote per share on all matters to be voted on by our stockholders. Subject to preferences that may be applicable to any outstanding shares of Preferred Stock, holders of our Common Stock are entitled to receive ratably such dividends as may be declared by our Board of Directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of Common Stock are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the prior distribution rights of Preferred Stock then outstanding. Except as otherwise described below in the section entitled "Preemptive Rights; Standstill; Transfer Restrictions," holders of Common Stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to the Common Stock.

Voting Rights

Holders of our Common Stock are entitled to one vote for each share of Common Stock held by such holder on any matter submitted to a vote at a meeting of stockholders. In addition, our Certificate of Incorporation provides that certain corporate actions require the approval of our stockholders. These actions, and the vote required, are as follows:

- the removal of a director requires the vote of a majority of the voting power of our issued and outstanding capital stock entitled to vote in the election of directors; and
- the amendment of provisions of our Certificate of Incorporation relating to blank check preferred stock, the classification of our directors, the removal of directors, the filling of vacancies on our Board of Directors, cumulative voting, procedures for annual and special meetings of our stockholders, action by written consent of stockholders and procedures for the amendment of our Certificate of Incorporation require the vote of 66 2/3% of our then outstanding voting securities.

Preferred Stock

Our Board of Directors has the authority, without further action by our stockholders, to designate and issue our Preferred Stock in one or more series. Our Board of Directors may also fix by resolution or resolutions the designations, powers, preferences and rights, and the qualifications, limitations or restrictions, of each such series of Preferred Stock, any or all of which may be greater than or senior to those of the Common Stock. Though the actual effect of any such issuance on the rights of the holders of Common Stock will not be known until our Board of Directors determines the specific rights of the holders of Preferred Stock, the potential effects of such an issuance include:

- diluting the voting power of the holders of Common Stock;
- reducing the likelihood that holders of Common Stock will receive dividend payments;
- reducing the likelihood that holders of Common Stock will receive payments in the event of our liquidation, dissolution, or winding up;
 and
- delaying, deterring or preventing a change-in-control or other corporate takeover.

Series B-1 Preferred Stock

The following is a summary of the principal terms of the Series B-1 Preferred Stock.

The powers, preferences and rights, and the qualifications, limitations or restrictions of the Series B-1 Preferred Stock are set forth in the Certificate of Designations of Rights, Preferences and Privileges of Series B-1 Convertible Preferred Stock, Par Value \$0.001 of Standard BioTools Inc. dated April 1, 2022 (the "Series B-1 Certificate of Designations").

The Series B-1 Preferred Stock ranks senior to the Common Stock with respect to dividend rights and rights on the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company.

Dividend Rights

The holders of Series B-1 Preferred Stock are entitled to participate in all dividends declared on the Common Stock on an as-converted basis, on the terms and subject to the conditions set forth in the Series B-1 Certificate of Designations.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, the Series B-1 Preferred Stock has a liquidation preference equal to the greater of (i) the Liquidation Preference (as defined in the Series B-1 Certificate of Designations) and (ii) the amount per share of Series B-1 Preferred Stock that such holder would have received had all holders of Series B Preferred Stock, immediately prior to such voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, converted all shares of Series B Preferred Stock into Common Stock pursuant to the terms of the Series B-1 Certificate of Designations or Series B-2 Certificate of Designations, as applicable (without regard to any limitations on conversion contained therein).

Conversion and Redemption Rights

Subject to certain limitations contained in the Series B-1 Certificate of Designations, the Series B-1 Preferred Stock is convertible at the option of the holders thereof at any time into a number of shares of Common Stock equal to the Conversion Rate (as defined in the Series B-1 Certificate of Designations).

At any time after the fifth anniversary of the closing of the Preferred Equity Transactions, if the last reported sale price of the Common Stock is greater than 250% of the Conversion Price (as defined in the Series B-1 Certificate of Designations) as of such time for at least 20 consecutive trading days immediately preceding the date of the notice of mandatory conversion, the Company may elect to convert all of the outstanding shares of Series B-1 Preferred Stock into shares of Common Stock at the Conversion Rate.

If the Company undergoes certain change of control transactions, each holder of outstanding Series B-1 Preferred Stock will have the option, subject to the holder's right to convert all or a portion of the shares of Series B-1 Preferred Stock held by such holder into Common Stock prior to such redemption, to require the Company to purchase all or a portion of such holder's outstanding shares of Series B-1 Preferred Stock that have not been converted into Common Stock at a purchase price per share of Series B-1 Preferred Stock, payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-1 Preferred Stock, and (B) the amount of cash and/or other assets that such holder would have been entitled to receive if such holder had converted such share of Series B-1 Preferred Stock into Common Stock immediately prior to the change of control transaction ("B-1 Change of Control Put"). In the event of a change of control in which the Company is anticipated to merge with another person and will not be the surviving corporation or if the Common Stock will no longer be listed on

a U.S. national securities exchange, the Company will have a right to redeem, subject to the holder's right to convert into Common Stock prior to such redemption, all of such holder's shares of Series B-1 Preferred Stock, or if a holder exercises the B-1 Change of Control Put in part, the remainder of such holder's shares of Series B-1 Preferred Stock, at a redemption price per share payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-1 Preferred Stock, and (B) the amount of cash and/or other assets that the holder would have received if such holder had converted such share of Series B-1 Preferred Stock into Common Stock immediately prior to the change of control transaction.

After the seventh anniversary of the closing of the Preferred Equity Transactions, subject to certain conditions, the Company may, at its option, redeem all of the outstanding shares of Series B-1 Preferred Stock at a redemption price per share of Series B Preferred Stock, payable in cash, equal to the Liquidation Preference.

