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

FORM S-3

		HON STATEMENT UNDER UTIES ACT OF 1933	
		BIOTOOLS INC.	
	(Exact Name of Regist	rant as Specified in Its Charter)	
	laware	77-0513190	
	iction of incorporation or nization)	(I.R.S. Employer Identification No).)
(Address, includ	South Sa (65	Place, Suite 2000 an Francisco, CA 0) 266-6000 including area code, of registrant's principal executive office	es)
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(Name, a	address, including zip code, and telepl	none number, including area code, of agent for service)	
		Copies to:	
	John Mintz, Levin, Cohn, F One Fi Bosto	n C. Hicks, Esq. T. Rudy, Esq. erris, Glovsky and Popeo, P.C. nancial Center on, MA 02111 7) 542-6000	
Approximate date of commen	cement of proposed sale to the publ	ic: From time to time after this registration statement becom	es effective.
If the only securities being reg box: \Box	istered on this Form are being offered	d pursuant to dividend or interest reinvestment plans, please	e check the following
		on a delayed or continuous basis pursuant to Rule 415 unde erest reinvestment plans, check the following box: ⊠	er the Securities Act of
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Large accelerated filer		Accelerated filer	\boxtimes

Smaller reporting company

X

Non-accelerated filer

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box
THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

The information in this preliminary prospectus is not complete and may be changed. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 19, 2024

PRELIMINARY PROSPECTUS



Standard BioTools Inc.

38,428,964 Shares of Common Stock

On January 5, 2024, we consummated the transactions contemplated by that certain Agreement and Plan of Merger, dated as of October 4, 2023 (the "Merger Agreement"), by and among us, SomaLogic, Inc. ("SomaLogic") and Martis Merger Sub, Inc. ("Merger Sub"). As contemplated by the Merger Agreement, Merger Sub, our direct, wholly owned subsidiary, merged with and into SomaLogic, with SomaLogic becoming our wholly owned subsidiary (the "Merger").

At the effective time of the Merger (the "Effective Time"), each issued and outstanding share of SomaLogic common stock, par value \$0.0001 per share ("SomaLogic Common Stock"), was automatically converted into 1.11 shares (the "Exchange Ratio") of our common stock, par value \$0.001 per share ("Standard BioTools Common Stock"), and each SomaLogic Warrant (as defined below), each exercisable for one share of SomaLogic Common Stock, was treated in accordance with its terms and each Warrant will convert into the right to receive, upon exercise of such Warrant, the number of shares of Standard BioTools Common Stock equal to multiplying the number of shares of common stock of SomaLogic subject to such Warrant by the Exchange Ratio.

This prospectus relates to the offer and sale from time to time by the selling securityholders named in this prospectus (the "Selling Securityholders") of (A) up to 26,392,931 shares of Standard BioTools Common Stock, consisting of up to (i) 13,807,380 shares of Standard BioTools Common Stock (the "PIPE Shares"), originally issued as SomaLogic Common Stock in SomaLogic's private placement pursuant to subscription agreements each entered into on March 28, 2021 (the "Subscription Agreements"); (ii) 7,575,750 shares of Standard BioTools Common Stock originally issued as SomaLogic Common Stock pursuant to that certain Agreement and Plan of Merger, dated as of March 28, 2021, as amended by Amendment No. 1 and Amendment No. 2 thereto, dated as of May 12, 2021 and July 15, 2021, respectively, by and among CM Life Sciences II Inc., SomaLogic's predecessor company ("CMLS II"), private SomaLogic, Inc., a Delaware corporation ("Old SomaLogic"), and S-Craft Merger Sub, Inc., a Delaware corporation and a direct, wholly owned subsidiary of CMLS II ("Merger Sub"), in exchange for shares of Class B common stock of CMLS II originally issued in SomaLogic's private placement to CMLS Holdings II LLC, a Delaware limited liability company (the "Sponsor"), and certain directors and former directors of SomaLogic (collectively, the "Founder Shares"); and (iii) 5,009,801 shares of Standard BioTools Common Stock issuable upon the exercise of the warrants to purchase SomaLogic Common Stock ("Private Placement Warrants") originally issued in a private placement to the Sponsor and certain CMLS II directors at the time of CMLS II's initial public offering (the "IPO") of units; and (B) up to 344,044 shares of Standard BioTools Common Stock consisting of (i) 238,864 shares of Standard BioTools Common Stock (the "Upfront Shares"); and (ii) up to 105,180 shares of Standard BioTools Common Stock (the "Milestone Shares") originally issued as SomaLogic Common Stock pursuant to that certain Agreement and Plan of Merger, dated as of July 25, 2022 (the "Palamedrix Merger Agreement"), by and among SomaLogic, Panther Merger Subsidiary I, LLC, a Delaware limited liability company and wholly-owned subsidiary of SomaLogic, Panther Merger Subsidiary II, LLC, a Delaware limited liability company and wholly owned subsidiary of SomaLogic, Palamedrix, Inc., and Shareholders Representative Services LLC, a Colorado limited liability company, solely in its capacity as the shareholder representative.

In addition, this prospectus relates to the offer and sale of: (i) up to 6,127,190 shares of Standard BioTools Common Stock that are issuable by us upon the exercise of warrants to purchase SomaLogic Common Stock ("Previously Public Warrants," and together with the Private Placement Warrants, the "Warrants") originally issued in CMLS II's IPO; and (ii) up to 5,564,799 shares of Standard BioTools Common Stock that are issuable by us upon the exercise of the Private Placement Warrants.

We are registering the offer and sale of these securities to satisfy certain registration rights previously granted by SomaLogic, which we assumed following the closing of the Merger. The Selling Securityholders may offer, sell or distribute all or a portion of the securities hereby registered publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any of the proceeds from such sales of the shares of Standard BioTools Common Stock or Warrants, except with respect to amounts received by us upon the exercise of the Warrants for cash. We will bear all costs, expenses and fees in connection with the registration of these securities, including with regard to compliance with state securities or "blue sky" laws. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of shares of Standard BioTools Common Stock. See section entitled "Plan of Distribution" beginning on page 14 of this prospectus.

The shares of Standard BioTools Common Stock are listed on The Nasdaq Global Select Market under the symbol "LAB." On January 18, 2024, the last reported sale price of the Standard BioTools Common Stock on The Nasdaq Global Select Market was \$2.29 per share.

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 5 of this prospectus and "Item 1A – Risk Factors" of our most recent report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q, that are 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 , 2024.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission ("SEC") using the "shelf" registration process. Under this shelf registration process, the Selling Securityholders hereunder may, from time to time, sell the securities offered by them described in this prospectus. We will not receive any proceeds from the sale by such Selling Securityholders of the securities offered by them described in this prospectus. This prospectus also relates to the issuance by us of shares of Standard BioTools Common Stock issuable upon the exercise of the Warrants. We will receive proceeds from any exercise of the Warrants for cash.

Neither we nor the Selling Securityholders have authorized anyone to provide you with any information or to make any representations other than those contained in, or incorporated by reference into, this prospectus. Neither we nor the Selling Securityholders take responsibility for and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Securityholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in, or incorporated by reference into, this prospectus. You should assume that the information appearing in, or incorporated by reference into, this prospectus is accurate as of their respective dates, regardless of the time of delivery of this prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

The Selling Securityholders and their permitted transferees may use the shelf registration statement of which this prospectus forms a part to sell securities from time to time through any means described in the section entitled "Plan of Distribution." More specific terms of any securities that the Selling Securityholders and their permitted transferees offer and sell may be provided in a prospectus supplement that describes, among other things, the specific amounts and prices of the securities being offered and the terms of the offering.

