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

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

SAB BIOTHERAPEUTICS, INC.
(Exact Name Of Registrant As Specified In Its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

85-3899721

(I.R.S. Employer
Identification No.)

**2100 East 54th Street North
Sioux Falls, South Dakota 57104
Telephone: 605-679-6980**

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

**Eddie J. Sullivan, PhD
President and Chief Executive Officer
SAB Biotherapeutics, Inc.
2100 East 54th Street North
Sioux Falls, South Dakota 57104
Telephone: 605-679-6980**

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

Copy to:
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement as determined by the selling stockholders.

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 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 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 the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The Selling Stockholders may not sell these securities or accept an offer to buy 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 it is not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

SUBJECT TO COMPLETION, PRELIMINARY PROSPECTUS DATED NOVEMBER 3, 2023



Up to 412,698,389 Shares of Common Stock Offered by the Selling Stockholders

This prospectus relates to the offer and resale, from time to time, by the selling stockholders named under the heading “Selling Stockholders” in this prospectus, or their assigns (the “Selling Stockholders”), of up to 412,698,389 shares (the “Resale Shares”) of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”) which consists of (i) 42,033,326 shares of Common Stock, issuable upon conversion of 26,481 shares (the “Series A Shares”) of Series A-1 Convertible Preferred Stock, par value \$0.0001 per share (the “Series A-1 Preferred Stock”) and/or Series A-2 Convertible Preferred Stock, par value \$0.0001 per share (the “Series A-2 Preferred Stock”), (ii) 81,776,186 shares of Common Stock issuable upon conversion of 51,519 shares of Series A-1 Preferred Stock and/or Series A-3 Convertible Preferred Stock, par value \$0.0001 per share (the “Series A-3 Preferred Stock”, and together with the Series A-1 Preferred Stock and the Series A-2 Preferred Stock, the “Preferred Stock”) issuable upon exercise of tranche A warrants (the “Preferred Tranche A Warrants”), (iii) 82,539,678 shares of Common Stock issuable upon conversion of 52,000 shares of Series A-3 Preferred Stock issuable upon exercise of tranche B warrants (the “Preferred Tranche B Warrants”) and (iv) 206,349,199 shares of Common Stock issuable upon conversion of 130,000 shares of Series A-3 Preferred Stock issuable upon exercise of tranche C warrants (“Preferred Tranche C Warrants”, together with the Preferred Tranche A Warrants and the Preferred Tranche B Warrants, the “Preferred Warrants” and the shares underlying the Preferred Warrants, the “Preferred Warrant Shares”).

We are registering the offer and sale of the Resale Shares held by the Selling Stockholders to satisfy the registration rights granted pursuant to the Purchase Agreement (as defined below). While we will not receive any proceeds from the sale of the Resale Shares by the Selling Stockholders, we will receive proceeds from the exercise of any Preferred Warrants for cash.

Our registration of the Resale Shares covered by this prospectus does not mean that the Selling Stockholders will offer or sell such Resale Shares. The Selling Stockholders may sell the Resale Shares covered by this prospectus in a number of different ways and at varying prices. For additional information on the possible methods of sale that may be used by the Selling Stockholders, you should refer to the section of this prospectus entitled “Plan of Distribution.” The Selling Stockholders may, individually but not severally, be deemed to be an “underwriter” within the meaning of the Securities Act of 1933, as amended (the “Securities Act”), of the Resale Shares that they are offering pursuant to this prospectus. The Selling Stockholders will bear all commissions and discounts, if any, attributable to their respective sales of the Resale Shares hereunder. We will bear all costs, expenses and fees in connection with the registration of the Resale Shares. We will not be paying any underwriting discounts or commissions in this offering.

The Resale Shares represent a substantial percentage of our total outstanding Common Stock as of the date of this prospectus. The Resale Shares being offered for resale in this prospectus represent 789% of our current total outstanding Common Stock, because a significant portion of the Resale Shares being registered under this prospectus represents shares that will be issued upon the exercise of Preferred Warrants and the conversion of our

Preferred Stock. Such shares of Common Stock will represent a substantial portion of our public float. If the Preferred Warrants are exercised and the Preferred Stock is converted into Common Stock, such shares of Common Stock will be significantly dilutive and may cause a decline in the market price of our securities. On October 30, 2023 the closing price of our Common Stock was \$1.00, See “*Risk Factors — The sale of the securities registered for resale hereunder and future sales of substantial amounts of our securities in the public market (including the shares of Common Stock issuable upon conversion of Series A Shares and Preferred Warrant Shares), or the perception that such sales may occur, may cause the market price of our securities to decline significantly*” for more information.

A prospectus supplement may add, update, or change information contained in this prospectus. You should carefully read this prospectus, any applicable prospectus supplement, and the information incorporated by reference in this prospectus and any applicable prospectus supplement before you make your investment decision.

