

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

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

Solid Biosciences Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

90-0943402
(I.R.S. Employer
Identification Number)

**500 Rutherford Avenue
Charlestown, MA 02129
(617) 337-4680**
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

**Alexander Cumbo
Chief Executive Officer
Solid Biosciences Inc.
500 Rutherford Avenue
Charlestown, MA 02129
(617) 337-4680**
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copy to:

**Caroline Dotolo
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, MA 02109
Telephone: (617) 526-6000
Telecopy: (617) 526-5000**

**Ty Howton
Chief Administrative Officer
Solid Biosciences Inc.
500 Rutherford Avenue
Charlestown, MA 02129**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement is declared 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 and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☒

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

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

Subject to completion, dated January 26, 2023

PROSPECTUS



11,992,548 SHARES

COMMON STOCK

This prospectus relates to the resale from time to time of up to 11,992,548 shares of common stock of Solid Biosciences Inc. by the selling stockholders listed on page 8, including their transferees, pledgees or donees or their respective successors, issued to the selling stockholders in connection with our acquisition of AavantiBio, Inc. and our concurrent private placement in December 2022. We are registering these shares on behalf of the selling stockholders, to be offered and sold by them from time to time. We will not receive any proceeds from the sale of the shares offered by this prospectus.

We have agreed to bear all of the expenses incurred in connection with the registration of these shares. The selling stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers or dealer managers and similar expenses, if any, incurred for the sale of shares of our common stock.

The selling stockholders identified in this prospectus, or their respective transferees, pledgees, donees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the methods of sale that may be used by the selling stockholders, see the section entitled "Plan of Distribution" on page 12. For a list of the selling stockholders, see the section entitled "Selling Stockholders" on page 8.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Our common stock is traded on the Nasdaq Global Select Market under the symbol "SLDB." On January 25, 2023, the closing sale price of our common stock on the Nasdaq Global Select Market was \$7.34 per share. You are urged to obtain current market quotations for our common stock.

We are an "emerging growth company" and a "smaller reporting company" under applicable Securities and Exchange Commission rules and, as such, have elected to comply with certain reduced public company disclosure requirements for this prospectus and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company" for additional information.

Our business and investing in our common stock involve significant risk. These risks are described in the section titled "[Risk Factors](#)" beginning on page 4 of this prospectus.

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 _____, 2023.

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You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus may only be used where it is legal to offer and sell shares of our common stock. If it is against the law in any jurisdiction to make an offer to sell these shares, or to solicit an offer from someone to buy these shares, then this prospectus does not apply to any person in that jurisdiction, and no offer or solicitation is made by this prospectus to any such person. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since such date. Information contained on our website is not a part of this prospectus.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and in the documents we incorporate by reference. This summary does not contain all of the information you should consider before making an investment decision. You should read this entire prospectus carefully, especially the risks of investing in our common stock discussed under “Risk Factors” beginning on page 4 of this prospectus, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus.

Solid Biosciences Inc.

We are a life science company focused on advancing a portfolio of neuromuscular and cardiac programs, including SGT-003, a differentiated gene transfer candidate, for the treatment of Duchenne Muscular Dystrophy; AVB-202, a gene transfer candidate for the treatment of Friedrich’s Ataxia; AVB-401, a gene transfer candidate for the treatment of BAG3 mediated dilated cardiomyopathy; and additional assets for the treatment of undisclosed cardiac diseases. We aim to be the center of excellence, bringing together those with expertise in science, technology, disease management and care. Patient-focused and founded by those directly impacted by Duchenne, our mandate is to improve the daily lives of patients living with these devastating diseases.

Corporate Information

Our principal executive offices are located at 500 Rutherford Avenue, Charlestown, MA 02129. Our main telephone number is (617) 337-4680. Our website address is www.solidbio.com. The information contained on, or that can be accessed through, our website is not incorporated by reference and is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Unless the context otherwise indicates, references in this prospectus to “we,” “our” and “us” refer, collectively, to Solid Biosciences Inc. and our consolidated subsidiaries.

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

As a company with less than \$1.235 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we may remain an emerging growth company until December 31, 2023 or until such earlier time as we have more than \$1.235 billion in annual revenue, the market value of our stock held by non-affiliates is more than \$700 million as of our most recently completed second fiscal quarter or we issue more than \$1 billion of non-convertible debt over a three-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to public companies that are not emerging growth companies.

We are also a “smaller reporting company,” meaning that the market value of our stock held by non-affiliates is less than \$700 million as of our most recently completed second fiscal quarter and our annual revenue was less than \$100 million during our most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700 million as of our most recently completed second fiscal quarter. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies.