Unless expressly indicated or the context otherwise requires, references in this prospectus to "Standard BioTools," the "Company," the "Registrant," "we," "us" and "our" in this prospectus refer to Standard BioTools Inc., a Delaware corporation and its consolidated subsidiaries, including SomaLogic, unless the context otherwise requires.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus and the documents we have filed with the SEC that are incorporated by reference. This summary is not complete and does not contain all of the information you should consider in making your investment decision. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and the documents incorporated by reference herein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Company Overview

Standard BioTools is driven by a bold purpose—unleashing tools to accelerate breakthroughs in human health. Standard BioTools has an established portfolio of essential, standardized next-generation high resolution technologies that assist biomedical researchers to develop medicines faster and better. Standard BioTools' tools are designed to provide reliable and repeatable insights in health and disease using its proprietary mass cytometry and microfluidics technologies, which are useful in proteomics and genomics 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.

Background on the Merger

On October 4, 2023, Standard BioTools entered into the Merger Agreement with SomaLogic and Merger Sub, pursuant to which, at the Effective Time, among other matters, Merger Sub merged with and into SomaLogic, with SomaLogic surviving as a wholly owned subsidiary of Standard BioTools. Upon the terms and subject to the conditions set forth in the Merger Agreement, at the Effective Time, each share of SomaLogic Common Stock converted into the right to receive 1.11 shares of Standard BioTools Common Stock, pursuant to the Exchange Ratio. At the Effective Time, SomaLogic's common stockholders owned approximately 57%, and Standard BioTools' common stockholders owned approximately 43%, of the outstanding shares of common stock of the combined company on a fully diluted basis.

In addition, as of the Effective Time, Standard BioTools assumed each of the SomaLogic equity incentive plans and outstanding options to purchase shares of SomaLogic Common Stock (the "SomaLogic Stock Options") and restricted stock units convertible into shares of SomaLogic Stock ("SomaLogic RSUs" and together with the SomaLogic Stock Options, the "Equity Awards"), whether vested or unvested. Each such Equity Award so assumed by the Company continued to have, and be subject to, the same terms and conditions applicable to such Equity Award immediately prior to the Effective Time, except that (A) such SomaLogic Stock Option is now exercisable for that number of shares of Standard BioTools Common Stock equal to the number of shares of SomaLogic Stock subject to such SomaLogic Stock Option immediately prior to the Effective Time multiplied by the Exchange Ratio and rounded down to the next nearest share of Standard BioTools Common Stock, (B) the exercise price per share is now the exercise price per share in effect for that SomaLogic Stock Option immediately prior to the Effective Time divided by the Exchange Ratio and rounded up to the next nearest cent and (C) such SomaLogic RSU vested for that number of shares of Standard BioTools Common Stock equal to the number of shares of SomaLogic Stock subject to such SomaLogic RSU immediately prior to the Effective Time multiplied by the Exchange Ratio and rounded to the next nearest share of Standard BioTools Common Stock. In addition, as of the Effective Time, each SomaLogic Warrant, each exercisable for one share of SomaLogic Common Stock, was treated in accordance with its terms and each Warrant will convert into the right to receive, upon exercise of such Warrant, the number of shares of Standard BioTools Common Stock equal to multiplying the number of shares of common stock of SomaLogic subject to such Warrant by the Exchange Ratio. Additionally, as of the Effective Time, each share of SomaLogic Common Stock issuable in satisfaction of the applicable Milestone Consideration (as defined in the Palamedrix Merger Agreement) shall be satisfied with Standard BioTools Common Stock after applying the Exchange Ratio, if the Milestone Consideration is earned.

Corporate History and 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.

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 SEC. Our SEC reports can be accessed through the investor relations page of our website. 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.

Stock Exchange Listing

The Standard BioTools Common Stock is listed on The Nasdaq Global Select Market under the symbol "LAB."

THE OFFERING					
Issuer	Standard BioTools Inc.				
Issuance of Standard BioTools Common Stock					
Shares of Standard BioTools Common Stock offered by us	Up to 11,691,989 shares of Standard BioTools Common Stock issuable upon exercise of the Warrants, consisting of:				
	a. up to 6,127,190 shares of Standard BioTools Common Stock that are issuable upon the exercise of the Previously Public Warrants; and				
	b. up to 5,564,799 shares of Standard BioTools Common Stock that are issuable upon the exercise of the Private Placement Warrants.				
Use of proceeds	We will receive up to an aggregate of approximately \$121.1 million from the exercise of all Warrants, assuming the exercise in full of such Warrants for cash.				
	Unless we inform you otherwise in a prospectus supplement or free writing prospectus, we intend to use the net proceeds from the exercise of such Warrants for general corporate purposes.				
Resale of Standard BioTools Common Stock					
Shares of Standard BioTools Common Stock offered by the	Up to 26,736,975 shares of Standard BioTools Common Stock, consisting of:				
Selling Securityholders	a. up to 13,807,380 PIPE Shares;				
	b. up to 7,575,750 Founder Shares;				
	c. up to 238,864 Upfront Shares;				
	d. up to 105,180 Milestone Shares; and				
	e. up to 5,009,801 shares of Standard BioTools Common Stock issuable upon the exercise of the Private Placement Warrants.				
Use of proceeds	We will not receive any proceeds from the sale of shares of Standard BioTools Common Stock or Private				

Nasdaq symbol Standard BioTools Common Stock is listed on The Nasdaq Global Select Market under the symbol "LAB."

Placement Warrants by the Selling Securityholders.

Risk Factors

See the section entitled "Risk Factors" and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to invest in our securities.

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.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (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: the anticipated benefits of the Merger, the future financial performance of the combined company, 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 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 that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

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.

USE OF PROCEEDS

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

Assuming the exercise of all outstanding Warrants for cash, we will receive an aggregate of approximately \$121.1 million but will not receive any proceeds from the sale of the shares of Standard BioTools Common Stock issuable upon such exercise. We expect to use the net proceeds from the exercise of the Warrants, if any, for general corporate purposes. We will have broad discretion over the use of any proceeds from the exercise of the Warrants. There is no assurance that the holders of the Warrants will elect to exercise for cash any or all of such Warrants. To the extent that any Warrants are exercised on a "cashless basis," the amount of cash we would receive from the exercise of the Warrants will decrease.

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

SELLING SECURITYHOLDERS

The Selling Securityholders may offer and sell, from time to time, any or all of the shares of Standard BioTools Common Stock being offered for resale by this prospectus, which consists of:

- up to 13,807,380 PIPE Shares;
- · up to 7,575,750 Founder Shares;
- · up to 238,864 Upfront Shares;
- · up to 105,180 Milestone Shares; and
- · up to 5,009,801 shares of Standard BioTools Common Stock issuable upon the exercise of Private Placement Warrants.

The number of Milestone Shares set forth above was determined assuming the achievement of remaining milestones set forth in the Palamedrix Merger Agreement. The Milestone Shares have not been earned and are not currently outstanding. The actual number of Milestone Shares issued to the Selling Securityholders could be materially greater or less than 105,180 shares of Standard BioTools Common Stock depending on whether and to what extent the future milestones are achieved and/or the actual volume weighted average price of the Standard BioTools Common Stock at the time such milestones are achieved. This presentation is not intended to constitute an indication or prediction of whether any of the future milestones will be achieved, the election to pay the milestone consideration in cash or Standard BioTools Common Stock, or the future market price of the Standard BioTools Common Stock.

