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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

STANDARD BIOTOOLS INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

34385P108

(CUSIP Number)

Eli Casdin Casdin Capital, LLC 1350 Avenue of the Americas, Suite 2600 New York, New York 10019 (212) 897-5430

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

April 4, 2022

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box. \Box

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1	NAME OF 1	REPORTING PERSON	
	Casdin Capi	ital, LLC	
2	CHECK TH	IE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □
3	SEC USE O	DNLY	
4	SOURCE O	F FUNDS	
5		DX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	
6	CITIZENSF	HIP OR PLACE OF ORGANIZATION	
REPORTIN WI	RES CIALLY BY EACH 9 G PERSON TH 1	37,582,346 (1) 37 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 37,582,346 (1)	
11	37,582,346		
12	CHECK BC	DX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 32.74% (2)		
14		EPORTING PERSON	

(1) Represents 37,582,346 shares of common stock, par value \$0.001 per share (the "Common Stock") of Standard BioTools Inc. (the "Company"), issuable upon conversion of the Company's Series B-1 Convertible Preferred Stock, par value \$0.001 per share (the "Series B-1 Preferred Stock").

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 37,582,346 shares of Common Stock issuable to the Reporting Person upon conversion of 37,582,346 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

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1	NAME OF REPORTING PERSON			
	Eli Casdin			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □		
3	SEC USE ONLY			
4	SOURCE OF FUNDS			
	AF			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
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11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 37,582,346 (1)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			
13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
	32.74% (2)			
14	TYPE OF REPORTING PERSON			
	IN			

(1) Represents 37,582,346 shares of Common Stock issuable upon conversion of Series B-1 Preferred Stock.

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 37,582,346 shares of Common Stock issuable to the Reporting Person upon conversion of 37,582,346 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

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1 NAME OF REPORTING PERSON				
	Casdin Private Growth Equity Fund II, L.P.			
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □		
3	SEC USE ONLY			
4	SOURCE OF FUNDS			
	WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
NUMBE SHAF BENEFIC OWNED B REPORTINC WIT	RES TALLY Y EACH G PERSON 'H 10 SHARED DISPOSITIVE POWER 11,274,704 (1)			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11,274,704 (1)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)			
14	12.74% (2) TYPE OF REPORTING PERSON			
14	4 I YPE OF REPORTING PERSON PN			

(1) Represents 11,274,704 shares of Common Stock issuable upon conversion of Series B-1 Preferred Stock.

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 11,274,704 shares of Common Stock issuable to the Reporting Person upon conversion of 11,274,704 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

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1	NAME OF REPORTING PERSON				
	Casdin Private Growth Equity Fund II GP, LLC				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □			
3	SEC USE ONLY				
4	SOURCE OF FUNDS				
	AF				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)				
6	CITIZENSHIP OR PLACE OF ORGANIZATION				
	Delaware				
NUMBI SHAJ BENEFIC OWNED E REPORTINC WIT	RES CIALLY 11,274,704 (1) BY EACH 9 G PERSON TH 0 10 SHARED DISPOSITIVE POWER 11,274,704 (1)				
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11,274,704 (1)				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
14	12.74% (2) TYPE OF REPORTING PERSON	12.74% (2) TYPE OF REPORTING PERSON			
	00				

(1) Represents 11,274,704 shares of Common Stock issuable upon conversion of Series B-1 Preferred Stock.

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 11,274,704 shares of Common Stock issuable to the Reporting Person upon conversion of 11,274,704 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

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1	NAME OF	F REPORTING PERSON		
	Casdin Par	tners Master Fund L.P.		
2	CHECK T	HE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □	
3	SEC USE ONLY			
4	SOURCE OF FUNDS			
	WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)			
6	CITIZENS	SHIP OR PLACE OF ORGANIZATION		
	Cayman Is	lands		
NUMBE SHAF BENEFIC OWNED B REPORTINC WIT	RES TIALLY Y EACH G PERSON TH	 7 SOLE VOTING POWER 0 8 SHARED VOTING POWER 26,307,642 (1) 9 SOLE DISPOSITIVE POWER 0 10 SHARED DISPOSITIVE POWER 26,307,642 (1) 		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 26,307,642 (1)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)			
	25.42% (2)			
14	TYPE OF REPORTING PERSON			
	PN			

(1) Represents 26,307,642 shares of Common Stock issuable upon conversion of the Series B-1 Preferred Stock.