THE OFFERING	
Common stock offered by selling stockholders	11,992,548 shares.
Use of proceeds	We will not receive any proceeds from the sale of shares in this offering.
Risk factors	You should read the “Risk Factors” section included or incorporated by reference in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Nasdaq Global Select Market symbol	“SLDB”

DESCRIPTION OF PRIVATE PLACEMENT WITH THE SELLING STOCKHOLDERS

On December 2, 2022, we completed our acquisition of AavantiBio, Inc., or AavantiBio. The acquisition was effected in accordance with the terms of an agreement and plan of merger, dated as of September 29, 2022, by and among us, Greenland Merger Sub LLC, a Delaware limited liability company and our wholly owned subsidiary, or Transitory Subsidiary, AavantiBio and, solely in his capacity as equityholder representative, Doug Swirsky, providing for the acquisition of AavantiBio by us through the merger of Transitory Subsidiary into AavantiBio, with AavantiBio surviving as our wholly owned subsidiary. At the closing of the acquisition, we issued an aggregate of (i) \$1,000 and (ii) 1,354,258 shares of our common stock to AavantiBio equityholders.

On December 2, 2022, immediately following the closing of the acquisition, we issued and sold an aggregate of 10,638,290 shares of our common stock at a price of \$7.05 per share in a private placement to accredited investors pursuant to a securities purchase agreement, dated as of September 29, 2022, with certain of the selling stockholders.

For a detailed description of the transactions contemplated by the merger agreement and the securities purchase agreement with the selling stockholders and the securities issued pursuant thereto, see the section entitled “Selling Stockholders” in this prospectus. We filed the registration statement on Form S-3, of which this prospectus forms a part, to (i) fulfill our contractual obligations under the registration rights agreement entered into concurrently with the securities purchase agreement with the selling stockholders participating in the private placement and which each selling stockholder who received stock consideration in the acquisition elected to become a party to on or prior to the closing of the acquisition and (ii) to provide for the resale by the selling stockholders of the shares of common stock offered hereby.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks and uncertainties described under the section captioned “Risk Factors” contained in our most recent Annual Report on Form 10-K, our most recent Quarterly Report on Form 10-Q and other filings we make with the Securities and Exchange Commission, or the SEC, from time to time, which are incorporated by reference herein in their entirety, together with other information in this prospectus and in the documents incorporated by reference in this prospectus. The risks described in our most recent Annual Report on Form 10-K, our most recent Quarterly Report on Form 10-Q and the other filings we make with the SEC incorporated by reference herein are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. If any of the risks described in our most recent Annual Report on Form 10-K, our most recent Quarterly Report on Form 10-Q and the other filings incorporated by reference herein occurs, our business, financial condition, results of operations and future growth prospects could be harmed. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

SELECTED FINANCIAL DATA

Reverse Stock Split

On October 27, 2022, we effected a 1-for-15 reverse stock split of our common stock. The number of authorized shares of common stock was also proportionately adjusted and such reduced authorized number of shares of common stock was subsequently multiplied by three, such that following the reverse stock split we had 60,000,000 shares of common stock authorized. The par value per share of common stock remained unchanged. Except where the context otherwise requires, share numbers in this prospectus reflect the 1-for-15 reverse stock split of our common stock.

The following selected financial data has been derived from our consolidated financial statements included in our Quarterly Report on Form 10-Q filed with the SEC on April 27, 2022. Our historical results are not indicative of the results that may be expected in the future and results of interim periods are not indicative of the results for the entire year.

AS REPORTED (in thousands, except per share amounts):

	For the Three Months Ended March 31,	
	2022	2021
	(unaudited)	
Net loss	\$ (25,328)	\$ (16,900)
Net loss per share attributable to common stockholders, basic and diluted	\$ (0.22)	\$ (0.19)
Weighted-average common stock outstanding, basic and diluted	112,607,322	89,267,194
Common stock outstanding at period end	112,781,291	110,288,567

AS ADJUSTED FOR 1-FOR-15 REVERSE STOCK SPLIT (unaudited, in thousands, except per share amounts):

	For the Three Months Ended March 31,	
	2022	2021
	(unaudited)	
Net loss	\$ (25,328)	\$ (16,900)
Net loss per share attributable to common stockholders, basic and diluted	\$ (3.37)	\$ (2.84)
Weighted-average common stock outstanding, basic and diluted	7,507,154	5,951,146
Common stock outstanding at period end	7,518,753	7,352,571

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus and the information incorporated by reference in this prospectus include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other than statements of historical fact, contained in or incorporated by reference in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “predict,” “project,” “target,” “potential,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. You are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are referenced in the section of any accompanying prospectus supplement entitled “Risk Factors.” You should also carefully review the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments that we may make or enter into.

You should read this prospectus and the information incorporated by reference herein completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

A statement contained in a document incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any prospectus supplement or in any other subsequently filed document which is also incorporated in this prospectus modifies or replaces such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

This prospectus incorporates by reference statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus is a part to permit holders of the shares of our common stock described in the section entitled “Selling Stockholders” to resell such shares. We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of shares by the selling stockholders.