The Selling Securityholders may from time to time offer and sell any or all of the shares of Standard BioTools Common Stock set forth below pursuant to this prospectus. In this prospectus, the term "Selling Securityholders" includes (i) the entities identified in the table below (as such table may be amended from time to time by means of an amendment to the registration statement of which this prospectus forms a part or by a supplement to this prospectus) and (ii) any donees, pledgees, transferees or other successors-in-interest that acquire any of the securities covered by this prospectus from the named Selling Securityholders as a gift, pledge, partnership distribution or other non-sale related transfer.

The following tables provide, as of January 10, 2024, information regarding the beneficial ownership of Standard BioTools Common Stock and other securities convertible or exercisable into shares of Standard BioTools Common Stock, including shares of Standard BioTools Common Stock issuable upon the exercise of the Private Placement Warrants of each Selling Securityholder, and the number of shares of Standard BioTools Common Stock that may be sold by each Selling Securityholder under this prospectus and that each Selling Securityholder will beneficially own after this offering.

Because each Selling Securityholder may dispose of all, none or some portion of their securities, no estimate can be given as to the number of securities that will be beneficially owned by a Selling Securityholder upon termination of this offering. For purposes of the tables below, however, we have assumed that after termination of this offering none of the securities covered by this prospectus will be beneficially owned by the Selling Securityholders and further assumed that the Selling Securityholders will not acquire beneficial ownership of any additional securities during the offering. In addition, the Selling Securityholders may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, our securities in transactions exempt from the registration requirements of the Securities Act after the date on which the information in the tables is presented. Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by the Selling Securityholders and the percentage ownership of each Selling Securityholder, securities that are currently convertible or exercisable into shares of Standard BioTools Common Stock, or convertible or exercisable within 60 days following the date of this prospectus, are deemed beneficially owned by the Selling Securityholder.

Except as described herein or in the documents incorporated by reference, none of the Selling Securityholders or their respective affiliates has been an officer or director of our Company or any of our predecessors or affiliates within the last three years, nor has any Selling Securityholder had a material relationship with us within the last three years.

Selling Securityholder information for each additional Selling Securityholder, if any, will be set forth by a prospectus supplement to the extent required prior to the time of any offer or sale of such Selling Securityholder's securities pursuant to this prospectus. Any prospectus supplement may add, update, substitute, or change the information contained in this prospectus, including the identity of each Selling Securityholder and the number of shares of Standard BioTools Common Stock or Private Placement Warrants registered on its behalf.

Please see the section entitled "Plan of Distribution" for further information regarding the Selling Securityholders' method of distributing these shares of Standard BioTools Common Stock.

	Sha	Shares of Standard BioTools Common Stock					
Name of Selling Securityholder	Number Beneficially Owned Prior to Offering ^{(1)*}	Number Registered for Sale Hereby	Number Beneficially Owned After Offering	Percentage Beneficially Owned After Offering ⁽²⁾			
Casdin Partners Master Fund, L.P. ⁽³⁾	37,659,347	11,351,705	26,307,642	8.3%			
Casdin Private Growth Equity Fund, L.P. ⁽⁴⁾	2,744,219	2,744,219	_	_			
CMLS Holdings II LLC ⁽⁵⁾	12,372,802	12,372,802	_	_			
Troy M. Cox ⁽⁶⁾	761,967	268,249	493,718	**			
Total	53,538,335	26,736,975	26,801,360	8.5%			

- Certain Selling Securityholders may be deemed to beneficially own other securities reported herein.
- ** Less than 1%
 - (1) The table includes PIPE Shares, Founder Shares, and shares of Common Stock issuable upon exercise of the Private Placement Warrants (including both shares beneficially owned as determined in accordance with Rule 13d-3 of the Exchange Act and additional shares underlying the Private Placement Warrants to purchase Common Stock which may be exercisable or vest within one year following the Closing), (collectively, the "Resale Securities"). We do not know when or in what amounts the Selling Securityholders will offer the Resale Securities for sale, if at all.
 - (2) The percentage of shares to be beneficially owned after completion of the offering is calculated on the basis of 289,809,158 shares of Standard BioTools Common Stock and 127,780 shares of Series B-1 Preferred Stock (which represents up to 37,582,346 shares of Standard BioTools Common Stock issuable upon conversion of the Series B-1 Preferred Stock) outstanding, in each case at January 10, 2024. In calculating percentages of shares of Standard BioTools Common Stock owned by a particular Selling Securityholder, we treated as outstanding the number of shares of Standard BioTools Common Stock issuable upon exercise of that particular Selling Securityholder's Private Placement Warrants or Series B-1 Preferred Stock, if any, and did not assume the exercise of any other Selling Securityholder's Private Placement Warrants or the conversion of any other Selling Securityholder's Series B-1 Preferred Stock.
 - (3) The number of shares registered for sale hereby includes (i) 11,007,661 PIPE Shares held by Casdin Partners Master Fund, L.P., (ii) 238,864 Upfront Shares held by Casdin Partners Master Fund, L.P., and (iii) up to 105,180 Milestone Shares to be received by Casdin Partners Master Fund, L.P., based on milestone assumptions. The number of shares beneficially owned prior to and after the offering also includes 26,307,642 shares of Standard BioTools Common Stock issuable upon conversion of the Series B-1 Preferred Stock held by Casdin Partners Master Fund, L.P. The shares held by Casdin Partners Master Fund, L.P. may be deemed to be indirectly beneficially owned by (i) Casdin Capital, LLC, the investment adviser to Casdin Partners Master Fund, L.P., (ii) Casdin Partners GP, LLC, the general partner of Casdin Partners Master Fund L.P., and (iii) Eli casdin, the managing member of Casdin Capital, LLC and Casdin Partners GP, LLC. Mr. Casdin is a director of the Company. The business address of Casdin Partners Master Fund, L.P. is 1350 Avenue of the Americas, Suite 2600, New York, New York 10019.
 - (4) The number of shares registered for sale hereby includes 2,744,219 PIPE Shares held by Casdin Private Growth Equity Fund, L.P. The shares held by Casdin Private Growth Equity Fund, L.P. may be deemed to be indirectly beneficially owned by (i) Casdin Capital, LLC, the investment adviser to Casdin Private Growth Equity Fund, L.P., (ii) Casdin Private Growth Equity GP, LLC, the general partner of Casdin Private Growth Equity Fund, L.P., and (iii) Eli Casdin, the managing member of Casdin Capital, LLC and Casdin Private Growth Equity GP, LLC. Mr. Casdin is a director of the Company. The business address of Casdin Private Growth Equity Fund, L.P. is 1350 Avenue of the Americas, Suite 2600, New York, New York 10019.

- (5) Includes 4,824,802 shares of Standard BioTools Common Stock issuable upon exercise of the Private Placement Warrants and 7,548,000 Founder Shares held by CMLS Holdings II LLC. The Board of Managers of CMLS Holdings II LLC includes Mr. Casdin, who, as a member of the Board of Managers of CMLS Holdings II LLC, shares voting and investment discretion with respect to the shares of Standard BioTools Common Stock held by CMLS Holdings II LLC. Mr. Casdin may be deemed to have or share beneficial ownership of the securities held by CMLS Holdings II LLC. Mr. Casdin is a director of the Company. The business address of CMLS Holdings II LLC is c/o Corvex Management LP, 667 Madison Avenue, New York, New York 10065.
- (6) The number of shares registered for sale hereby includes (i) 55,500 PIPE Shares, (ii) 184,999 shares of Standard BioTools Common Stock issuable upon exercise of the Private Placement Warrants and (iii) 27,750 Founder Shares. Mr. Cox is a Director of the Company. The number of shares beneficially owned prior to and after the offering also includes (i) 3,807 shares of Standard BioTools Common Stock held by Mr. Cox and (ii) 489,911 shares of Standard BioTools Common Stock underlying stock options exercisable within 60 days of January 10, 2024. The business address of Mr. Cox is c/o Standard BioTools Inc., 2 Tower Place, South San Francisco, California 94080.