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 26,307,642 shares of Common Stock issuable to the Reporting Person upon conversion of 26,307,642 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

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1	NAME OF H	REPORTING PERSON	
	Casdin Partn	ners GP, LLC	
2	CHECK TH	E APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) □ (b) □
3	SEC USE O	NLY	
4			
5	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)		
6	CITIZENSH Delaware	IIP OR PLACE OF ORGANIZATION	
SHA BENEFI OWNED I REPORTIN WI	BY EACH 9 G PERSON TH 1 ¹	26,307,642 (1) SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 26,307,642 (1)	
11	26,307,642 (
12	CHECK BO	X IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.42% (2)		
14		EPORTING PERSON	

(1) Represents 26,307,642 shares of Common Stock issuable upon conversion of the Series B-1 Preferred Stock.

(2) Based on (i) 77,198,577 shares of Common Stock that were issued and outstanding, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 8, 2022 and (ii) 26,307,642 shares of Common Stock issuable to the Reporting Person upon conversion of 26,307,642 shares of Series B-1 Preferred Stock beneficially owned by the Reporting Person.

Item 1. Security and Issuer.

The title of the class of equity securities to which this statement relates is common stock, par value \$0.001 per share (the "Common Stock"), of Standard BioTools Inc., a Delaware corporation (the "Company"). The address of the principal executive office of the Company is 2 Tower Place, Suite 2000, South San Francisco, California 94080.

Item 2. Identity and Background.

(a), (f) This Schedule 13D is being filed by Casdin Capital, LLC, a Delaware limited liability company ("Casdin"), Casdin Private Growth Equity Fund II, L.P., a Delaware limited partnership ("Casdin PGEII"), Casdin Private Growth Equity Fund II GP, LLC, a Delaware limited liability company ("Casdin PGEII GP"), Casdin Partners Master Fund L.P., a Cayman Islands exempted limited partnership ("Casdin PMF"), Casdin Partners GP, LLC, a Delaware limited liability company ("Casdin PGEII GP"), and Eli Casdin, a United States citizen (each a "Reporting Person" and collectively, the "Reporting Persons").

(b) The principal business address for each of the Reporting Persons is 1350 Avenue of the Americas, Suite 2600, New York, New York 10019.

(c) Eli Casdin is the managing member of Casdin, Casdin GP and Casdin PGEII GP. The principal business of Casdin is serving as an investment adviser to its clients. The principal business of Casdin GP and Casdin PGEII GP is serving as the general partner to certain private funds. Casdin is the investment manager to Casdin PMF and Casdin PGEII. Casdin GP is the general partner of Casdin PMF, and Casdin PGEII GP is the general partner of Casdin PGEII GP. The principal business of Casdin PGEII. Casdin PGEII is purchasing, holding and selling securities for investment purposes.

(d)-(e) During the last five years, none of the Reporting Persons have been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration.

On January 23, 2022, the Company agreed to issue and sell (a) 78,750 shares of Series B-1 Convertible Preferred Stock ("Series B-1 Preferred Stock") to Casdin PMF in exchange for cash consideration of \$78,750,000 and (b) 33,750 shares of Series B-1 Preferred Stock to Casdin PGEII in exchange for cash consideration of \$33,750,000. Pursuant to the Loan Agreement (defined below), (i) Casdin PMF provided a term loan to the Company in an aggregate original principal amount of \$8,750,000 and (ii) Casdin PGEII provided a term loan to the Company in an aggregate original principal amount of \$3,750,000. Upon the issuance of the Series B-1 Preferred Stock pursuant to the Stock Purchase Agreement (as defined below), (A) the aggregate principal amount of the term loan and all unpaid interest owed to Casdin PMF under the Loan Agreement was automatically converted into 10,696 shares of Series B-1 Preferred Stock and (B) the aggregate principal amount of the term loan and all unpaid interest of Series B-1 Preferred Stock, in each case in accordance with the terms of the Loan Agreement.

