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

Amendment No. 1 to

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

STANDARD BIOTOOLS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware 77-0513190

(State or other jurisdiction of incorporation or organization)

2 Tower Place, Suite 2000
South San Francisco, CA
(650) 266-6000

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

Michael Egholm, Ph.D.
President and Chief Executive Officer
2 Tower Place, Suite 2000
South San Francisco, CA 94080
(650) 266-6000

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

Copies to:

William C. Hicks, Esq. John T. Rudy, Esq. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. One Financial Center Boston, MA 02111 (617) 542-6000

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

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

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box

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

and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square

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

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

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

Large accelerated filer ☐ Accelerated filer ☐

Non-accelerated filer		Smaller reporting company	×				
		Emerging growth company					
	If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box						
TO DELAY ITS EFFECTIVE I STATES THAT THIS REGIST SECTION 8(a) OF THE SECUR	DATE UNTIL THE REGISTRAN TRATION STATEMENT SHALL SITIES ACT OF 1933, AS AMENI	ON STATEMENT ON SUCH DATE OR DATES AS MAY BE I SHALL FILE A FURTHER AMENDMENT WHICH SPI THEREAFTER BECOME EFFECTIVE IN ACCORDA DED, OR UNTIL THE REGISTRATION STATEMENT SHA HANGE COMMISSION, ACTING PURSUANT TO SAID SI	ECIFICALLY ANCE WITH LL BECOME				

EXPLANATORY NOTE

This Amendment No. 1 ("Amendment No. 1") to the Registration Statement on Form S-3 (File No. 333-276628) of Standard BioTools Inc. (the
"Registration Statement") is being filed solely for the purpose of filing certain exhibits as indicated in Part II of this Amendment No. 1. This Amendment
No. 1 does not modify any provision of the prospectus that forms a part of the Registration Statement. Accordingly, a preliminary prospectus has been
omitted.

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:

	A	mount 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;

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

- 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		<u>8-K</u>	<u>001-34180</u>	<u>2.1</u>	10/4/2023
	October 4, 2023, by and among Standard					
	BioTools Inc., SomaLogic, Inc. and Martis					
	Merger Sub Inc.					
2.2†	Merger Agreement, dated as of March 28,		<u>S-4/A</u>	<u>333-256127</u>	Annex A	8/5/2021
	2021, as amended by the First Amendment					
	thereto dated as of May 12, 2021 and the					
	Second Amendment thereto dated as of					
	July 15, 2021, by and among CM Life					
	Sciences II, Inc., S-Craft Merger Sub, Inc.,					
	and SomaLogic, Inc.					
2.3††	Agreement and Plan of Merger, dated as of		<u>8-K</u>	<u>001-40090</u>	<u>2.1</u>	7/27/2022
	July 25, 2022, by and among SomaLogic,					
	Merger Sub I, Merger Sub II, Palamedrix,					
	and the Securityholder Representative.					
<u>3.1</u>	Eighth Amended and Restated Certificate of		<u>10-K</u>	001-34180	<u>3.1</u>	3/28/2011
	<u>Incorporation.</u>					
<u>3.2</u>	Amended and Restated Bylaws.		<u>S-8</u>	<u>333-264086</u>	<u>4.8</u>	<u>4/1/2022</u>
3.2 3.3	Certificate of Amendment to Eighth		<u>S-8</u>	<u>333-264086</u>	<u>4.3</u>	4/1/2022
	Amended and Restated Certificate of					
	Incorporation, filed April 1, 2022.					
<u>3.4</u>	Second Certificate of Amendment to the		<u>8-K</u>	001-34180	<u>3.1</u>	1/5/2024
	Eighth Amended and Restated Certificate of					
	Incorporation filed on January 4, 2024.					
<u>4.1</u>	Specimen Common Stock Certificate of the		<u>S-8</u>	333-2640864	<u>4.1</u>	4/1/2022
	Registrant.					
<u>4.2</u>	Certificate of Designation of Rights,		<u>8-K</u>	001-34180	<u>3.1</u>	11/22/2016
	Preferences and Privileges of Series A					
	Participating Preferred Stock.					
<u>4.3</u>	Certificate of Elimination of Series A		<u>8-K</u>	001-34180	<u>3.1</u>	8/2/2017
	Participating Preferred Stock of the					
	Registrant.					