The selling stockholders will pay any discounts, commissions, fees of underwriters, selling brokers or dealer managers and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, printing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

On September 29, 2022, we entered into an agreement and plan of merger, dated as of September 29, 2022, or the Merger Agreement, by and among us, Greenland Merger Sub LLC, our wholly owned subsidiary, or Transitory Subsidiary, AavantiBio, Inc., or AavantiBio, and, solely in his capacity as equityholder representative, Doug Swirsky, providing for the acquisition of AavantiBio by us through the merger of Transitory Subsidiary into AavantiBio, with AavantiBio surviving as our wholly owned subsidiary. On December 2, 2022, we completed our acquisition of AavantiBio, or the Acquisition, in accordance with the terms of the Merger Agreement. At the closing of the Acquisition, we issued an aggregate of (i) \$1,000 and (ii) 1,354,258 shares of our common stock to AavantiBio equityholders.

On September 29, 2022, we also entered into a securities purchase agreement, or the Purchase Agreement, with certain of the selling stockholders, or the PIPE investors, pursuant to which we issued and sold an aggregate of 10,638,290 shares of our common stock at a price of \$7.05 per share in a private placement to accredited investors, which we refer to as the Private Placement. The closing of the issuance and sale of these securities was consummated on December 2, 2022.

In connection with the Private Placement, we entered into a registration rights agreement with certain of the selling stockholders, dated as of September 29, 2022, or the Registration Rights Agreement, pursuant to which we agreed to file a registration statement with the SEC covering the resale of the shares of common stock sold in the Private Placement. We agreed to file such registration statement within 60 days following the closing of the Private Placement. The Registration Rights Agreement includes customary indemnification rights in connection with the registration statement. On or prior to the closing of the Acquisition, the AavantiBio equityholders who received stock consideration in the Acquisition could elect to become a party to the Registration Rights Agreement. We refer to both the PIPE investors and the AavantiBio equityholders as selling stockholders in this prospectus. The registration statement of which this prospectus is a part has been filed in accordance with the Registration Rights Agreement.

The foregoing summary descriptions of the Merger Agreement, the Purchase Agreement and the Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of such documents, which were filed as exhibits to our Current Report on Form 8-K filed on September 30, 2022, and are incorporated by reference herein.

The table below sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholders as of January 3, 2023. The information in the table below with respect to the selling stockholders has been obtained from the selling stockholders. When we refer to the “selling stockholders” in this prospectus, we mean the selling stockholders listed in the table below as offering shares, as well as their respective pledgees, donees, transferees or other successors-in-interest. The selling stockholders may sell all, some or none of the shares of common stock subject to this prospectus. See “Plan of Distribution.”

The number of shares of common stock beneficially owned prior to the offering for each selling stockholder includes (i) all shares of common stock held by such selling stockholder as of January 3, 2023, (ii) all shares as to which such selling stockholder has the right to acquire within 60 days of January 3, 2023, (iii) all shares of common stock acquired by such selling stockholder in the Acquisition and (iv) all shares of common stock purchased by such selling stockholder in the Private Placement. The percentages of shares owned before and after the offering are based on 19,556,732 shares of common stock outstanding as of January 3, 2023, which includes the outstanding shares of common stock offered by this prospectus. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock issuable upon the exercise of options held by that selling stockholder that are exercisable within 60 days of January 3, 2023. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares. Unless otherwise indicated below, to our knowledge, each selling stockholder

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named in the table has sole voting and investment power with respect to the shares of common stock beneficially owned by it, except to the extent authority is shared by spouses under applicable law. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for any selling stockholder named below.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering		Number of Shares of Common Stock Being Offered	Shares of Common Stock to be Beneficially Owned After Offering (1)	
	Number	Percentage		Number	Percentage
Perceptive Life Sciences Master Fund, Ltd. (2)	3,501,265	17.9%	2,601,763	899,502	4.6%
Entities associated with RA Capital Management, L.P. (3)	3,431,618	17.5%	2,601,762	829,856	4.2%
Entities affiliated with Bain Capital Life Sciences Investors, LLC (4)	2,601,762	13.3%	2,601,762	—	—
Camber Capital Master Fund, L.P. (5)	1,418,439	7.3%	1,418,439	—	—
Laurion Capital Master Fund Ltd. (6)	928,169	4.8%	851,063	77,106	*
Invus Public Equities, L.P. (7)	909,219	4.7%	709,219	200,000	1.0%
Alyeska Master Fund, L.P. (8)	546,604	2.8%	425,531	121,073	*
CaaS Capital Master Fund LP (9)	283,687	1.5%	283,687	—	—
Pura Vida Investments, LLC and certain of its affiliates (10)	283,687	1.5%	283,687	—	—
Matthew B. Arnold (11)	451,228	2.3%	177,304	273,924	1.4%
Muscular Dystrophy Association, Inc. (12)	14,166	*	14,166	—	—
Ian F. Smith (13)	104,162	*	13,172	90,990	*
Comitato RUDI Onlus (14)	7,115	*	7,115	—	—
University of Florida Research Foundation, Inc. (15)	3,293	*	3,293	—	—
Alexander Cumbo (16)	585	*	585	—	—

* Less than one percent.