Voting Rights; Consent Rights

The holders of Series B-1 Preferred Stock have voting power measured in a manner related to the conversion ratio of the shares of Series B-1 Preferred Stock and are entitled to vote as a single class with the holders of the Common Stock and the holders of any other class or series of equity interest of the Company then entitled to vote with the Common Stock on all matters submitted to a vote of the holders of Common Stock; provided, among other things, that to the extent the Series B-1 Preferred Stock held by the Casdin Parties (as defined in the Series B-1 Certificate of Designations) would, in the aggregate, represent voting rights with respect to more than 19.9% of the Common Stock (including the Series B-1 Preferred Stock on an as-converted basis) (the "B-1 Voting Threshold"), the Casdin Parties will not be permitted to exercise the voting rights with respect to any shares of Series B-1 Preferred Stock, as applicable, held by them in excess of the B-1 Voting Threshold and the Chief Financial Officer or General Counsel of the Company, each with full power of substitution and re-substitution, shall exercise the voting rights with respect to such shares of Series B-1 Preferred Stock in excess of the B-1 Voting Threshold in the same proportion as the outstanding Common Stock (excluding any and all Common Stock beneficially owned by the Casdin Parties and the Viking Parties (each as defined in the Series B-1 Certificate of Designations)) is voted on relevant matters.

The Series B-1 Certificate of Designations also provides that the holders of shares of the Series B-1 Preferred Stock have separate class approval rights over certain specified actions that would affect the rights of holders of the Series B-1 Preferred Stock and other specified matters. Specifically, the vote or written approval of the holders of at least 60% of the shares of Series B Preferred Stock outstanding at such time, voting or providing such approval together as a single class, and for the avoidance of doubt, without giving effect to limitations associated with the B-1 Voting Threshold, is generally required for the taking of the following actions: (i) any amendment to the Certificate of Incorporation to create any new series of securities of the Company with rights ranking senior to or on parity with the Series B-1 Preferred Stock or the Series B-2 Preferred Stock; (ii) the declaration or payment of any dividend or distribution on the Company's capital stock; (iii) the purchase, redemption, or other acquisition of any Common Stock or other capital stock of the Company ranking junior to the Series B-1 Preferred Stock, subject to certain exceptions; (iv) any amendment to the rights, powers, preferences, privileges or voting powers of the Series B-1 Preferred Stock or the Series B-2 Preferred Stock; and (v) any amendment to the Certificate of Incorporation or Bylaws that would have an adverse effect on the rights, preferences, privileges, or voting power of the Series B-1 Preferred Stock.

In addition, for so long as Casdin and its Permitted Transferees (as defined in the Series B-1 Certificate of Designations) continue to beneficially own shares of Series B-1 Preferred Stock that represent at least 7.5% of the outstanding shares of Common Stock, on an as converted basis (the "Casdin Ownership Percentage"), on the terms and subject to the conditions set forth in the Series B-1 Certificate of Designations, the holders of a majority of the outstanding shares of Series B-1 Preferred Stock will have the right to nominate for election and to elect one member to the Board of Directors (the "Series B-1 Preferred Director"). Subject to applicable law and Nasdaq listing standards, the Series B-1 Preferred Director shall be offered the opportunity, with respect to each standing committee of the Board of Directors, to sit on such committee. Further, the Series B-1 Preferred

Director will hold office until the following year's annual meeting of the Company's stockholders and until his or her successor is duly elected or qualified or until his or her earlier death, incapacity, resignation or removal. For purposes of clarity, the Series B-1 Preferred Director shall not be classified with the remaining members of the Board of Directors.

The Series B-1 Certificate of Designations also provides that for so long as the Casdin Ownership Percentage continues to be met or exceeded for the Series B-1 Preferred Stock, the Series B-1 Preferred Director will have certain consent rights over, among other things: (i) any increase in the number of directors on the Board of Directors beyond seven; (ii) the hiring, promotion, demotion, or termination of the Company's Chief Executive Officer; (iii) entering into or modifying (including by waiver) any transaction, agreement or arrangement with any Related Person (as such term is defined in the Certificates of Designations), subject to certain exceptions; (iv) any voluntary petition under any applicable federal or state bankruptcy or insolvency law effected by the Company; (v) any change in the principal business of the Company or entry by the Company into any material new line of business; and (vi) for a period of three years after the closing of the Preferred Equity Transactions, (A) any acquisition (including by merger, consolidation or acquisition of stock or assets) of any assets, securities or property of any other person or (B) any sale, lease, license, transfer or other disposition of any assets of the Company or any of its subsidiaries, in each case, other than acquisitions or disposition of inventory or equipment in the ordinary course of business consistent with past practice, for consideration in excess of \$50,000,000 in the aggregate in any six month period.

Series B-2 Preferred Stock

The following is a summary of the principal terms of the Series B-2 Preferred Stock.

The powers, preferences and rights, and the qualifications, limitations or restrictions of the Series B-2 Preferred Stock are set forth in the B-2 Certificate of Designations of Rights, Preferences and Privileges of Series B-2 Convertible Preferred Stock, Par Value \$0.001 of Standard BioTools Inc. dated April 1, 2022 (the "Series B-2 Certificate of Designations" and together with the Series B-1 Certificate of Designations, the "Certificates of Designations").

The Series B-2 Preferred Stock ranks senior to the Common Stock, with respect to dividend rights and rights on the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company.