Casdin PGEII and Casdin PMF used working capital to fund the term loan and purchase of the Series B-1 Preferred Stock.

Item 4. Purpose of Transaction.

The Reporting Persons have acquired their shares of the Company for investment purposes. The Reporting Persons intend to review their holdings in the Company on a continuing basis and, depending upon the price and availability of the Company's securities, subsequent developments affecting the Company, the business prospects of the Company, general stock market and economic conditions, tax considerations, investment considerations and/or other factors deemed relevant, may consider increasing or decreasing their investments in the Company.

Except as set forth in this Schedule 13D, none of the Reporting Persons have any plan or proposals that relate to or would result in any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. However, each of the Reporting Persons reserves the right to change its plans at any time, as it deems appropriate, in light of its ongoing evaluation of (i) its business and liquidity objectives, (ii) the Company's financial condition, business, operations, competitive position, prospects and/or share price, (iii) industry, economic and/or securities markets conditions, (iv) alternative investment opportunities and (v) other relevant factors.

Without limiting the generality of the preceding sentence, each of the Reporting Persons reserves the right (subject to any applicable restrictions under law or contracts by which it is bound) to at any time or from time to time (A) purchase or otherwise acquire additional shares of Common Stock or other securities of the Company, or instruments convertible into or exercisable for any such securities (collectively, "Company Securities"), in the open market, in privately negotiated transactions or otherwise, (B) sell, transfer or otherwise dispose of Company Securities in public or private transactions, (C) acquire or write options contracts, or enter into derivatives or hedging transactions, relating to Company Securities, (D) pledge Company Securities to secure obligations of the Reporting Persons and/or (E) encourage (including, without limitation, through any designated or nominated member of the Company's board of directors (the "Board of Directors") and/or communications with directors, management and existing or prospective security holders, investors or lenders of the Company, existing or potential strategic partners, industry analysts and other investment and financing professionals) the Company to consider or explore the following: (i) sales or acquisitions of assets or businesses or extraordinary corporate transactions, such as a merger (including transactions in which affiliates of Reporting Persons may be proposed as acquirers or as a source of financing), (ii) changes to the Company's capitalization or dividend policy, (iii) changes to the present Board of Directors, including changes to the number or term of members of the Board of Directors or filling existing vacancies on the Board of Directors, (iv) changes to the Company's by-laws and (v) other changes to the Company's business or structure.

For avoidance of doubt, the Reporting Persons further reserve the right to act in concert with any other shareholders of the Company, or other persons, for a common purpose should it determine to do so, and/or to recommend courses of action to management and the shareholders of the Company.

Item 5. Interest in Securities of the Issuer.

(a) See rows (11) and (13) of the cover pages to this Schedule 13D for the aggregate number of shares of Common Stock and percentages of shares of Common Stock beneficially owned by each of the Reporting Persons.

(b) See rows (7) through (10) of the cover pages to this Schedule 13D for the number of shares of Common Stock as to which each Reporting Person has the sole or shared power to vote or direct the vote and sole or shared power to dispose or to direct the disposition.

(c) None.

(d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock reported herein.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Stock Purchase Agreement

On January 23, 2022, Casdin PMF and Casdin PGEII entered into the Series B-1 Convertible Preferred Stock Purchase Agreement (the "Stock Purchase Agreement") with the Company, pursuant to which the Company agreed to issue and sell (a) 78,750 shares of Series B-1 Preferred Stock to Casdin PMF in exchange for cash consideration of \$78,750,000 and (b) 33,750 shares of Series B-1 Preferred Stock to Casdin PGEII in exchange for cash consideration of \$33,750,000.