U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF SHARES OF STANDARD BIOTOOLS 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 shares of Standard BioTools 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 shares of Standard BioTools 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, by vote or value (except to the extent specifically set forth below);
- · certain former citizens or long-term residents of the United States;
- · persons who hold shares of Standard BioTools Common Stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction:
- persons who do not hold shares of Standard BioTools 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 shares of Standard BioTools Common Stock as a result of such income being recognized on an applicable financial statement; or
- persons deemed to sell shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools Common Stock and do not intend to make any distributions on shares of Standard BioTools Common Stock for the foreseeable future. However, if we do make distributions of cash or property on shares of Standard BioTools 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, such excess will first constitute a return of capital and will reduce your basis in shares of Standard BioTools Common Stock (determined separately with respect to each share of Standard BioTools Common Stock), but not below zero, and then, any amount in excess of such basis, 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 Standard BioTools 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 shares of Standard BioTools Common Stock is regularly traded on an established securities market, such shares of Standard BioTools 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 the shares of Standard BioTools Common Stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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 shares of Standard BioTools 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

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 shares of Standard BioTools Common Stock, including the consequences of any proposed changes in applicable laws.

PLAN OF DISTRIBUTION

The Selling Securityholders, which as used herein includes donees, pledgees, transferees, distributees or other successors-in-interest selling shares of Standard BioTools Common Stock or interests in Standard BioTools Common Stock received from the Selling Securityholders as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer, distribute or otherwise dispose of certain of their shares of Standard BioTools Common Stock or interests in Standard BioTools Common Stock on any stock exchange, market or trading facility on which shares of Standard BioTools Common Stock are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Securityholders may use any one or more of the following methods when disposing of their shares of Standard BioTools Common Stock or interests therein:

- · ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- · one or more underwritten offerings;
- block trades (which may involve crosses) in which the broker-dealer will attempt to sell the shares of Standard BioTools Common Stock as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its accounts;
- an exchange distribution and/or secondary distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- · distributions to their employees, partners, members or stockholders;
- short sales (including short sales "against the box") effected after the date of the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of standardized or over-the-counter options or other hedging transactions, whether through an options exchange or otherwise:
- in market transactions, including transactions on a national securities exchange or quotations service or over-the-counter market;
- · by pledge to secure debts and other obligation;
- · directly to purchasers, including our affiliates and stockholders, in a rights offering or otherwise;
- · 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;
- through agents;
- broker-dealers may agree with the Selling Securityholders to sell a specified number of such shares of Standard BioTools Common Stock at a stipulated price per share; and
- through a combination of any of these methods or any other method permitted by applicable law.

The Selling Securityholders may effect the distribution of Standard BioTools Common Stock and from time to time in one or more transactions either:

- \cdot at a fixed price or prices, which may be changed from time to time;
- · at market prices prevailing at the time of sale;
- at prices relating to the prevailing market prices; or
- · at negotiated prices.

The Selling Securityholders may, from time to time, pledge or grant a security interest in some shares of Standard BioTools Common Stock owned by them and, if a Selling Securityholder defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell such shares of Standard BioTools Common Stock from time to time, under this prospectus, or under an amendment or supplement to this prospectus under Rule 424(b) (3) or other applicable provision of the Securities Act amending the list of the Selling Securityholders to include the pledgee, transferee or other successors in interest as the Selling Securityholders under this prospectus. The Selling Securityholders also may transfer shares of Standard BioTools Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

We and the Selling Securityholders may agree to indemnify an underwriter, broker-dealer or agent against certain liabilities related to the sale of Standard BioTools Common Stock, including liabilities under the Securities Act. The Selling Securityholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their Standard BioTools Common Stock. Upon our notification by a Selling Securityholder that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of Standard BioTools Common Stock through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

- · the name of the selling security holder;
- · the number of shares of Standard BioTools Common Stock being offered;
- the terms of the offering;
- the names of the participating underwriters, broker-dealers or agents;
- · any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallowed or paid by any underwriters to dealers;
- · the public offering price;
- the estimated net proceeds to us from the sale of shares of Standard BioTools Common Stock;
- · any delayed delivery arrangements; and
- · other material terms of the offering.

In addition, upon being notified by a Selling Securityholder that a donee, pledgee, transferee or other successor-in-interest intends to sell Standard BioTools Common Stock, we will, to the extent required, promptly file a supplement to this prospectus to name specifically such person as a Selling Securityholder.

Agents, broker-dealers and underwriters or their affiliates may engage in transactions with, or perform services for, the Selling Securityholders (or their affiliates) in the ordinary course of business. The Selling Securityholders may also use underwriters or other third parties with whom such selling securityholders have a material relationship. The Selling Securityholders (or their affiliates) will describe the nature of any such relationship in the applicable prospectus supplement.

There can be no assurances that the Selling Securityholders will sell, nor are the Selling Securityholders required to sell, any or all of the Standard BioTools Common Stock offered under this prospectus.

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

The aggregate proceeds to the Selling Securityholders from the sale of shares of Standard BioTools Common Stock offered by them will be the purchase price of such shares of Standard BioTools Common Stock less discounts or commissions, if any. The Selling Securityholders reserve the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of share of Standard BioTools Common Stock to be made directly or through agents. We will not receive any of the proceeds from any offering by the Selling Securityholders.

The Selling Securityholders also may in the future resell a portion of Standard BioTools Common Stock in open market transactions in reliance upon Rule 144 under the Securities Act, *provided that* they meet the criteria and conform to the requirements of that rule, or pursuant to other available exemptions from the registration requirements of the Securities Act.

The Selling Securityholders and any underwriters, broker-dealers or agents that participate in the sale of shares of Standard BioTools Common Stock or interests therein may be "underwriters" within the meaning of Section 2(a)(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of shares of Standard BioTools Common Stock may be underwriting discounts and commissions under the Securities Act. If any Selling Securityholder is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act, then the Selling Securityholder will be subject to the prospectus delivery requirements of the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us and the Selling Securityholders, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

To the extent required, Standard BioTools Common Stock to be sold, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable discounts, commissions, concessions or other compensation 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 that includes this prospectus.

To facilitate the offering of shares of Standard BioTools Common Stock offered by the Selling Securityholders, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of Standard BioTools Common Stock. This may include overallotments or short sales, which involve the sale by persons participating in the offering of more shares of Standard BioTools Common Stock than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of Standard BioTools Common Stock by bidding for or purchasing shares of Standard BioTools Common Stock in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if shares of Standard BioTools Common Stock sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of Standard BioTools Common Stock at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time. These transactions may be effected on any exchange on which the securities are traded, in the over-the-counter market or otherwise.

We have agreed to indemnify the applicable Selling Securityholders party thereto against certain liabilities that they may incur in connection with the sale of the securities registered hereunder, including liabilities under the Securities Act, and to contribute to payments that the Selling Securityholders may be required to make with respect thereto. In addition, we and the Selling Securityholders may agree to indemnify any underwriter, broker-dealer or agent against certain liabilities related to the selling of the securities, including liabilities arising under the Securities Act.