Dividend Rights

The holders of Series B-2 Preferred Stock are entitled to participate in all dividends declared on the Common Stock on an as-converted basis, on the terms and subject to the conditions set forth in the Series B-2 Certificate of Designations.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, the Series B-2 Preferred Stock has a liquidation preference equal to the greater of (i) the Liquidation Preference (as defined in the Series B-2 Certificate of Designations) and (ii) the amount per share of Series B-2 Preferred Stock that such holder would have received had all holders of Series B Preferred Stock, immediately prior to such voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, converted all shares of Series B Preferred Stock into Common Stock pursuant to the terms of the Series B-1 Certificate of Designations or Series B-2 Certificate of Designations, as applicable (without regard to any limitations on conversion contained therein).

Conversion and Redemption Rights

Subject to certain limitations contained in the Series B-2 Certificate of Designations, the Series B-2 Preferred Stock is convertible at the option of the holders thereof at any time into a number of shares of Common Stock equal to the Conversion Rate (as defined in the Series B-2 Certificate of Designations), in each case subject to certain adjustments, provided that Viking and its affiliates shall not be permitted to voluntarily convert shares of its Series B-2 Preferred Stock if, as a result of such conversion, Viking, together with its affiliates, would beneficially own more than 9.5% of the total number of shares of our Common Stock issued and outstanding after giving effect to such conversion.

At any time after the fifth anniversary of the closing of the Preferred Equity Transactions, if the last reported sale price of the Common Stock is greater than 250% of the Conversion Price (as defined in the Series B-2 Certificate of Designations) as of such time for at least 20 consecutive trading days immediately preceding the date of the notice of mandatory conversion, the Company may elect to convert all of the outstanding shares of Series B-2 Preferred Stock into shares of Common Stock at the Conversion Rate.

If the Company undergoes certain change of control transactions, each holder of outstanding Series B-2 Preferred Stock will have the option, subject to the holder's right to convert all or a portion of the shares of Series B-2 Preferred Stock held by such holder into Common Stock prior to such redemption, to require the Company to purchase all or a portion of such holder's outstanding shares of Series B-2 Preferred Stock that have not been converted into Common Stock at a purchase price per share of Series B-2 Preferred Stock, payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-2 Preferred Stock, and (B) the amount of cash and/or other assets that such holder would have been entitled to receive if such holder had converted such share of Series B-2 Preferred Stock into Common Stock immediately prior to the change of control transaction ("B-2 Change of Control Put"). In the event of a change of control in which the Company is anticipated to merge with another person and will not be the surviving corporation or if the Common Stock will no longer be listed on a U.S. national securities exchange, the Company will have a right to redeem, subject to the holder's right to convert into Common Stock prior to such redemption, all of such holder's shares of Series B-2 Preferred Stock, or if a holder exercises the B-2 Change of Control Put in part, the remainder of such holder's shares of Series B-2 Preferred Stock, at a redemption price per share payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-2 Preferred Stock, and (B) the amount of cash and/or other property that the holder would have received if such holder had converted such share of Series B-2 Preferred Stock into Common Stock immediately prior to the change of control transaction.

After the seventh anniversary of the closing of the Preferred Equity Transactions, subject to certain conditions, the Company may, at its option, redeem all of the outstanding shares of Series B Preferred Stock at a redemption price per share of Series B Preferred Stock, payable in cash, equal to the Liquidation Preference.

Voting Rights; Consent Rights

The holders of Series B-2 Preferred Stock have voting power measured in a manner related to the conversion ratio of the shares of Series B-2 Preferred Stock and are entitled to vote as a single class with the holders of the Common Stock and the holders of any other class or series of equity interest of the Company then entitled to vote with the Common Stock on all matters submitted to a vote of the holders of Common Stock; provided, among other things, that to the extent the Series B-2 Preferred Stock held by the Viking Parties (as defined in the Series B-2 Certificate of Designations) would, in the aggregate, represent voting rights with respect to more than 19.9% of the Common Stock (including the Series B-2 Preferred Stock on an as-converted basis) (the "B-2 Voting Threshold"), the Viking Parties will not be permitted to exercise the voting rights with respect to any shares of Series B-2 Preferred Stock, as applicable, held by them in excess of the B-2 Voting Threshold and the Chief Financial Officer or General Counsel of the Company, each with full power of substitution and re-substitution, shall exercise the voting rights with respect to such shares of Series B-2 Preferred Stock in excess of the B-2 Voting Threshold in the same proportion as the outstanding Common Stock

(excluding any and all Common Stock beneficially owned by the Casdin Parties and the Viking Parties (each as defined in the Series B-2 Certificate of Designations)) is voted on relevant matters.

The Series B-2 Certificate of Designations also provides that the holders of shares of the Series B-2 Preferred Stock will have separate class approval rights over certain specified actions that would affect the rights of holders of the Series B-2 Preferred Stock and other specified matters. Specifically, the vote or written approval of the holders of at least 60% of the shares of Series B Preferred Stock outstanding at such time, voting or providing such approval together as a single class, and for the avoidance of doubt, without giving effect to limitations associated with the B-2 Voting Threshold, is generally required for the taking of the following actions: (i) any amendment to the Certificate of Incorporation to create any new series of securities of the Company with rights ranking senior to or on parity with the Series B-1 Preferred Stock or the Series B-2 Preferred Stock; (ii) the declaration or payment of any dividend or distribution on the Company's capital stock; (iii) the purchase, redemption, or other acquisition of any Common Stock or other capital stock of the Company ranking junior to the Series B-2 Preferred Stock, subject to certain exceptions; (iv) any amendment to the rights, powers, preferences, privileges or voting powers of the Series B-1 Preferred Stock or the Series B-2 Preferred Stock; and (v) any amendment to the Certificate of Incorporation or Bylaws that would have an adverse effect on the rights, preferences, privileges, or voting power of the Series B-2 Preferred Stock.