- (1) We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders might not sell any or might sell all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders.
- (2) Consists of (a) 894,170 shares held by Perceptive Life Sciences Master Fund, Ltd., (b) 5,332 shares of common stock underlying options held by Adam Stone, a member of our board of directors, that are exercisable as of January 3, 2023 or will become exercisable within 60 days after such date, (c) 365,536 shares issued to Perceptive Life Sciences Master Fund, Ltd. and 73,107 shares issued to Perceptive Xontogeny Venture Fund, LP (pre-Acquisition stockholders of AavantiBio) in connection with the Acquisition and (d) 2,163,120 shares issued to Perceptive Life Sciences Master Fund, Ltd. in the Private Placement. Perceptive Advisors LLC is the investment manager to Perceptive Life Sciences Master Fund, Ltd. and may be deemed to beneficially own the securities directly held by Perceptive Life Sciences Master Fund, Ltd. Joseph Edelman is the managing member of Perceptive Advisors LLC. Perceptive Advisors LLC and Mr. Edelman may be deemed to beneficially own the shares held by Perceptive Life Sciences Master Fund, Ltd. The address of Perceptive is 51 Astor Place, 10th Floor, New York, NY 10003. Perceptive reports that it holds shared voting power and shared dispositive power with respect to all shares held by it.
- (3) Consists of (a) 824,524 shares held by RA Capital Healthcare Fund, L.P. ("RACHF"), (b) 5,332 shares of common stock underlying options held by Rajeev Shah, a member of our board of directors, for the benefit of RA Capital Management, L.P. ("RACM") that are exercisable as of January 3, 2023 or will become exercisable within 60 days after such date, (c) 438,642 shares issued to RACHF, RA Capital Nexus Fund,

L.P. (“RACNF”) and a separately managed account (pre-Acquisition stockholders of AavantiBio) in connection with the Acquisition and (d) 2,163,120 shares issued to RACHF in the Private Placement. RA Capital Healthcare Fund GP, LLC is the general partner of RACHF and RA Capital Nexus Fund GP, LLC is the general partner of RACNF. RACM is the investment manager for RACHF, RACNF and the separately managed account. The general partner of RACM is RA Capital Management GP, LLC (“RACM GP”), of which Dr. Peter Kolchinsky and Mr. Rajeev Shah are the managing members. Rajeev Shah is a member of Solid’s Board of Directors. RACM, RACM GP, Dr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the shares held of record by RACHF, RACNF and the separately managed account. RACM, RACM GP, Dr. Kolchinsky and Mr. Shah expressly disclaim beneficial ownership over all shares held by RACHF, RACNF, the separately managed account and Mr. Shah, except to the extent of their pecuniary interest therein. The address for each of RACHF, RACNF and RACM is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