We have agreed to use our commercially reasonable efforts to cause the registration statement of which this prospectus forms a part to remain effective with respect to any securities registered hereunder pursuant to such agreement until: (i) such securities have been sold, transferred, disposed of or exchanged in accordance with such registration statement; (ii) such securities have ceased to be outstanding; (iii) such securities have been otherwise transferred, new certificates for such securities not bearing a legend restricting further transfer will have been delivered by us and subsequent public distribution of such securities will not require registration under the Securities Act; (iv) with respect to a Selling Securityholder party to such agreement, all such securities held by such Selling Securityholder could be sold pursuant to Rule 144 without restriction on volume or manner of sale in any three-month period and without the requirement for us to be in compliance with the public information required under Rule 144; or (v) such securities have been sold to, or through, a broker, dealer or underwriter in a public distribution or other public securities transaction. Under each Subscription Agreement, we have agreed to our commercially reasonable efforts to maintain the continuous effectiveness of the registration statement of which this prospectus forms a part with respect to any securities registered hereunder pursuant to such agreement until: (A) with respect to a Selling Securityholder party to such agreement, such Selling Securityholder ceases to hold any such securities; (B) the date all such securities held by such Selling Securityholder may be sold without restriction under Rule 144, including without limitation, any volume and manner of sale restrictions which may be applicable to affiliates under Rule 144, and without the requirement for us to be in compliance with the current public information required under Rule 144; or (C) when such securities shall have ceased to be outstanding or three years from the date of effectiveness of such registration statement; or (B) such shorter period upon which such Selling Securityholder has notified us that such securities have actually been sold. Under the warrant agreement, we have agreed to maintain the effectiveness of this prospectus in respect of the shares of Standard BioTools Common Stock issuable upon the exercise of the Previously Public Warrants and the Private Placement Warrants until the expiration or redemption of such Private Placement Warrants. We have agreed to pay all expenses in connection with this offering, other than underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses. The Selling Securityholders will pay, on a pro rata basis, any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses relating to the offering.

Selling Securityholders may use this prospectus in connection with resales of shares of Standard BioTools Common Stock. This prospectus and any accompanying prospectus supplement will identify the Selling Securityholders, the terms of Standard BioTools Common Stock and any material relationships between us and the Selling Securityholders. Selling Securityholders may be deemed to be underwriters under the Securities Act in connection with shares of Standard BioTools Common Stock they resell and any profits on the sales may be deemed to be underwriting discounts and commissions under the Securities Act. Unless otherwise set forth in a prospectus supplement, the Selling Securityholders will receive all the net proceeds from the resale of shares of Standard BioTools Common Stock.

A Selling Securityholder that is an entity may elect to make an in-kind distribution of Standard BioTools Common Stock to its members, partners or stockholders pursuant to the registration statement of which this prospectus is a part by delivering a prospectus, as amended or supplemented. To the extent that such transferees are not affiliates of ours, such transferees will receive freely tradable shares of Standard BioTools Common Stock pursuant to the distribution effected through this prospectus.

DESCRIPTION OF CAPITAL STOCK

As a result of the Merger described in this prospectus, SomaLogic stockholders have become stockholders of Standard BioTools. The rights of former SomaLogic stockholders and the rights of Standard BioTools stockholders following the consummation of the Merger are governed by the Standard BioTools Eighth Amended and Restated Certificate of Incorporation, as amended (the "Standard BioTools Charter"), the Standard BioTools Amended and Restated Bylaws (the "Standard BioTools Bylaws"), and the Certificate of Designations of the Series B-1 Preferred Stock and the Certificate of Designations of the Series B-2 Preferred Stock (together, the "Certificates of Designations"). The following description of Standard BioTools capital stock is a summary. This summary does not purport to be complete and is qualified in its entirety by reference to the latest Standard BioTools SEC filings on Form 10-K and 10-Q, the Standard BioTools Charter, Standard BioTools Bylaws, the Certificates of Designations, and to the applicable provisions of the Delaware General Corporate Law.

Authorized Capital Shares

The Standard BioTools authorized capital stock consists of 600,000,000 shares of Standard BioTools Common Stock and 10,000,000 shares of Standard BioTools' Series B-1 preferred stock, par value \$0.001 per share (the "Series B-1 Preferred Stock"), and Standard BioTools' Series B-2 preferred stock, par value \$0.001 per share (the "Series B-2 Preferred Stock," and together with the Series B-1 Preferred Stock, the "Series B Preferred Stock"). Out of the Series B Preferred Stock, as of January 10, 2024, 128,267 shares have been designated Series B-1 Preferred Stock and 128,267 shares have been designated Series B-2 Preferred Stock. As of January 10, 2024, there were 289,809,158 shares of Standard BioTools Common Stock outstanding, 127,780 shares of Series B-1 Preferred Stock outstanding and 127,779 shares of Series B-2 Preferred Stock outstanding.

Common Stock

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

Voting Rights

Holders of Standard BioTools Common Stock are entitled to one vote for each share held by such holder on any matter submitted to a vote at a meeting of stockholders. In addition, the Standard BioTools Charter provides that certain corporate actions require the approval of the Standard BioTools 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 the issued and outstanding capital stock entitled to vote in the election of directors; and
- the amendment of provisions of the charter relating to blank check preferred stock, the classification of the Standard BioTools directors, the removal of directors, the filling of vacancies on the Standard BioTools Board, cumulative voting, procedures for annual and special meetings of the stockholders, action by written consent of stockholders and procedures for the amendment of the charter require the vote of 66 2/3% of the Standard BioTools then outstanding voting securities.

Preferred Stock

The Board of Directors of Standard BioTools (the "Standard BioTools Board") has the authority, without further action by the Standard BioTools stockholders, to designate and issue the preferred stock in one or more series. The Standard BioTools Board may also fix by resolution or resolutions the designations, powers, preferences and rights, and the qualifications, limitations or restrictions, of each such series of the Series B Preferred Stock, any or all of which may be greater than or senior to those of the Standard BioTools Common Stock. Though the actual effect of any such issuance on the rights of the holders of Standard BioTools Common Stock will not be known until the Standard BioTools Board 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 Standard BioTools Common Stock;
- · reducing the likelihood that holders of Standard BioTools Common Stock will receive dividend payments;
- · reducing the likelihood that holders of Standard BioTools Common Stock will receive payments in the event of a 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 Standard BioTools 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 Standard BioTools.

Dividend Rights

The holders of Series B-1 Preferred Stock are entitled to participate in all dividends declared on the Standard BioTools Common Stock on an asconverted 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 Standard BioTools, 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 Standard BioTools, converted all shares of Series B Preferred Stock into Standard BioTools Common Stock pursuant to the terms of the 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 Standard BioTools 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 Original Issuance Date, if the Last Reported Sale Price of the Standard BioTools Common Stock is greater than the Mandatory Conversion Price for at least twenty consecutive Trading Days immediately preceding the date of the Notice of Mandatory Conversion (as such terms are defined in the Series B-1 Certificate of Designations), Standard BioTools may elect to convert all of the outstanding shares of Series B Preferred Stock into shares of Standard BioTools Common Stock at the Conversion Rate.

If Standard BioTools 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 Standard BioTools Common Stock prior to such redemption, to require Standard BioTools to purchase all or a portion of such holder's outstanding shares of Series B-1 Preferred Stock that have not been converted into Standard BioTools 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 Standard BioTools 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 Standard BioTools is anticipated to merge with another person and will not be the surviving corporation or if the Standard BioTools Common Stock will no longer be listed on a U.S. national securities exchange, Standard BioTools will have a right to redeem, subject to the holder's right to convert into Standard BioTools 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 Standard BioTools Common Stock immediately prior to the change of control transaction.