The shares issued to Casdin PMF and Casdin PGEII pursuant to the Stock Purchase Agreement are subject to certain transfer restrictions until October 4, 2022. Each of Casdin PMF and Casdin PGEII has agreed to a customary standstill until the later of April 4, 2023 and such time as the shares beneficially owned by Casdin PMF and Casdin PGEII no longer represent 7.5% or more of the total number of shares of the Common Stock issued and outstanding, calculated on an as-converted basis. For as long as Casdin PMF and Casdin PGEII continue to own 25% of the Acquired Shares (as defined in the Stock Purchase Agreement), Casdin PMF and Casdin PGEII are entitled to certain information rights and preemptive rights.

Loan Agreement

On January 23, 2022, the Company entered into a loan agreement (the "Loan Agreement"), dated and effective as of January 23, 2022, pursuant to which (a) Casdin PMF provided a term loan to the Company in an aggregate original principal amount of \$8,750,000 and (b) Casdin PGEII provided a term loan to the Company in an aggregate original principal amount of \$3,750,000.

The loans were fully drawn on January 24, 2022. Upon the issuance of the Series B-1 Preferred Stock pursuant to the Stock Purchase Agreement, the aggregate principal amount of the term loan and all unpaid interest owed to Casdin PMF was automatically converted into 10,696 shares of Series B-1 Preferred Stock and the aggregate principal amount of the term loan and all unpaid interest owed to Casdin PGEII was automatically converted into 4,584 shares of Series B-1 Preferred Stock, in each case in accordance with the terms of the Loan Agreement.

Registration Rights Agreement

On January 23, 2022, the Company entered into a registration rights agreement (the "Registration Rights Agreement") with Casdin PGEII, Casdin PMF and the other stockholders party thereto (together with any other party that may become party to the Registration Rights Agreement, "Holders"), pursuant to which, among other things, and on the terms and subject to certain limitations set forth therein, the Company is obligated to use its reasonable best efforts to prepare and file within 120 days after the date of the Registration Rights Agreement a registration statement registering the sale or distribution of Registrable Securities (as defined in the Registration Rights Agreement), which includes: (i) the Series B-1 Preferred Stock acquired by Casdin PGEII and Casdin PMF pursuant to the Purchase Agreement and the Loan Agreement, (ii) any shares of Common Stock acquired pursuant to the conversion of the Series B-1 Preferred Stock in accordance with the Certificate of Designations (as defined below), and (iii) any other securities issued or issuable with respect to any such shares of Common Stock or Series B-1 Preferred Stock by way of share split, share dividend, distribution, recapitalization, merger, exchange, replacement or similar event or otherwise.

In addition, pursuant to the Registration Rights Agreement, Holders have the right to require the Company, subject to certain limitations set forth therein, to effect a sale of any or all of their Registrable Securities by means of an underwritten offering.

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The Company is not obligated to effect any underwritten offering (a) subject to certain exceptions, unless the dollar amount of the Registrable Securities of Holder(s) demanding such underwritten offering to be included therein is anticipated to result in gross proceeds of at least \$25,000,000, (b) if three underwritten offerings have already been launched at the request of Holder(s) within a 365-day period (or more than two underwritten offerings in the case of a long-form registration statement), (c) if the underwritten offering would be within 60 days following a prior offering in which Holders sold (or had the opportunity to sell) Registrable Securities (or within 90 days in the case of a long-form registration statement) or (d) subject to certain limitations, during the Company's blackout period under its insider trading policy.

The Registration Rights Agreement also provides Holders with customary piggyback registration rights.

These registration rights are subject to certain conditions and limitations, including the right of the underwriters to limit the number of shares to be included in a registration or offering and the Company's right to delay or withdraw a registration statement under certain circumstances.

Certificate of Designations of Series B-1 Preferred Stock

On April 1, 2022, in connection with the consummation of the Stock Purchase Agreement, the Company filed a Certificate of Designations of Series B-1 Convertible Preferred Stock (the "Certificate of Designations") with the Secretary of State of the State of Delaware, designating the Series B-1 Preferred Stock and establishing the powers, designations, preferences, rights and privileges of the shares of Series B-1 Preferred Stock included in such series. The Certificate of Designations became effective on filing.