- (4) Consists of (a) an aggregate of 2,301,955 shares held by BCLS II Investco, LP (“BCLS II Investco”), which consists of 138,835 shares issued in connection with the Acquisition and 2,163,120 shares issued in the Private Placement, (b) 267,257 shares held by Bain Capital Life Sciences Fund II, L.P. (“BCLS Fund II”), which were issued in connection with the Acquisition, and (c) 32,550 shares held by BCIP Life Sciences Associates, LP (“BCIPLS”) and, together with BCLS II Investco and BCLS Fund II, the “Bain Capital Life Sciences Entities”), which were issued in connection with the Acquisition. Bain Capital Life Sciences Investors, LLC (i) is the manager of Bain Capital Life Sciences Investors II, LLC, which is the general partner of BCLS Fund II, which is the managing member of BCLS II Investco (GP), LLC, which is the general partner of BCLS II Investco, and (ii) governs the investment strategy and decision-making process with respect to investments held by BCIPLS. As a result, Bain Capital Life Sciences Investors, LLC may be deemed to share voting and dispositive power with respect to the shares held by the Bain Capital Life Sciences Entities. The address of the Bain Capital Life Sciences Entities is c/o Bain Capital Life Sciences, LP, 200 Clarendon Street, Boston, Massachusetts 02116.
- (5) Consists of shares issued to Camber Capital Master Fund, L.P. in the Private Placement. Camber Capital Management, L.P. (“Camber Advisor”) serves as the investment advisor to Camber Capital Master Fund, L.P. Stephen DuBois serves as the Managing Member of Camber Advisor. The address of Camber Capital Master Fund, L.P. is 101 Huntington Ave, Suite 2101, Boston, Massachusetts 02199.
- (6) Consists of shares issued to Laurion Capital Master Fund Ltd. in the Private Placement. Laurion Capital Management LP, the investment manager of Laurion Capital Master Fund Ltd., has voting and investment power over the securities held by Laurion Capital Master Fund Ltd. Messrs. Benjamin A. Smith and Sheehan Maduraperuma are the managing members of Laurion Capital GP LLC, which is the general partner of Laurion Capital Management LP. Each of Laurion Capital Master Fund Ltd., Laurion Capital GP LLC, Benjamin A. Smith and Sheehan Maduraperuma disclaims beneficial ownership over these securities. The address Laurion Capital Master Fund Ltd. is c/o Laurion Capital Management LP, 360 Madison Avenue, Suite 2000, New York, NY 10017.
- (7) Consists of (a) 709,219 shares issued to Invus Public Equities, L.P. (“Invus PE”) in the Private Placement and (b) 200,000 shares held by Invus PE. Invus Public Equities Advisors, LLC (“Invus PE Advisors”) controls Invus PE, as its general partner and accordingly, may be deemed to beneficially own the shares held by Invus PE. The Geneva branch of Artal International S.C.A. (“Artal International”) controls Invus PE Advisors, as its managing member and accordingly, may be deemed to beneficially own the shares held by Invus PE. Artal International Management S.A. (“Artal International Management”), as the managing partner of Artal International, controls Artal International and accordingly, may be deemed to beneficially own the shares that Artal International may be deemed to beneficially own. Artal Group S.A. (“Artal Group”), as the sole stockholder of Artal International Management, controls Artal International Management and accordingly, may be deemed to beneficially own the shares that Artal International Management may be deemed to beneficially own. Westend S.A. (“Westend”), as the parent company of Artal Group, controls Artal Group and accordingly, may be deemed to beneficially own the shares that Artal Group may be deemed to beneficially own. Stichting Administratiekantoor Westend (the “Stichting”), as majority shareholder of Westend, controls Westend and accordingly, may be deemed to beneficially own the shares that Westend may be deemed to beneficially own. Mr. Amaury Wittouck, as the sole member of the

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board of the Stichting, controls the Stichting and accordingly, may be deemed to beneficially own the Shares that the Stichting may be deemed to beneficially own. The address for Invus PE and Invus PE Advisors is 750 Lexington Avenue, 30th Floor, New York, NY 10022. The address for Artal International, Artal International Management, Artal Group, Westend and Mr. Wittouck is Valley Park, 44, Rue de la Vallée, L-2661, Luxembourg. The address for the Stichting is Claude Debussylaan, 46, 1082 MD Amsterdam, The Netherlands.

- (8) Consists of shares issued to Alyeska Master Fund, L.P. (“Alyeska”) in the Private Placement. Alyeska Investment Group, L.P., the investment manager of Alyeska, has voting and investment control of the shares held by Aleyska. Anand Parekh is the Chief Executive Officer of Alyeska Investment Group, L.P. and may be deemed to be the beneficial owner of such shares. Mr. Parekh, however, disclaims any beneficial ownership of the shares held by Aleyska. The registered address of Alyeska is at c/o Maples Corporate Services Limited, P.O. Box 309, Ugland House, South Church Street George Town, Grand Cayman, KY1-1104, Cayman Islands. Alyeska Investment Group, L.P. is located at 77 W. Wacker, Suite 700, Chicago IL 60601.
- (9) Consists of shares issued to CaaS Capital Master Fund LP (“CCMF”) in the Private Placement. CCMF is managed by CaaS Capital Management LP (“CaaS Management”). Siufu Frank Fu has voting and investment control over CaaS Management and, accordingly, may be deemed to have beneficial ownership of the shares of our Common Stock held by CCMF. The address of CCMF is 800 3rd Ave., 26th Floor, New York, NY 10022.
- (10) Consists of (a) 192,719 shares issued to Pura Vida Master Fund, Ltd. (the “PV Master Fund”) in the Private Placement and (b) 90,968 shares issued to Highmark Limited, in respect of its Segregated Account Highmark Long/Short Equity 20 (“Highmark” and, together with the PV Master Fund, the “PV Funds”), in the Private Placement. Pura Vida Investments, LLC (“PVI”) serves as the investment manager to the PV Funds. Efrem Kamen serves as the Managing Member of PVI. By virtue of these relationships, PVI and Efrem Kamen may be deemed to have shared voting and dispositive power with respect to the securities held by the PV Funds. The information provided in this footnote should not be deemed an admission that PVI and/or Efrem Kamen are beneficial owners of the securities described herein for purposes of Sections 13 and 16 of the Exchange Act or for any other purpose. Each of PVI and Efrem Kamen disclaims beneficial ownership of the securities herein except to the extent of each of PVI’s and Efrem Kamen’s pecuniary interest therein, if any. The address for each of the PV Funds is c/o Pura Vida Investments, LLC, 512 West 22nd Street, 7th Floor, New York, New York 10011.
- (11) Consists of (a) 273,924 shares held by Mr. Arnold and (b) 177,304 shares issued to Mr. Arnold in the Private Placement.
- (12) Consists of shares issued to the Muscular Dystrophy Association, Inc. (“MDA”) (a pre-Acquisition stockholder of AavantiBio) in connection with the Acquisition. The address for MDA is 161 N. Clark, Suite 3550, Chicago, Illinois 60601.
- (13) Consists of (a) 24,498 shares owned by Mr. Smith, (b) 13,172 shares issued to Mr. Smith (a pre-Acquisition stockholder of AavantiBio) in connection with the closing of the Acquisition, (c) 60,009 shares of common stock underlying options held by Mr. Smith that are exercisable as of January 3, 2023 or will become exercisable within 60 days after such date and (d) 6,483 shares issuable upon vesting of restricted stock units within 60 days after January 3, 2023.
- (14) Consists of shares issued to Comitato RUDI Onlus (a pre-Acquisition stockholder of AavantiBio) in connection with the Acquisition. The address of Comitato RUDI Onlus is Via G. Giacosa 21bis, 10125 Torino, Italy.
- (15) Consists of shares issued to University of Florida Research Foundation, Inc. (“UF”) (a pre-Acquisition stockholder of AavantiBio) in connection with the closing of the Acquisition. The address of UF is Grinter Hall, PO Box 115500, Gainesville, FL 32611-5500.
- (16) Consists of shares issued to Alexander Cumbo (a pre-Acquisition stockholder of AavantiBio) in connection with the closing of the Acquisition.