In addition for so long as Viking and its Permitted Transferees (as defined in the Series B-2 Certificate of Designations) continue to beneficially own shares of Series B-2 Preferred Stock that represent at least 7.5% of the outstanding shares of Common Stock, on an as converted basis (the "Viking Ownership Percentage"), on the terms and subject to the conditions set forth in the Series B-2 Certificate of Designations, the holders of a majority of the outstanding shares of Series B-2 Preferred Stock will each have the right to nominate for election and to elect one member to the Board of Directors (the "Series B-2 Preferred Director"). Subject to applicable law and Nasdaq listing standards, the Series B-2 Preferred Director shall be offered the opportunity, with respect to each standing committee of the Board of Directors, to sit on such committee. The Series B-2 Preferred Director will hold office until the following year's annual meeting of the Company's stockholders and until his or her successor is duly elected or qualified or until his or her earlier death, incapacity, resignation or removal. For purposes of clarity, the Series B-2 Preferred Director shall not be classified with the remaining members of the Board of Directors.

The Series B-2 Certificate of Designations also provides that for so long as the Viking Ownership Percentage continues to be met or exceeded for the Series B-2 Preferred Stock, the Series B-2 Preferred Director will have certain consent rights over, among other things: (i) any increase in the number of directors on the Board of Directors beyond seven; (ii) the hiring, promotion, demotion, or termination of the Company's Chief Executive Officer; (iii) entering into or modifying (including by waiver) any transaction, agreement or arrangement with any Related Person (as such term is defined in the Certificates of Designations), subject to certain exceptions; (iv) any voluntary petition under any applicable federal or state bankruptcy or insolvency law effected by the Company; (v) any change in the principal business of the Company or entry by the Company into any material new line of business; and (vi) for a period of three years after the closing of the Preferred Equity Transactions, (A) any acquisition (including by merger, consolidation or acquisition of stock or assets) of any assets, securities or property of any other person or (B) any sale, lease, license, transfer or other disposition of any assets of the Company or any of its subsidiaries, in each case, other than acquisitions or disposition of inventory or equipment in the ordinary course of business consistent with past practice, for consideration in excess of \$50,000,000 in the aggregate in any six month period.

Registration Rights Agreement

On January 23, 2022, the Company entered into a Registration Rights Agreement with the Purchasers, pursuant to which the Purchasers have certain customary registration rights with respect to shares issuable under the Loan Agreements and the Purchase Agreements, including (i) any shares of Common Stock acquired by any Holder (as defined in the Registration Rights Agreement) pursuant to the conversion of the Series B Preferred

Stock in accordance with the Certificates of Designations and (ii) any shares of Common Stock acquired by any Holder pursuant to preemptive rights under the Purchase Agreements.

Preemptive Rights; Standstill; Transfer Restrictions

Pursuant to the Purchase Agreements, and subject to customary exceptions, if the Company intends to issue or sell new equity securities, then each of the Purchaser Parties (as defined in the Casdin Purchase Agreement and Viking Purchase Agreement) have the right to participate in such equity offering on a pro rata basis for so long as such Purchaser Parties (as defined under each of their applicable Purchase Agreements), collectively, continue to beneficially own at least 25% of the Acquired Shares (as defined in each of the Casdin Purchase Agreement and Viking Purchase Agreement) (including Underlying Shares (as defined in each of the Casdin Purchase Agreement and Viking Purchase Agreement) issued on conversion of such Acquired Shares) issued. Pursuant to the Purchase Agreements, until the later of (x) the first anniversary of April 4, 2022 and (y) such time as such Purchaser beneficially owns securities representing less than 7.5% of the outstanding shares of Common Stock (on an as-converted basis), each selling securityholder is subject to customary standstill restrictions. The Purchase Agreements also prohibit the Purchasers from transferring the Series B Preferred Stock, or Common Stock issued upon conversion of such Series B Preferred Stock, in either case without the Company's consent for six months from April 4, 2022, except for certain permitted transfers. Thereafter, the selling securityholders are prohibited under the Purchase Agreements from transferring any shares of Series B Preferred Stock and any shares of Common Stock issued or issuable upon conversion of such shares of Series B Preferred Stock to certain purchasers who may be activists, competitors, or other significant holders, with certain exceptions.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Certain provisions of Delaware law and our Certificate of Incorporation and Bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of the Company. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our Common Stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Certificate of Incorporation and Bylaws

Our Certificate of Incorporation and Bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, additional shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our Board of Directors, the Chairperson of the Board of Directors, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders and an advance notice procedure for nominations of persons for election to our Board of Directors at any stockholder meeting;
- provide that directors may be removed only for cause; provided that, pursuant to the Series B-1 Certificate of Designations and the Series B-2 Certificate of Designations, the Series B-1 Director and the Series B-2 Director may only be removed by the holders of the Series B-1 Preferred Stock and the Series B-2 Preferred Stock, respectively;

- provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even though less than a quorum; provided that, pursuant to the Series B-1 Certificate of Designations and the Series B-2 Certificate of Designations, vacancies in directorships provided for the Series B-1 Director and the Series B-2 Director may be filled by a majority of the directors in office from time to time, but shall solely be filled with the approval of the holders of a majority of the outstanding shares of the Series B-1 Preferred Stock and Series B-2 Preferred Stock, respectively, voting as a single class;
- subject to the rights of holders of any outstanding Preferred Stock, establish that our Board of Directors is divided into three classes,
 Class I, Class II, and Class III, with each class serving staggered terms;
- specify that no stockholder is permitted to cumulate votes at any election of the Board of Directors; and
- require a super majority of votes to amend the above-mentioned provisions.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers ("Section 203"). In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, the Board of Directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (i) voting stock owned by persons who are directors and also officers, and (ii) voting stock owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the Board of Directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with its affiliates and associates, owns, or is an affiliate or associate of the corporation and within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that Section 203 may discourage business combinations or other attempts that might result in a premium over the market price for the shares of Common Stock held by our stockholders.