The Series B-1 Preferred Stock ranks senior to the Common Stock with respect to dividend rights, redemption rights and rights on the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company. The holders of Series B-1 Preferred Stock are entitled to participate in all dividends declared on the Common Stock on an as-converted basis, on the terms and subject to the conditions set forth in the Series B-1 Certificate of Designations.

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

The Series B-1 Preferred Stock is convertible at the option of the holders thereof at any time into 294.1176 shares of Common Stock, subject to adjustment as set forth in the Series B-1 Certificate of Designations (the "Conversion Rate").

At any time after April 4, 2027, if the last reported sale price of the Common Stock is greater than 250% of an amount equal to \$1,000 divided by the Conversion Rate as of such time for at least 20 consecutive trading days immediately preceding the date of the notice of mandatory conversion, the Company may elect to convert all of the outstanding shares of Series B-1 Preferred Stock into shares of Common Stock.

If the Company undergoes certain change of control transactions, each holder of outstanding Series B-1 Preferred Stock has the option, subject to the holder's right to convert all or a portion of the shares of Series B-1 Preferred Stock held by such holder into Common Stock prior to such redemption, to require the Company to purchase all or a portion of such holder's outstanding shares of Series B-1 Preferred Stock that have not been converted into Common Stock at a purchase price per share of Series B-1 Preferred Stock, payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-1 Preferred Stock, and (B) the amount of cash and/or other assets that such holder would have been entitled to receive if such holder had converted such share of Series B-1 Preferred Stock into Common Stock immediately prior to the change of control transaction ("B-1 Change of Control Put").

In the event of a change of control in which the Company is anticipated to merge with another person and will not be the surviving corporation or if the Common Stock will no longer be listed on a U.S. national securities exchange, the Company has a right to redeem, subject to the holder's right to convert into Common Stock prior to such redemption, all of such holder's shares of Series B-1 Preferred Stock, or if a holder exercises the B-1 Change of Control Put in part, the remainder of such holder's shares of Series B-1 Preferred Stock, at a redemption price per share payable in cash, equal to the greater of (A) the Liquidation Preference of such share of Series B-1 Preferred Stock, and (B) the amount of cash and/or other assets that the holder would have received if such holder had converted such share of Series B-1 Preferred Stock into Common Stock immediately prior to the change of control transaction.

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 Common Stock and the holders of any other class or series of equity interest of the Company then entitled to vote with the Common Stock on all matters submitted to a vote of the holders of Common Stock; provided, among other things, that to the extent the Series B-1 Preferred Stock held by the Casdin Parties (as defined the Stock Purchase Agreement) would, in the aggregate, represent voting rights with respect to more than 19.9% of the Common Stock (including the Series B-1 Preferred Stock on an as-converted basis) (the "Voting Threshold"), Casdin 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 Voting Threshold and the Chief Financial Officer or General Counsel of the Company shall exercise the voting rights with respect to such shares of Series B-1 Preferred Stock in excess of the Voting Threshold in a neutral manner. 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.

In addition, for so long as Casdin and its Permitted Transferees (as defined in the Series B-1 Certificate of Designations) continue to beneficially own shares of Series B-1 Preferred Stock that represent at least 7.5% of the outstanding shares of Common Stock, on an as converted basis (the "Casdin Ownership Percentage"), on the terms and subject to the conditions set forth in the Series B-1 Certificate of Designations, the holders of a majority of the outstanding shares of Series B-1 Preferred Stock have the right to nominate for election and to elect one member to the Board of Directors (the "Series B-1 Preferred Director"). Eli Casdin, Casdin's nominee, was appointed as the Series B-1 Preferred Director. Subject to applicable law and Nasdaq listing standards, the Series B-1 Preferred Director shall be offered the opportunity, with respect to each standing committee of the Board of Directors, to sit on such committee. Further, the Series B-1 Preferred Director will hold office until the following year's annual meeting of the Company's stockholders and until his or her successor is duly elected or qualified or until his or her earlier death, incapacity, resignation or removal. For purposes of clarity, the Series B-1 Preferred Director shall not be classified with the remaining members of the Board of Directors.