Ian F. Smith, who is a member of our board of directors, and Matthew B. Arnold, who is a former member of our board of directors until June 16, 2021, are selling stockholders. Alexander Cumbo, our President, Chief Executive Officer and a member of our board of directors, is also a selling stockholder.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares 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 stockholders may use any one or more of the following methods when disposing of shares or interests therein:

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

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of 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.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares 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 stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders

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reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part to become effective and to remain continuously effective until the earlier of (1) the date on which all of the shares covered by this prospectus have been sold or (2) the date on which all of the shares cease to be registrable securities (as defined in the registration rights agreement entered into in connection with the Private Placement).

LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP.

EXPERTS

The financial statements of Solid Biosciences Inc. incorporated in this Prospectus by reference to Solid Biosciences Inc.'s Definitive Proxy Statement on Schedule 14A filed with the SEC on November 7, 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 audited financial statements of AavantiBio, Inc. appearing in Solid Biosciences, Inc.'s Current Report on Form 8-K dated December 5, 2022 for the two years ended December 31, 2021 have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon, included therein, and incorporated herein by reference. Such 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 <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at www.solidbio.com. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and our securities. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC's website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-38360) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) between the date of the initial registration statement and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed:

- (1) Our Annual Report on [Form 10-K](#) for the year ended December 31, 2021, filed with the SEC on March 14, 2022;

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- (2) The audited financial statements of Solid Biosciences Inc. as of December 31, 2021 and 2020 and for each of the three years in the period ended December 31, 2021 included in Solid Biosciences Inc.'s [Definitive Proxy Statement on Schedule 14A](#) filed on November 7, 2022;
- (3) The unaudited condensed consolidated financial statements of Solid Biosciences Inc. as of June 30, 2022 and December 31, 2021 and for the three and six months ended June 30, 2022 and June 30, 2021 included in Solid Biosciences Inc.'s [Definitive Proxy Statement on Schedule 14A](#) filed on November 7, 2022;
- (4) Our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2022](#), [June 30, 2022](#) and [September 30, 2022](#), filed with the SEC on April 27, 2022, August 11, 2022 and November 10, 2022, respectively;
- (5) Our Current Reports on Form 8-K filed with the SEC on [January 10, 2022](#), [April 4, 2022](#), [April 27, 2022](#), [June 6, 2022](#), [June 9, 2022](#), [September 30, 2022](#), [October 27, 2022](#), [December 1, 2022](#), [December 5, 2022](#) and [January 9, 2023](#); and
- (6) The description of our common stock contained in our Registration Statement on [Form 8-A](#) filed with the SEC on January 22, 2018, including any amendments or reports filed for the purpose of updating such description.