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

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Computershare Trust Company, N.A. The transfer agent's address is 462 South 4th Street, Suite 1600, Louisville, KY 40202, and its telephone number is (800) 662-7232 or (781) 575-2879.

Nasdaq Global Select Market Listing

Our Common Stock is traded on The Nasdaq Global Select Market under the trading symbol "LAB."

PLAN OF DISTRIBUTION

We are registering the shares of Common Stock issuable upon conversion of the Series B-1 Preferred Stock and Series B-2 Preferred Stock held by the selling securityholders, or the securities, to permit the resale of such securities by the selling securityholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling securityholders of the securities. We will bear all fees and expenses incident to our obligation to register the securities in this offering. Sales by the selling securityholders may not require the provision of a prospectus supplement.

The securities may be sold from time to time directly by the selling securityholders, including their donees, pledgees, transferees and other successors in interest, or, alternatively, through underwriters, broker-dealers or agents, or through any combination of the foregoing methods. If the securities are sold through underwriters, broker-dealers or agents, the selling securityholders will be responsible for underwriting discounts or commissions or agents' commissions, if any. The securities may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale or at negotiated prices. Such sales may be effected in transactions, which may involve block transactions:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, including Nasdaq;
- in the over-the-counter market;
- otherwise than on such exchanges or services or in the over-the-counter market;
- through the writing of options;
- through trading plans entered into by the 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;
- pursuant to 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 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
- in privately negotiated transactions;
- in options or other hedging transactions, whether through an options exchange or otherwise;
- in distributions to members, limited partners or stockholders of selling securityholders;
- any other method permitted by applicable law; or
- through any combination of the foregoing.

The selling securityholders may also sell all or a portion of the securities beneficially owned by them and offered hereby from time to time using other methods as permitted pursuant to applicable law.

In addition, the selling securityholders may resell all or a portion of the securities in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the selling securityholders may arrange for other broker-dealers to participate in sales. If the selling securityholders effect such transactions by selling the securities to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling securityholders or commissions from purchasers of the securities for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with sales of the securities or otherwise, the selling securityholders 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 in positions they assume. The selling securityholders may also sell securities short and deliver securities covered by this prospectus to close out short positions and to return borrowed securities in connection with such short sales. The selling securityholders may also loan or pledge the securities to broker-dealers that in turn may sell such securities, to the extent permitted by applicable law. The selling securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to 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, from time to time, pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities from time to time pursuant to this prospectus or any amendment or supplement to this prospectus under any applicable provision of the Securities Act, amending, if necessary, the list of selling securityholders to include the pledgee, transferee or other successors in interest as selling securityholders under this prospectus. The selling securityholders also may transfer and donate the securities in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling securityholders and any broker-dealer or agents participating in the distribution of the securities may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling securityholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling securityholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. If required, the specific securities to be sold, the names of the selling securityholders, the respective purchase prices and public offering prices, the names of any agent, broker-dealer or underwriter and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless such securities have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling securityholder will sell any or all of the securities registered pursuant to the registration statement, of which this prospectus is a part.

Each selling securityholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the securities by the selling securityholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to the securities. All of the foregoing may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

We will pay all expenses of the registration of the shares of Common Stock pursuant to the registration rights agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that each selling securityholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it. We will indemnify the selling securityholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling securityholders will be entitled to contribution. We may be indemnified by the selling securityholders against certain liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling securityholders specifically for use in this prospectus, in accordance with the related registration rights agreements, or we may be entitled to contribution.

U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a summary of the U.S. federal income tax consequences to non-U.S. holders (as defined below) of the ownership and disposition of our Common Stock, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, and any changes may result in U.S. federal income tax consequences different from those set forth below. We have not sought any ruling from the Internal Revenue Service ("IRS") with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any state, local or non-U.S. jurisdiction or under U.S. federal non-income tax laws, except to the limited extent set forth below. It also does not discuss the consequences of ownership, disposition or converting Series B Preferred Stock into Common Stock. In addition, this discussion does not address the potential application of the alternative minimum tax or the Medicare contribution tax on net investment income or any tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt organizations or accounts;

- controlled foreign corporations, passive foreign investment companies or corporations that accumulate earnings to avoid U.S. federal income tax:
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our Common Stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction;
- persons who do not hold our Common Stock as a capital asset within the meaning of Section 1221 of the Code (generally property held for investment);
- persons required to accelerate the recognition of any item of gross income with respect to our Common Stock as a result of such income being recognized on an applicable financial statement; or
- persons deemed to sell our Common Stock under the constructive sale provisions of the Code.

In addition, if a partnership (or entity or arrangement classified as a partnership for U.S. federal income tax purposes) holds our Common Stock, the tax treatment of a person treated as a partner in such partnership generally will depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold our Common Stock, and partners in such partnerships, should consult their tax advisors.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our Common Stock arising under the U.S. federal estate or gift tax laws or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a non-U.S. holder if you are a beneficial owner of our Common Stock that is not, for U.S. federal income tax purposes, any of the following:

- an entity or arrangement treated as a partnership;
- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States, any State thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) whose administration is subject to the primary supervision of a court within the United States and which has one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code) who have the authority to control all substantial decisions of the trust or (y) which has made a valid election under applicable Treasury regulations to be treated as a "United States person."