After the seventh anniversary of the Original Issuance Date (as defined in the Series B-1 Certificate of Designations), subject to certain conditions, Standard BioTools 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 shares 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 Standard BioTools Common Stock and the holders of any other class or series of equity interest of Standard BioTools then entitled to vote with the Standard BioTools Common Stock on all matters submitted to a vote of the holders of Standard BioTools 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 Standard BioTools Common Stock (including the Series B-1 Preferred Stock on an as-converted basis, but excluding the Series B-2 Preferred Stock) (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 Standard BioTools, 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 Standard BioTools Common Stock (excluding any and all Standard BioTools 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 charter to create any new series of securities of Standard BioTools 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 Standard BioTools' capital stock; (iii) the purchase, redemption, or other acquisition of any Standard BioTools Common Stock or other capital stock of Standard BioTools 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 charter 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 Capital, LLC ("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 Standard BioTools 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 Standard BioTools Board (the "Series B-1 Preferred Director"). Subject to applicable law and The Nasdaq Stock Market listing standards, the Series B-1 Preferred Director shall be offered the opportunity, with respect to each standing committee of the Standard BioTools Board, to sit on such committee. Further, the Series B-1 Preferred Director will hold office until the following year's annual meeting of Standard BioTools' stockholders and until his or her successor is duly elected or qualified or until his or her earlier death, 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 Standard BioTools Board beyond seven; (ii) the hiring, promotion, demotion, or termination of Standard BioTools' 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 Standard BioTools or any of its subsidiaries; (v) any change in the principal business of Standard BioTools or entry by Standard BioTools into any material new line of business; and (vi) for a period of three years after the Original Issuance Date (as defined in the Series B-1 Certificate of Designations) or such shorter period ending immediately when the Series B-1 Preferred Stock percentage is less than 7.5%, (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 Standard BioTools 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").

The Series B-2 Preferred Stock ranks senior to the Standard BioTools 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 Standard BioTools.

Dividend Rights

The holders of Series B-2 Preferred Stock are entitled to participate in all dividends declared on the Standard BioTools Common Stock on an asconverted 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 Standard BioTools, 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 Standard BioTools, converted all shares of Series B Preferred Stock into Standard BioTools Common Stock pursuant to the terms of the Certificates 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 Standard BioTools 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 Global Investors LP ("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 Standard BioTools Common Stock issued and outstanding after giving effect to such conversion (the "Cap").

At any time after the fifth anniversary of the Original Issuance Date, if the Last Reported Sale Price of the Standard BioTools Common Stock is greater than the Mandatory Conversion Price for at least twenty consecutive Trading Days immediately preceding the date of the Notice of Mandatory Conversion (as such terms are defined in the Series B-2 Certificate of Designations), Standard BioTools may elect to convert all of the outstanding shares of Series B Preferred Stock into shares of Standard BioTools Common Stock at the Conversion Rate.

If Standard BioTools 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 Standard BioTools Common Stock prior to such redemption, to require Standard BioTools to purchase all or a portion of such holder's outstanding shares of Series B-2 Preferred Stock that have not been converted into Standard BioTools 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 Standard BioTools 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 Standard BioTools is anticipated to merge with another person and will not be the surviving corporation or if the Standard BioTools Common Stock will no longer be listed on a U.S. national securities exchange, Standard BioTools will have a right to redeem, subject to the holder's right to convert into Standard BioTools 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 Standard BioTools Common Stock immediately prior to the change of control transaction.

After the seventh anniversary of the Original Issuance Date (as defined in the Series B-2 Certificate of Designations), subject to certain conditions, Standard BioTools 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 shares 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 Standard BioTools Common Stock and the holders of any other class or series of equity interest of Standard BioTools then entitled to vote with the Standard BioTools Common Stock on all matters submitted to a vote of the holders of Standard BioTools 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 Standard BioTools Common Stock (including the Series B-2 Preferred Stock on an as-converted basis, but excluding the Series B-1 Preferred Stock) (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 Standard BioTools, 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 Standard BioTools Common Stock (excluding any and all Standard BioTools 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 Cap or the B-2 Voting Threshold, is generally required for the taking of the following actions: (i) any amendment to the charter to create any new series of securities of Standard BioTools 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 Standard BioTools' capital stock; (iii) the purchase, redemption, or other acquisition of any Standard BioTools Common Stock or other capital stock of Standard BioTools 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 charter 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 Standard BioTools 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, voting separately as a single class, and for the avoidance of doubt, without giving effect to limitations associated with the Cap or the B-2 Voting Threshold, will each have the right to nominate for election and to elect one member to the Standard BioTools Board (the "Series B-2 Preferred Director"). Subject to applicable law and The Nasdaq Stock Market listing standards, the Series B-2 Preferred Director shall be offered the opportunity, with respect to each standing committee of the Standard BioTools Board, to sit on such committee. The Series B-2 Preferred Director will hold office until the following year's annual meeting of Standard BioTools' stockholders and until his or her successor is duly elected or qualified or until his or her earlier death, resignation or removal. For purposes of clarity, the Series B-2 Preferred Director shall not be classified with the remaining members of the Standard BioTools Board.

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 Standard BioTools Board beyond seven; (ii) the hiring, promotion, demotion, or termination of Standard BioTools' 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 Standard BioTools or any of its subsidiaries; (v) any change in the principal business of Standard BioTools or entry by Standard BioTools into any material new line of business; and (vi) for a period of three years after the Original Issuance Date (as defined in the Series B-2 Certificate of Designations) or such shorter period ending immediately when the Series B-2 Preferred Stock percentage is less than 7.5%, (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 Standard BioTools 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, Standard BioTools entered into a Registration Rights Agreement (the "Registration Rights Agreement") with 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 (collectively, the "Purchasers"), pursuant to which the Purchasers have certain customary registration rights with respect to shares issuable under (i) a Loan Agreement, dated and effective as of January 23, 2022, among the lenders party thereto affiliated with Viking and the Company, (ii) a Loan Agreement, dated and effective as of January 23, 2022, among the lenders party thereto affiliated with Viking and the Company, and (iii) separate Series B Convertible Preferred Stock Purchase Agreements, dated and effective as of January 23, 2022 (together, the "Purchase Agreements") with each of the Purchasers, including (a) any shares of Standard BioTools 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 (b) any shares of Standard BioTools 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 Standard BioTools intends to issue or sell new equity securities, then each of the Purchaser Parties (as defined in the Purchase Agreements) 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 Purchase Agreements) (including Underlying Shares (as defined in each of the Purchase Agreements) issued on conversion of such Acquired Shares). 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 Standard BioTools Common Stock (on an as-converted basis), each selling securityholder is subject to customary standstill restrictions. The selling securityholders are prohibited under the Purchase Agreements from transferring any shares of Series B Preferred Stock and any shares of Standard BioTools 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 the Standard BioTools Charter and Standard BioTools Bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of Standard BioTools. 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 the Board of Directors. We believe that the advantages gained by protecting the 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 the Standard BioTools Common Stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Certificate of Incorporation and Bylaws

The Standard BioTools Charter and Standard BioTools Bylaws include provisions that:

- authorize the Standard BioTools Board to issue, without further action by the stockholders, additional shares of undesignated preferred stock;
- require that any action to be taken by the stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of the stockholders can be called only by the Standard BioTools Board, the Chairperson of the Standard BioTools Board, the Secretary, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of the stockholders and an advance notice procedure for nominations of persons for election to the Standard BioTools Board at any stockholder meeting;
- provide that directors may be removed only for cause; provided that, pursuant to the Certificates of Designations, the Series B-1 Director (as defined in the Series B-1 Certificate of Designations) and the Series B-2 Director (as defined in the Series B-2 Certificate of Designations) may only be removed by the holders of the Series B-1 Preferred Stock and the Series B-2 Preferred Stock, respectively;
- provide that (i) vacancies on the Standard BioTools Board resulting from one or more directors resignations from the Standard BioTools Board may be filled by a majority of directors then in office, including those who have so resigned; and (ii) vacancies on the Standard BioTools Board resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled only by a majority of the directors then in office, even though less than a quorum, or by a sole remaining director; provided that, pursuant to the Certificates 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 the Standard BioTools Board 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 Standard BioTools Board; and
- · require the affirmative vote of a majority of the Standard BioTools Board and at least 662/3% of the total voting power of outstanding voting securities, voting together as a single class, 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 662/3% 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 the Standard BioTools Board 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 Standard BioTools Common Stock held by the stockholders.