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

Solid Biosciences Inc.
Attn: Investor Relations
500 Rutherford Avenue
Charlestown, MA 02129
(617) 337-4680



11,992,548 SHARES

COMMON STOCK

PROSPECTUS

, 2023

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by Solid Biosciences Inc. (except any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 9,529
Legal fees and expenses	\$ 50,000
Accounting fees and expenses	\$ 20,000
Miscellaneous fees and expenses	\$ 5,000
Total expenses	<u>\$84,529</u>

Item 15. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, provides, generally, that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (except actions by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A corporation may similarly indemnify such person for expenses actually and reasonably incurred by such person in connection with the defense or settlement of any action or suit by or in the right of the corporation, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in the case of claims, issues and matters as to which such person shall have been adjudged liable to the corporation, provided that a court shall have determined, upon application, that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

Section 102(b)(7) of the DGCL provides, generally, that our certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its shareholders for monetary damages for breach of fiduciary duty as a director, provided that such provision may not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision may eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision became effective.

Our charter and bylaws provide for the indemnification of our directors and officers to the fullest extent permitted under the DGCL. As permitted by the DGCL, we have also entered into and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. Under the terms of our indemnification agreements, we are required to indemnify each of our directors and officers, to the fullest extent permitted by the laws of the State of Delaware, if the basis of the indemnitee's involvement was by reason of the fact that the indemnitee is or was a director, or officer, of the company or any of its subsidiaries or was serving at our request in an official capacity for another entity. We

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must indemnify our officers and directors against (1) attorneys' fees and (2) all other costs of any type or nature whatsoever, including any and all expenses and obligations paid or incurred in connection with investigating, defending, being a witness in, participating in (including on appeal) or preparing to defend, be a witness or participate in any completed, actual, pending or threatened action, suit, claim or proceeding, whether civil, criminal, administrative or investigative, or establishing or enforcing a right to indemnification under the indemnification agreement. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

In addition, we have purchased a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment in some circumstances.

Item 16. Exhibits

Exhibit Number	Description
2.1	<u>Agreement and Plan of Merger, dated March 29, 2017, by and between Solid Biosciences, LLC and Solid GT, LLC (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement on Form S-1 filed on December 29, 2017)</u>
2.2	<u>Plan of Conversion, dated January 25, 2018 (incorporated by reference to Exhibit 2.2 to the Registrant's Annual Report on Form 10-K filed on March 29, 2018)</u>
2.3	<u>Agreement and Plan of Merger, dated January 25, 2018, by and among the Registrant, Bain Capital Life Sciences Fund, L.P., BCIP Life Sciences Associates, LP, BCLS Solid Bio, Inc., Foresite Capital Fund III, L.P. and FC Fund III Solid Holdings, Inc. (incorporated by reference to Exhibit 2.3 to the Registrant's Annual Report on Form 10-K filed on March 29, 2018)</u>
2.4	<u>Agreement and Plan of Merger, dated as of September 29, 2022, by and among the Registrant, Greenland Merger Sub LLC, AavantiBio, Inc. and, solely in his capacity as the Equityholder Representative, Doug Swirsky (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on September 30, 2022)</u>
4.1	<u>Certificate of Incorporation of the Registrant, as amended (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 filed on December 2, 2022)</u>
4.2	<u>Bylaws of the Registrant (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-8 filed on January 29, 2018)</u>
4.3	<u>Securities Purchase Agreement, dated September 29, 2022, by and among the Registrant and the persons party thereto (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the SEC on September 30, 2022)</u>
4.4	<u>Registration Rights Agreement, dated September 29, 2022, by and among the Registrant and the persons party thereto (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the SEC on September 30, 2022)</u>
4.5	<u>Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 filed on December 29, 2017)</u>
5.1*	<u>Opinion of Wilmer Cutler Pickering Hale and Dorr LLP</u>
23.1*	<u>Consent of PricewaterhouseCoopers LLP</u>
23.2*	<u>Consent of Ernst & Young LLP</u>
23.3*	<u>Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1 filed herewith)</u>
24.1*	<u>Power of Attorney (included on the signature page of this registration statement)</u>
107*	<u>Filing Fee Table</u>

* Filed herewith

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

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

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended, or the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this 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 this 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, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

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

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purposes of determining any liability under the Securities Act, each 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 the 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.

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 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 this 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.

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

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Charlestown, Commonwealth of Massachusetts, on January 26, 2023.

SOLID BIOSCIENCES INC.

By: /s/ Alexander Cumbo

Name: Alexander Cumbo

Title: Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Solid Biosciences Inc. hereby severally constitute and appoint Alexander Cumbo, Kevin Tan and Ty Howton, and each of them singly, our true and lawful attorneys with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-3 filed herewith and any and all amendments (including post-effective amendments) to said Registration Statement, and any registration statement filed pursuant to Rule 462 under the Securities Act of 1933, as amended, in connection with said Registration Statement, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name and on our behalf in our capacities as officers and directors to enable Solid Biosciences Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue hereof.