Distributions

We have not made any distributions on our Common Stock and do not intend to make any distributions on our Common Stock for the foreseeable future. However, if we do make distributions of cash or property on our Common Stock, those distributions will constitute dividends for U.S. federal income tax purposes to the extent

paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and accumulated earnings and profits, they will constitute a return of capital and will first reduce your basis in our Common Stock (determined separately with respect to each share of our Common Stock), but not below zero, and then will be treated as gain from the deemed sale of that stock.

Subject to the discussion below on effectively connected income, any dividend paid to you generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. In order to receive a reduced treaty rate, you must provide us in a timely manner an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8 properly certifying qualification for the reduced rate. If you are eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty, you may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS in a timely manner. If you hold our Common Stock through a financial institution or other agent acting on your behalf, you will be required to provide appropriate documentation to the agent, who then may be required to provide the required certification to us or our paying agent, either directly or through other intermediaries. You should consult your tax advisor regarding to the availability of benefits under any applicable income tax treaty.

Dividends received by you that are effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, that are attributable to a permanent establishment or fixed base maintained by you in the United States) generally are exempt from such withholding tax. In order to obtain this exemption, you must provide us with an IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to withholding tax, generally are taxed at the same graduated rates applicable to U.S. persons. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty, subject to certain adjustments.

Gain on Disposition of Our Common Stock

You generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our Common Stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, the gain is attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the taxable year in which the sale or disposition occurs and certain other conditions are met; or
- shares of our Common Stock constitute a U.S. real property interest by reason of our status as a "United States real property holding corporation" ("USRPHC") for U.S. federal income tax purposes.

We believe that we are not currently and will not become a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we are or become a USRPHC, as long as our Common Stock is regularly traded on an established securities market, such Common Stock will be treated as U.S. real property interest with respect to you only if you actually or constructively hold more than 5% of our Common Stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our Common Stock.

If you are a non-U.S. holder described in the first bullet above, you will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates, and a corporate non-U.S. holder

described in the first bullet above also may be subject to the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be required to pay a tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S.-source capital losses for the year, provided you have timely filed U.S. federal income tax returns with respect to such losses. You should consult your own tax advisors regarding any applicable income tax or other treaties that may provide for different rules.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on, or of proceeds from, the disposition of our Common Stock made to you may be subject to additional information reporting and backup withholding at a current rate of 24% unless you establish an exemption, for example, by properly certifying your non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or another appropriate version of IRS Form W-8.

Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be credited against the U.S. federal income tax liability of persons subject to backup withholding, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act ("FATCA") generally imposes a U.S. federal withholding tax of 30% on dividends and on the gross proceeds of a disposition of our Common Stock paid to a "foreign financial institution" (as specially defined under these rules), unless otherwise provided by the Treasury Secretary or such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on and the gross proceeds of a disposition of our Common Stock paid to a "non-financial foreign entity" (as specially defined under these rules) unless otherwise provided by the Treasury Secretary or such entity provides the withholding agent with a certification identifying certain substantial direct and indirect U.S. owners of the entity, certifies that there are none or otherwise establishes an exemption. The withholding obligations under FATCA generally apply to payments of dividends on our Common Stock. The Treasury Secretary has issued proposed regulations providing that the withholding provisions under FATCA do not apply to payments of gross proceeds from a sale or other disposition of our Common Stock, which may be relied upon by taxpayers until final regulations are issued. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of this legislation on their investment in our Common Stock.

Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, owning and disposing of our Common Stock, including the consequences of any proposed changes in applicable laws.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, San Diego, California. Additional legal matters may be passed on for us, or any underwriters, dealers or agents by counsel we will name in the applicable prospectus supplement to the extent required by law.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2021 have been so incorporated in reliance on the report, which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 2 to the financial statements, of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at http://www.fluidigm.com. Information accessible on or through our website is not a part of this prospectus.

This prospectus and any prospectus supplement is part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities that we are offering. Forms of any documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or under cover of a Current Report on Form 8-K and incorporated in this prospectus by reference. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should read the actual documents for a more complete description of the relevant matters.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. Any statement contained in this prospectus or 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 or a subsequently filed document incorporated by reference modifies or replaces that statement. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form

that are related to such information), until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the SEC on March 8, 2022;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, as filed with the SEC on May 9, 2022;
- the portions of our Definitive Proxy Statement on <u>Schedule 14A</u> (other than information furnished rather than filed) that are incorporated by reference into our Annual Report on Form 10-K, filed with the SEC on April 29, 2022;
- our Current Reports on Form 8-K filed on <u>January 24, 2022</u>, <u>February 11, 2022</u>, <u>March 16, 2022</u>, <u>March 28, 2022</u>, <u>March 29, 2022</u>, and <u>April 5, 2022</u>; and
- The description of our Common Stock contained in the Registration Statement on <u>Form 8-A</u> relating thereto, filed on February 7, 2011, including any amendment or report filed for the purpose of updating such description.