The provisions of Delaware law and the Standard BioTools Charter and Standard BioTools 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 the Standard BioTools Common Stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the Standard BioTools 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 the Standard BioTools 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

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

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, will pass upon the validity of the Standard BioTools Common Stock offered by this prospectus on behalf of Standard BioTools Inc.

EXPERTS

The financial statements of Standard BioTools Inc. 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 Standard BioTools' Annual Report on Form 10-K for the year ended December 31, 2022 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of SomaLogic appearing in SomaLogic's <u>Annual Report (Form 10-K) for the year ended December 31, 2022</u>, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. 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.standardbio.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 OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus information that we file with the SEC. This permits us to disclose important information to you by referring to these filed documents. Any information referenced this way is considered to be a part of this prospectus and any such information filed by us with the SEC subsequent to the date of this prospectus will automatically be deemed to update and supersede this prospectus. We incorporate by reference into this prospectus and any accompanying prospectus supplement the following documents that we have already filed with the SEC except that any information which is furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K (including financial statements or exhibits relating thereto furnished pursuant to Item 9.01) and not filed shall not be deemed incorporated by referenced herein:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on March 14, 2023;
- · our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, filed with the SEC on May 9, 2023, August 8, 2023 and November 7, 2023, respectively;
- · our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 28, 2023 (excluding those portions that are not incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2022);
- our Current Reports on Form 8-K, filed with the SEC on March 13, 2023, March 16, 2023, May 3, 2023, May 15, 2023, June 16, 2023, July 28, 2023, October 4, 2023, November 21, 2023, December 4, 2023, December 19, 2023, December 26, 2023, December 29, 2023, and January 5, 2024 (as amended on January 19, 2024); and
- the description of the Standard BioTools Common Stock contained in the Registration Statement on Form 8-A relating thereto, filed with the SEC on February 7, 2011, including any amendment or report filed for the purpose of updating such description.

The SEC file number for each of the documents listed above is 001-34180.

In addition, all reports and other documents filed by us pursuant to Section 13(d), 13(c), 14 or 15(d) of the Exchange Act after the date of the registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting:

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

You may also access these documents on our website, http://www.standardbio.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

You should rely only on information contained in, or incorporated by reference into, this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.



38,428,964 Shares of Common Stock

PROSPECTUS

, 2024

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:

	Am	ount to be
		Paid
SEC registration fee	\$	12,904.07
Printing and engraving expenses		*
Accounting fees and expenses		*
Legal fees and 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 (the "DGCL"), permits a corporation to indemnify its directors and officers against expenses, including attorneys' fees, judgments, fines and amounts paid in settlements actually and reasonably incurred by them in connection with any action, suit or proceeding brought by third parties. The directors or officers must have acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reason to believe their conduct was unlawful. In a derivative action, an action only by or in the right of the corporation, indemnification may be made only for expenses, including attorney's fees, actually and reasonably incurred by directors and officers in connection with the defense or settlement of an action or suit, and only with respect to a matter as to which they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation. No indemnification shall be made if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought determines upon application that the defendant officers or directors are fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability. The Standard BioTools Charter provides that the registrant may indemnify its directors, officers, employees or agents to the fullest extent permitted by applicable law and the Standard BioTools ByLaws provide that the registrant shall indemnify its directors and officers to the fullest extent permitted by applicable law.

Section 102(b)(7) of the DGCL permits a corporation to provide in its charter that a director or officer of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, except for liability of (1) a director or officer for any breach of the director's or officer's duty of loyalty to the corporation or its stockholders, (2) a director or officer for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) a director for payments of unlawful dividends or unlawful stock purchases or redemptions, (4) a director or officer for any transaction from which the director or officer derived an improper personal benefit, or (5) an officer in any action by or in the right of the corporation. The Standard BioTools Charter provides for such limitation of liability with respect to directors of the corporation.

Standard BioTools has entered into indemnification agreements with its officers, directors and certain other employees. With certain exceptions, these agreements provide for indemnification for related expenses including, among others, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, the Standard BioTools Charter, the Standard BioTools Bylaws, any agreement, any vote of stockholders or disinterested directors or otherwise.

Standard BioTools maintains standard policies of insurance that provide coverage (1) to its directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to Standard BioTools with respect to indemnification payments that it may make to such directors and officers.

Item 16. Exhibits

The exhibits to this registration statement are listed in the Exhibit Index immediately prior the signature page hereto, which Exhibit Index is hereby incorporated by reference into this Item 16 by reference.

Item 17. Undertakings

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% 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) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act, that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

- 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.
- (5) That, for the purpose of determining liability under the Securities Act to any purchaser:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

- (6) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the 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.

EXHIBIT INDEX

Exhibit		Filed			Incorporated by Reference From Exhibit	
No.	Description	Herewith	Form	File No.	Number	Date Filed
<u>2.1†</u>	Agreement and Plan of Merger, dated as of October 4, 2023, by and among Standard BioTools Inc., SomaLogic, Inc. and Martis Merger Sub Inc.		<u>8-K</u>	001-34180	<u>2.1</u>	10/4/2023
<u>3.1</u>	Eighth Amended and Restated Certificate of Incorporation.		<u>10-K</u>	001-34180	<u>3.1</u>	<u>3/28/2011</u>
<u>3.2</u>	Amended and Restated Bylaws.		<u>S-8</u>	<u>333-264086</u>	<u>4.8</u>	4/1/2022
3.2 3.3	Certificate of Amendment to Eighth Amended and Restated Certificate of Incorporation, filed April 1, 2022.		<u>S-8</u>	333-264086	4.3	4/1/2022
3.4	Second Certificate of Amendment to the Eighth Amended and Restated Certificate of Incorporation filed on January 4, 2024.		<u>8-K</u>	001-34180	3.1	1/5/2024
<u>4.1</u>	Specimen Common Stock Certificate of the Registrant.		<u>S-8</u>	<u>333-264086</u>	<u>4.1</u>	4/1/2022
<u>4.2</u>	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock.		<u>8-K</u>	001-34180	<u>3.1</u>	11/22/2016
<u>4.3</u>	Certificate of Elimination of Series A Participating Preferred Stock of the Registrant.		<u>8-K</u>	001-34180	<u>3.1</u>	8/2/2017
<u>4.4</u>	Certificate of Designations of Rights, Preferences and Privileges of Series B-1 Convertible Preferred Stock.		<u>8-K</u>	001-34180	<u>3.6</u>	4/5/2022
<u>4.5</u>	Certificate of Designations of Rights, Preferences and Privileges of Series B-2 Convertible Preferred Stock.		<u>8-K</u>	001-34180	<u>3.7</u>	4/5/2022
<u>4.6</u>	Indenture, dated November 22, 2019, by and between Fluidigm Corporation and U.S. Bank National Association.		<u>8-K</u>	001-34180	4.1	11/22/2019

<u>4.7</u> <u>4.8</u>	Form of 5.25% Convertible Senior Note due 2024. Series B-1 Loan Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Casdin		<u>8-K</u> <u>8-K/A</u>	001-34180 001-34180	<u>4.2</u> <u>10.1</u>	11/22/2019 2/11/2022
<u>4.9</u>	Partners Master Fund, L.P., and Casdin Private Growth Equity Fund II, L.P. Series B-2 Loan Agreement, dated as of January 23, 2022, by and among Fluidigm Corporation, Viking Global Opportunities Illiquid Investments Sub-		<u>8-K</u>	001-34180	10.2	1/24/2022
4.10	Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP. Warrant Agreement, dated as of February 22, 2021, by and between CM Life Sciences II Inc. and					
<u>5.1</u>	Continental Stock Transfer & Trust Company. Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.	X	<u>8-K</u>	<u>001-40090</u>	<u>10.1</u>	2/26/2021
<u>23.1</u>	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting	X				
<u>23.2</u>	Firm. Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.	<u>X</u>				
<u>23.3</u>	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included as part of Exhibit 5.1 hereto).	X				
<u>24.1</u>	Power of Attorney (included on the signature	<u>X</u>				
<u>107</u>	page to this registration statement). Filing Fee Table.	X				

The schedules and exhibits to this exhibit have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Indicates management contract or compensatory plan, contract, or arrangement.