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

Signature	Title	Date
<u>/s/ Alexander Cumbo</u> Alexander Cumbo	President, Chief Executive Officer and Director (Principal Executive Officer)	January 26, 2023
<u>/s/ Kevin Tan</u> Kevin Tan	Chief Financial Officer (Principal Financial and Accounting Officer)	January 26, 2023
<u>/s/ Ian F. Smith</u> Ian F. Smith	Chairman of the Board of Directors	January 26, 2023
<u>/s/ Martin Freed</u> Martin Freed, M.D.	Director	January 26, 2023
<u>/s/ Ilan Ganot</u> Ilan Ganot	Director	January 26, 2023
<u>/s/ Robert Huffines</u> Robert Huffines	Director	January 26, 2023

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<u>/s/ Clare Kahn</u> Clare Kahn, Ph.D.	Director	January 26, 2023
<u>/s/ Georgia Keresty</u> Georgia Keresty, Ph.D.	Director	January 26, 2023
<u>/s/ Adam Koppel</u> Adam Koppel, M.D., Ph.D.	Director	January 26, 2023
<u>/s/ Sukumar Nagendran</u> Sukumar Nagendran, M.D.	Director	January 26, 2023
<u>/s/ Rajeev Shah</u> Rajeev Shah	Director	January 26, 2023
<u>/s/ Adam Stone</u> Adam Stone	Director	January 26, 2023
<u>/s/ Lynne Sullivan</u> Lynne Sullivan	Director	January 26, 2023

WILMERHALE

+1 617 526 6000 (t)

+1 617 526 5000 (f)

wilmerhale.com

January 26, 2023

Solid Biosciences Inc.
500 Rutherford Avenue, Third Floor
Charlestown, Massachusetts 02129

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of the resale of an aggregate of 11,992,548 shares (the "Shares") of common stock, \$0.001 par value per share (the "Common Stock"), of Solid Biosciences Inc., a Delaware corporation (the "Company"). All of the Shares are being registered for resale on behalf of certain stockholders of the Company (the "Selling Stockholders").

We are acting as counsel for the Company in connection with the registration for resale of the Shares. We have examined signed copies of the Registration Statement as filed with the Commission. We have also examined and relied upon minutes of meetings of the Board of Directors of the Company as provided to us by the Company, stock record books of the Company as provided to us by the Company, the Certificate of Incorporation and By-Laws of the Company, each as restated and/or amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, 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 latter documents and the legal competence of all signatories to such documents.

Our opinion below, insofar as it relates to the Shares being fully paid, is based solely on a certificate of the Chief Administrative Officer of the Company confirming the Company's receipt of the consideration called for by the applicable resolutions authorizing the issuance of such Shares.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares by the Selling Stockholders, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and are validly issued, fully paid and nonassessable. It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

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.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

January 26, 2023

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We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Prospectus under the caption “Legal Matters.” In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Wilmer Cutler Pickering Hale and Dorr LLP

WILMER CUTLER PICKERING
HALE AND DORR LLP

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Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Solid Biosciences Inc. of our report dated March 14, 2022, except for the effects of the reverse stock split discussed in Note 1 to the consolidated financial statements, as to which the date is October 28, 2022, relating to the financial statements, which appears in Solid Biosciences Inc.'s Definitive Proxy Statement on Schedule 14A filed on November 7, 2022. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
January 26, 2023

Consent of Independent Auditors

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of Solid Biosciences Inc. for the registration of 11,992,548 shares of its common stock, and to the incorporation by reference therein of our report dated August 4, 2022 (except for Notes 3, 12 and 14, as to which the date is October 28, 2022), with respect to the financial statements of AavantiBio, Inc. included in Solid Biosciences, Inc.’s Current Report on Form 8-K dated December 5, 2022 filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
January 26, 2023

Calculation of Filing Fee Tables

Form S-3
(Form Type)Solid Biosciences Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common Stock, \$0.001 par value per share	Other	11,992,548(1)	\$7.21(2)	\$86,466,271.08(2)	0.00011020	\$9,528.59				
Fees Previously Paid	—	—	—	—	—	—	—	—				
Carry Forward Securities												
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—	—
	Total Offering Amounts					\$86,466,271.08 (2)	—	\$9,528.59				
	Total Fees Previously Paid							—				
	Total Fee Offsets							—				
	Net Fee Due							\$9,528.59				

- (1) The shares of common stock will be offered for resale by the selling stockholders pursuant to the prospectus contained in the registration statement to which this exhibit is attached. The registration statement registers the resale of an aggregate of 11,992,548 shares of the Registrant's common stock. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the shares of common stock being registered hereunder include such indeterminate number of shares of common stock as may be issuable upon stock splits, stock dividends, or other distribution, recapitalization or similar events.
- (2) This estimate is made pursuant to Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Registrant's common stock on January 20, 2023, as reported on the Nasdaq Global Select Market.