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

Standard BioTools Inc. 2 Tower Place, Ste 2000 South San Francisco, California 94080 Attn: Investor Relations (650) 266-6000

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth estimated expenses in connection with the issuance and distribution of the securities being registered:

	Amount to be Paid
SEC registration fee for securities offered by the selling securityholders identified in	
the prospectus	\$ 15,817
Stock exchange listing fee	*
Printing and engraving expenses	*
Accounting fees and expenses	*
Legal fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous expenses	*
Total	\$ *

^{*} These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors, and other corporate agents.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the registrant's amended and restated certificate of incorporation includes provisions that eliminate the personal liability of its directors and officers for monetary damages for breach of their fiduciary duty as directors and officers.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, the amended and restated certificate of incorporation and amended and restated bylaws of the registrant provide that:

- The Registrant shall indemnify its directors and officers for serving the registrant in those capacities or for serving other business enterprises at the registrant's request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- The registrant may, in its discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- The registrant is required to advance expenses, as incurred, to its directors and officers in connection with defending a proceeding, except that such director or officer shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- The registrant is not obligated pursuant to its amended and restated bylaws to indemnify a person with respect to proceedings initiated by
 that person, except with respect to proceedings authorized by the registrant's board of directors or brought to enforce a right to
 indemnification.
- The rights conferred in the amended and restated certificate of incorporation and amended and restated bylaws are not exclusive, and the registrant is authorized to enter into indemnification agreements with its directors, officers, employees, and agents and to obtain insurance to indemnify such persons.

• The registrant may not retroactively amend the bylaw provisions to reduce its indemnification obligations to directors, officers, employees, and agents.

The registrant has entered into separate indemnification agreements with each of its directors and certain of its officers that provide the maximum indemnity allowed to directors and executive officers by Section 145 of the Delaware General Corporation Law and also to provide for certain additional procedural protections. The registrant also maintains directors and officers insurance to insure such persons against certain liabilities.

These indemnification provisions and the indemnification agreements entered into between the registrant and its directors and certain of its officers may be sufficiently broad to permit the indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

Item 16. Exhibits

		Incorporation by Reference			
Exhibit Number	Exhibit Description	Form	Exhibit Number	Filing Date	Filed Herewith
1.1*	Form of Underwriting Agreement				
3.1	Eighth Amended and Restated Certificate of Incorporation	10-K	3.1	3/28/2011	
3.2	Amended and Restated Bylaws	S-8	4.8	4/1/2022	
3.3	Certificate of Amendment to Eighth Amended and Restated Certificate of Incorporation	S-8	4.3	4/1/2022	
3.4	<u>Certificate of Designation of Rights, Preferences and Privileges of Series A</u> <u>Participating Preferred Stock</u>	8-K	3.1	11/22/2016	
3.5	Certificate of Elimination of Series A Participating Preferred Stock	8-K	3.1	8/2/2017	
3.6	<u>Certificate of Designations of Rights, Preferences and Privileges of Series B-1</u> <u>Convertible Preferred Stock</u>	8-K	3.6	4/5/2022	
3.7	<u>Certificate of Designations of Rights, Preferences and Privileges of Series B-2</u> <u>Convertible Preferred Stock</u>	8-K	3.7	4/5/2022	
4.1	Specimen Common Stock Certificate	S-8	4.1	4/1/2022	
4.2	Series B-1 Loan Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Casdin Partners Master Fund, L.P., and Casdin Private Growth Equity Fund II, L.P.	8-K/A	10.1	2/11/2022	
4.3	Series B-2 Loan Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Viking Global Opportunities Illiquid Investments Sub-Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP.	8-K	10.2	1/24/2022	
4.4	Series B-1 Convertible Preferred Stock Purchase Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Casdin Private Growth Equity Fund II, L.P., and Casdin Partners Master Fund, L.P.	DEF 14A	Anx. B	2/24/2022	

		Incorporation by Reference			
Exhibit <u>Number</u>	Exhibit Description	Form	Exhibit Number	Filing Date	Filed Herewith
4.5	Series B-2 Convertible Preferred Stock Purchase Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Viking Global Opportunities Illiquid Investments Sub-Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP.	DEF 14A	Anx. C	2/24/2022	
4.6	Registration Rights Agreement, dated as of January 23, 2022, by and between Fluidigm Corporation, Casdin Private Growth Equity Fund II, L.P., Casdin Partners Master Fund, L.P., Viking Global Opportunities Illiquid Investments Sub-Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP.	8-K	10.5	1/24/2022	
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation				X
23.1	Consent of Independent Registered Public Accounting Firm				X
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in the opinion filed as Exhibit 5.1 to this Registration Statement)				X
24.1	Power of Attorney (included on the signature page to this Registration Statement)				X
107	Filing Fee Table				X

^{*} To be filed, if applicable, by amendment or incorporated by reference pursuant to a Current Report on Form 8-K.

Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
 - (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act 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; and

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

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) 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, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) that, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
- (i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) that, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 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.

(b) 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 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act 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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on May 17, 2022.

STANDARD BIOTOOLS INC.

By: /s/Michael Egholm
Michael Egholm
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Michael Egholm and Vikram Jog, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this registration statement, including post-effective amendments, and registration statements filed pursuant to Rule 462 under the Securities Act, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully for all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, 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>
/s/ Michael Egholm Michael Egholm	President and Chief Executive Officer and Director (Principal Executive Officer)	May 17, 2022
/s/ Vikram Jog Vikram Jog	Chief Financial Officer (Principal Financial and Accounting Officer)	May 17, 2022
/s/ Carlos Paya Carlos Paya	Chair of the Board of Directors	May 17, 2022
/s/ Frank Witney Frank Witney	Director	May 17, 2022
/s/ Gerhard F. Burbach Gerhard F. Burbach	Director	May 17, 2022
/s/ Laura M. Clague Laura M. Clague	Director	May 17, 2022

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Bill W. Colston Bill W. Colston	Director	May 17, 2022
/s/ Martin Madaus Martin Madaus	Director	May 17, 2022
/s/ Eli Casdin Eli Casdin	Director	May 17, 2022



Wilson Sonsini Goodrich & Rosati Professional Corporation

650 Page Mill Road Palo Alto, California 94304-1050

O: 650.493.9300 F: 650.493.6811

May 17, 2022

Standard BioTools Inc. 2 Tower Place, Ste 2000 South San Francisco, California 94080

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-3 (the "Registration Statement"), filed by Standard BioTools Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") in connection with the registration pursuant to the Securities Act of 1933, as amended (the "Act"), of the Securities (as defined below).