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 January 19, 2024.

STANDARD BIOTOOLS INC.

By: /s/ Michael Egholm, Ph.D.

Michael Egholm, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Standard BioTools Inc., hereby severally constitute and appoint Michael Egholm, Ph.D. and Jeffrey Black and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including, without limitation, post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or 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>Title</u>	<u>Date</u>
President, Chief Executive Officer and Director (Principal Executive Officer)	January 19, 2024
Chief Financial Officer (Principal Financial and Accounting Officer)	January 19, 2024
Chairman of the Board of Directors	January 19, 2024
Director	January 19, 2024
	President, Chief Executive Officer and Director (Principal Executive Officer) Chief Financial Officer (Principal Financial and Accounting Officer) Chairman of the Board of Directors Director Director Director



One Financial Center Boston, MA 02111 617 542 6000 mintz.com

January 19, 2024

Standard BioTools Inc. 2 Tower Place, Suite 2000 South San Francisco, CA 94080

Re: <u>Registration Statement on Form S-3</u>

Ladies and Gentlemen:

We have acted as legal counsel to Standard BioTools Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-3 (the "Registration Statement") relating to the registration under the Securities Act of 1933, as amended (the "Act"), of (a) the issuance of shares of common stock, \$0.001 par value per share ("Common Stock"), of the Company upon the exercise of warrants to purchase shares of common stock, \$0.001 par value per share ("SomaLogic Common Stock"), of SomaLogic, Inc. ("SomaLogic"), originally issued by SomaLogic, and (b) the resale of Common Stock held by certain securityholders of the Company, as follows:

- (i) the issuance of up to 5,564,799 shares of Common Stock that are issuable upon exercise of certain currently outstanding warrants to purchase SomaLogic Common Stock (the "Private Placement Warrants"), all of which are authorized but heretofore unissued shares (the "Private Placement Warrant Shares");
- (ii) the issuance of up to 6,127,190 shares of Common Stock that are issuable upon exercise of certain currently outstanding warrants to purchase SomaLogic Common Stock (the "Previously Public Warrants," and together with the Private Placement Warrants, the "Warrants"), all of which are authorized but heretofore unissued shares (the "Previously Public Warrant Shares," and together with the Private Placement Warrant Shares, the "Warrant Shares"); and
- (iii) the resale of up to 26,736,975 shares of Common Stock, including up to 5,009,801 Private Placement Warrant Shares (collectively, the "Selling Stockholder Shares").

The Warrants were issued by SomaLogic pursuant to a Warrant Agreement, dated as of February 22, 2021, between SomaLogic and Continental Stock Transfer & Trust Company, as warrant agent.

This opinion is being rendered in connection with the filing of the Registration Statement with the Commission. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company's Eighth Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, each as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company's officers as we have deemed relevant; and the Registration Statement and the exhibits thereto. In such review, we have assumed the accuracy and completeness of all agreements, documents, records, certificates and other materials submitted to us, the conformity with the originals of all such materials submitted to us as copies (whether or not certified and including facsimiles), the authenticity of the originals of such materials and all materials submitted to us as originals, the genuineness of all signatures and the legal capacity of all natural persons.

BOSTON LOS ANGELES MIAMI NEW YORK SAN DIEGO SAN FRANCISCO TORONTO WASHINGTON
MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C.

MINTZ

January 19, 2024 Page 2



With respect to the Warrant Shares, we express no opinion to the extent that, notwithstanding the Company's current reservation of shares of Common Stock, future issuances of securities of the Company, including the Warrant Shares and/or antidilution adjustments to outstanding securities of the Company may cause the number of shares issuable upon exercise of the Warrants for more shares of Common Stock than the number that then remain authorized but unissued.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such copies, and the truth and correctness of any representations and warranties contained therein.

Our opinion expressed herein is limited to the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

On the basis of the foregoing and the assumptions set forth below, and subject to the qualifications and limitations set forth herein, we are of the opinion that:

- 1. The Warrant Shares have been duly authorized and, when issued and paid for upon exercise of the Warrants in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.
- 2. The Selling Stockholder Shares, other than the Private Placement Warrant Shares, are validly issued, fully paid and nonassessable. Any Private Placement Warrant Shares included in the Selling Stockholder Shares, when issued and paid for in accordance with the terms of the Private Placement Warrants, will be validly issued, fully paid and nonassessable.

We have assumed that at or prior to the time of the delivery of any of the Warrant Shares, the Registration Statement will have been declared effective under the Act.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the Registration Statement and in the Prospectus forming a part thereof and any supplement thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

MINTZ

January 19, 2024 Page 3



Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

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. of our report dated March 14, 2023 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Standard BioTools Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California January 19, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Standard BioTools Inc. for the registration of 38,428,964 shares of its common stock and to the incorporation by reference of our report dated March 28, 2023, with respect to the consolidated financial statements of SomaLogic, Inc. as of and for the years ended December 31, 2022 and 2021 included in the Amendment No. 1 to the Current Report on Form 8-K of Standard BioTools Inc., filed with the Securities and Exchange Commission on January 19, 2024.

/s/ Ernst & Young LLP

Denver, Colorado January 19, 2024

Calculation of Filing Fee Tables

Form S-3 (Form Type)

Standard BioTools Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, \$0.001 par value per share	457(c)	38,428,964 (2)	\$2.275(3)	\$87,425,893.10	\$0.00014760	\$12,904.07
Total Offering Amounts				\$87,425,893.10		\$12,904.07	
Total Fees Previously Paid							
Total Fee Offsets						_	
Net Fee Due						\$12,904.07	

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), Standard BioTools Inc. (the "Registrant") is also registering an indeterminate number of additional shares of common stock, par value \$0.001 per share ("Standard BioTools Common Stock"), that may become issuable as a result of any stock dividend, stock split, recapitalization or other similar transaction.
- Consists of (i) 26,736,975 shares of Standard BioTools Common Stock registered for sale by the selling securityholders named in this registration statement (including 5,009,801 of the shares of Standard BioTools Common Stock referred to in the following clause (ii)), (ii) 5,564,799 shares of Standard BioTools Common Stock issuable upon the exercise of Private Placement Warrants (as defined in the registration statement), and (iii) 6,127,190 shares of Standard BioTools Common Stock issuable upon the exercise of Public Warrants (as defined in the registration statement).
- Pursuant to Rule 457(c) under the Securities Act, and solely for the purpose of calculating the registration fee, the proposed maximum offering price per share is \$2.275, which is the average of the high and low prices of the Standard BioTools Common Stock on January 16, 2024 on The Nasdaq Global Select Market.