The 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 Director will continue to have certain consent rights over, among other things: (i) any increase in the number of directors on the Board of Directors beyond seven; (ii) the hiring, promotion, demotion, or termination of the Company's Chief Executive Officer; (iii) entering into or modifying (including by waiver) any transaction, agreement or arrangement with any Related Person (as such term is defined in the Certificates of Designations), subject to certain exceptions; (iv) any voluntary petition under any applicable federal or state bankruptcy or insolvency law effected by the Company; (v) any change in the principal business of the Company or entry by the Company into any material new line of business; and (vi) until April 4, 2025, (A) any acquisition (including by merger, consolidation or acquisition of stock or assets) of any assets, securities or property of any other person or (B) any sale, lease, license, transfer or other disposition of any assets of the Company or any of its subsidiaries, in each case, other than acquisitions or disposition of inventory or equipment in the ordinary course of business consistent with past practice, for consideration in excess of \$50,000,000 in the aggregate in any six-month period.

Item 7. Material to Be Filed as Exhibits.

Exhibit A:	Joint Filing Agreement
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- Exhibit B: Series B-1 Convertible Preferred Stock Purchase Agreement, dated as of January 23, 2022, by and among Standard BioTools Inc. (f/k/a Fluidigm Corporation), Casdin Private Growth Equity Fund II, L.P., and Casdin Partners Master Fund, L.P. (incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K, filed on January 24, 2022) (File No. 001-34180).
- Exhibit C: Series B-1 Loan Agreement, dated as of January 23, 2022, by and among Standard BioTools Inc. (f/k/a Fluidigm Corporation), Casdin Partners Master Fund, L.P., and Casdin Private Growth Equity Fund II, L.P. (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed with the SEC on January 24, 2022) (File No. 001-34180).
- Exhibit D: Registration Rights Agreement, dated as of January 23, 2022, by and among Standard BioTools Inc. (f/k/a Fluidigm Corporation), Casdin Private Growth Equity Fund II, L.P., Casdin Partners Master Fund, L.P., Viking Global Opportunities Illiquid Investments Sub-Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP (incorporated by reference to Exhibit 10.5 of the Company's Current Report on Form 8-K, filed on January 24, 2022) (File No. 001-34180).
- Exhibit E: Letter Agreement, dated March 25, 2022, by and among Standard BioTools Inc. (f/k/a Fluidigm Corporation), Casdin Partners Master Fund, L.P., Casdin Private Growth Equity Fund II, L.P., Viking Global Opportunities Illiquid Investments Sub-Master LP, and Viking Global Opportunities Drawdown (Aggregator) LP (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on March 28, 2022) (File No. 001-34180).
- Exhibit F: Certificate of Designations of Rights, Preferences and Privileges of Series B-1 Convertible Preferred Stock (incorporated by reference to Exhibit 3.6 to the Company's Current Report on Form 8-K, filed on April 5, 2022) (File No. 001-34180).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: April 8, 2022

Casdin Capital, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Private Growth Equity Fund II, L.P.

- By: Casdin Private Growth Equity Fund II GP, LLC, its general partner
- By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Private Growth Equity Fund II GP, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Partners Master Fund L.P.

- By: Casdin Partners GP, LLC, its general partner
- By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Partners GP, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

/s/ Eli Casdin

Eli Casdin

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, each of the undersigned acknowledges and agrees that the foregoing statement on this Schedule 13D is filed on behalf of the undersigned and that all subsequent amendments to this statement on Schedule 13D shall be filed on behalf of the undersigned without the necessity of filing additional joint acquisition statements. Each of the undersigned acknowledges that it shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: April 8, 2022

Casdin Capital, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Private Growth Equity Fund II, L.P.

- By: Casdin Private Growth Equity Fund II GP, LLC, its general partner
- By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Private Growth Equity Fund II GP, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Partners Master Fund L.P.

- By: Casdin Partners GP, LLC, its general partner
- By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

Casdin Partners GP, LLC

By: /s/ Eli Casdin Name: Eli Casdin Title: Managing Member

/s/ Eli Casdin

Eli Casdin