The Registration Statement relates to the proposed offer and sale by the selling stockholders (the "Selling Stockholders"), from time to time, pursuant to Rule 415 under the Act, as set forth in the Registration Statement, the prospectus contained therein (the "Prospectus") and the supplements to the prospectus referred to therein (each a "Prospectus Supplement"), of up to an aggregate of 75,164,397 shares of the Company's common stock, \$0.001 par value per share (the "Securities"), which may be issued upon conversion of Series B-1 Convertible Preferred Stock, \$0.001 per share (the "Series B-2 Preferred Stock") and Series B-2 Convertible Preferred Stock, \$0.001 per share (the "Series B-2 Preferred Stock").

The Securities are to be sold from time to time as set forth in the Registration Statement, the Prospectus contained therein and the Prospectus Supplements.

We have examined instruments, documents, certificates and records that we have deemed relevant and necessary for the basis of our opinions hereinafter expressed. In such examination, we have assumed: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; (c) the truth, accuracy and completeness of the information, representations and warranties contained in the instruments, documents, certificates and records we have reviewed; (d) that the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Act; (e) that a Prospectus Supplement, to the extent necessary, will have been filed with the Commission describing the Securities offered thereby; (f) that the Securities will be issued and sold in compliance with applicable U.S. federal and state securities laws and in the manner stated in the Registration Statement and any applicable Prospectus Supplement; and (g) the legal capacity of all natural persons. As to any facts material to the opinions expressed herein that were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company.

AUSTIN BEIJING BOSTON BRUSSELS HONG KONG LONDON LOS ANGELES NEW YORK PALO ALTO SAN DIEGO SAN FRANCISCO SEATTLE SHANGHAI WASHINGTON, DC WILMINGTON, DE

WILSON

Standard BioTools Inc. May 17, 2022 Page 2

Based on such examination, we are of the opinion that with respect to the Securities, when issued to the holders of the Company's Series B Preferred Stock, upon conversion of the Series B Preferred Stock in accordance with the terms thereof, the Securities will be duly authorized, validly issued, fully paid and nonassessable. It is understood that this opinion is to be used only in connection with the offer and resale of the Securities while the Registration Statement is in effect. We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof. We express no opinion as to the laws of any other jurisdiction, other than the federal laws of the United States of America and the General Corporation Law of the State of Delaware.

* * *

WILSON

Standard BioTools Inc. May 17, 2022 Page 3

We hereby consent to the filing of this opinion as an exhibit to the above-referenced Registration Statement and to the use of our name wherever it appears in the Registration Statement, the Prospectus, any Prospectus Supplement, and in any amendment or supplement thereto. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Wilson Sonsini Goodrich & Rosati, P.C.

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Standard BioTools Inc. (formerly, Fluidigm Corporation) of our report dated March 7, 2022 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in Fluidigm Corporation's Annual Report on Form 10-K for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California May 17, 2022

Calculation of Filing Fee Table

Form S-3 (Form Type)

Standard BioTools Inc.

(Exact Name of Registrant as Specified in its Charter)

<u>Table 1: Newly Registered Securities</u>

Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾⁽²⁾	Proposed Maximum Offering Price Per Unit ⁽³⁾	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.001 per share issuable upon conversion of the Series B-1 Convertible Preferred Stock, par value \$0.001 per share and Series B-2 Convertible Preferred Stock, par value \$0.001per share	457(c)	75.164.397	\$2.27	\$170,623,181	0.0000927	\$15,817.00
Total Of	fering Amounts	()	, ,				\$15,817.00
Total Fe	e Offsets(4)						_
Net Fee	Due						\$15,817.00

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, or the Securities Act, this registration statement shall also cover any additional shares of the Registrant's securities that become issuable by reason of any stock split, stock dividend, recapitalization, reclassification, merger, consolidation or similar event.
- (2) Consists of up to (i) 37,582,346 shares of common stock issuable upon conversion of the Series B-1 Convertible Preferred Stock, par value \$0.001 (the "Series B-1 Preferred Stock) and (ii) 37,582,051 shares of common stock issuable upon conversion of the Series B-2 Convertible Preferred Stock, par value \$0.001 (the "Series B-2 Preferred Stock" and together with the Series B-1 Preferred Stock, the "Series B Preferred Stock"). Subject to certain anti-dilution adjustments and limitations on conversion with respect to certain Purchasers, the Series B Preferred Stock will be convertible at the option of the holders thereof at any time into a number of shares of Common Stock equal to the Conversion Rate (as defined in the Certificates of Designations for the Series B-1 Preferred Stock and the Series B-2 Preferred Stock establishing the powers, designations, preferences and privileges and the qualifications, limitations or restrictions of the shares of the Series B-1 Preferred Stock and the Series B-2 Preferred Stock (collectively, the "Certificates of Designation")), which shall initially be 294.1176.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act based on the average of the high and low prices of the Registrant's common stock on the Nasdaq Global Select Market on May 11, 2022.
- (4) The Registrant does not have any fee offsets.