Exhibit		Filed			Incorporated by Reference From Exhibit	
No.	Description	Herewith	Form	File No.	Number	Date Filed
<u>4.4</u>	Certificate of Designations of Rights,		<u>8-K</u>	<u>001-34180</u>	<u>3.6</u>	<u>4/5/2022</u>
	<u>Preferences and Privileges of Series B-1</u>					
	Convertible Preferred Stock.					
<u>4.5</u>	Certificate of Designations of Rights,		<u>8-K</u>	<u>001-34180</u>	<u>3.7</u>	<u>4/5/2022</u>
	<u>Preferences and Privileges of Series B-2</u>					
	Convertible Preferred Stock.					
<u>4.6</u>	Indenture, dated November 22, 2019, by and		<u>8-K</u>	<u>001-34180</u>	<u>4.1</u>	11/22/2019
	between Fluidigm Corporation and U.S.					
	Bank National Association.					
<u>4.7</u>	Form of 5.25% Convertible Senior Note due		<u>8-K</u>	<u>001-34180</u>	<u>4.2</u>	11/22/2019
	<u>2024.</u>					
<u>4.8</u>	Series B-1 Loan Agreement, dated as of		<u>8-K/A</u>	<u>001-34180</u>	<u>10.1</u>	<u>2/11/2022</u>
	January 23, 2022, by and among Fluidigm					
	Corporation, Casdin Partners Master Fund,					
	L.P., and Casdin Private Growth Equity Fund					
4.0	<u>II, L.P.</u>		0.17	001 24100	10.0	1/04/0000
<u>4.9</u>	Series B-2 Loan Agreement, dated as of		<u>8-K</u>	<u>001-34180</u>	<u>10.2</u>	<u>1/24/2022</u>
	January 23, 2022, by and among Fluidigm Corporation, Viking Global Opportunities					
	Illiquid Investments Sub-Master LP, and					
	Viking Global Opportunities Drawdown					
	(Aggregator) LP.					
4.10	Warrant Agreement, dated as of February 22,		<u>8-K</u>	001 40000	10.1	2/26/2021
<u>4.10</u>	2021, by and between CM Life Sciences II		<u>8-N</u>	<u>001-40090</u>	<u>10.1</u>	<u>2/26/2021</u>
	Inc. and Continental Stock Transfer & Trust					
	Company.					
<u>4.11</u>	Form of SomaLogic, Inc. Subscription		<u>8-K</u>	001-40090	<u>10.1</u>	3/29/2021
1.11	Agreement		<u>0 IX</u>	001 10090	10.1	<u>3/23/2021</u>
<u>5.1</u>	Opinion of Mintz, Levin, Cohn, Ferris,		<u>S-3</u>	333-276628	<u>5.1</u>	1/19/2024
<u>0.11</u>	Glovsky and Popeo, P.C.		<u>5 5</u>	<u>555 270020</u>	<u>0.1</u>	<u>1,12,1202.</u>
23.1	Consent of PricewaterhouseCoopers		<u>S-3</u>	333-276628	23.1	1/19/2024
	LLP, Independent Registered Public					
	Accounting Firm.					
23.2	Consent of Ernst & Young LLP, Independent		<u>S-3</u>	333-276628	<u>23.2</u>	1/19/2024
	Registered Public Accounting Firm.					
<u>23.3</u>	Consent of Mintz, Levin, Cohn, Ferris,					
	Glovsky and Popeo, P.C. (included as part of					
	Exhibit 5.1 hereto).					

Exhibit		Filed			Incorporated by Reference From Exhibit	
No.	Description	Herewith	Form	File No.	Number	Date Filed
<u>24.1</u>	Power of Attorney (included on the signature					
	page to the initial registration statement).					
<u>107</u>	Filing Fee Table.		<u>S-3</u>	333-276628	<u>107</u>	1/19/2024

[†] The schedules and exhibits to this exhibit have been omitted pursuant to Item 601(a)(5) of Regulation S-K.
†† Portions of this exhibit have been omitted pursuant to a request for confidential treatment. Omitted material for which confidential treatment has been requested has been filed separately with the SEC.

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 Amendment No. 1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on February 2, 2024.

STANDARD BIOTOOLS INC.

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

Michael Egholm, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 1 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	Title	<u>Date</u>
/s/ Michael Egholm, Ph.D. Michael Egholm, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	February 2, 2024
* Jeffrey Black	Chief Financial (Principal Financial and Accounting Officer)	February 2, 2024
* Tom Carey	Director	February 2, 2024
* Frank Witney, Ph.D.	Director	February 2, 2024
* Fenel M. Eloi	Director	February 2, 2024
* Troy Cox	Director	February 2, 2024
* Eli Casdin	Director	February 2, 2024
* Kathy Hibbs	Director	February 2, 2024
*By:/s/ Michael Egholm, Ph.D. Michael Egholm, Ph.D. Attorney-in-fact		