Our Common Stock is traded on The Nasdaq Capital Market under the symbol “SABS”. On October 30, 2023, the closing price for our Common Stock, as reported on The Nasdaq Capital Market, was \$1.00 per share.

Investing in these securities involves certain risks. See “Risk Factors” on page 5 of this prospectus. See also “Risk Factors” in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2023

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3, which we have filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under this shelf registration process, the Selling Stockholders may from time to time sell the Resale Shares described in this prospectus in one or more offerings or otherwise as described under “Plan of Distribution.”

This prospectus may be supplemented from time to time by one or more prospectus supplements. Such prospectus supplements may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you must rely on the information in the prospectus supplement. You should carefully read both this prospectus and any applicable prospectus supplement together with additional information described under the heading “Where You Can Find More Information” before deciding to invest in any Resale Shares being offered hereby.

Neither we nor the Selling Stockholders have authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any applicable prospectus supplement or any applicable free writing prospectus that we have authorized. If anyone provides, or has provided you, with different or inconsistent information, you should not rely on it. The Resale Shares are not being offered in any jurisdiction where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the respective dates of such document. Our business, financial condition, results of operations and prospects may have changed since those dates.

Unless the context otherwise indicates, references in this prospectus to, “SAB Biotherapeutics,” “SAB,” the “Company,” “we,” “us” and “our” refer to SAB Biotherapeutics, Inc. and its wholly owned subsidiaries. The term “Selling Stockholders” refers, collectively, to the selling stockholders named under the heading “Selling Stockholders” in this prospectus.

When we refer to the Selling Stockholders in this prospectus, we are referring to the persons names as the Selling Stockholders in this prospectus and, as applicable, any donees, pledgees, assignees, transferees or other successors-in-interest selling the Resale Shares received after the date of this prospectus from the Selling Stockholders as a gift, pledge, or other non-sale related transfer.

TRADEMARKS

We and our subsidiaries own or have rights to trademarks, trade names and service marks that they use in connection with the operation of their business. In addition, their names, logos and website names and addresses are their trademarks or service marks. Other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, in some cases, the trademarks, trade names and service marks referred to in this prospectus are listed without the applicable ®, ™ and SM symbols, but they will assert, to the fullest extent under applicable law, their rights to these trademarks, trade names and service marks

PROSPECTUS SUMMARY

This prospectus summary highlights certain information about us and selected information contained elsewhere in or incorporated by reference into this prospectus. This prospectus summary is not complete and does not contain all of the information that you should consider before making an investment decision. For a more complete understanding of the Company, you should read and consider carefully the more detailed information included or incorporated by reference in this prospectus and any applicable prospectus supplement or amendment, including the factors described under the heading “Risk Factors,” beginning on page 5 of this prospectus, as well as the information incorporated herein by reference, before making an investment decision.

Business Overview

We are a clinical-stage biopharmaceutical company focused on the development of proprietary fully-human immunotherapeutic antibodies, or fully-human immunoglobulins (“hIgGs”), to treat and prevent immune and autoimmune disorders with a current focus on disease modification of Type-1 Diabetes. We also have clinical stage assets to treat for the treatment of infectious diseases that have significant mortality and morbidity in both the general population and in high-risk patients. To date, we have conducted seven clinical trials, including Phase 1, Phase 2 and Phase 3 totaling more than 700 individuals dosed with our proprietary hIgGs. We recently received Fast Track Designation (“FTD”) and Breakthrough Therapy Designation (“BTD”) from the Food and Drug Administration Center for Biologics Evaluation and Research (“CBER”) for our SAB-176 immunoglobulin targeting multiple strains of influenza based upon positive clinical data from a Phase 2a trial. These antibodies are target-specific and polyclonal, meaning they are made up of many different hIgGs that bind to multiple sites specific to an immunogen as opposed to a monoclonal antibody that binds to only a single site. Polyclonal immunoglobulins are clearly differentiated from monoclonal antibodies because they can address multi-target binding in a single therapeutic and ideally suited to address the complex mechanisms of action associated with immune and autoimmune diseases like Type-1 Diabetes and the complexities of highly mutating infectious diseases like viruses and bacteria. Our development programs include autoimmune disorders, gastroenterological, and respiratory diseases. Using private resources and more than \$200 million of funds awarded by the U.S. Government emerging infectious disease and medical countermeasures programs since September 2019, we have developed a novel drug development production system, which we refer to as our DiversitAb™ production system. This production system is based on the natural human immune system and has the unique capability to generate large quantities of specifically targeted, high-potency, human IgG that target multiple epitopes, antigens or binding sites without the need for producing these antibodies from convalescent plasma or human donors. We have refined, optimized, and advanced genetic engineering and antibody science to develop transchromosomal cattle (which we refer to as Tc Bovine) that produce hIgGs and the engineering of the production system that drives IgG1 production primarily. These Tc Bovine form a key component of our versatile DiversitAb™ production system, a fully scalable manufacturing technology for producing immunotherapies to multiple disease indications. Our production system represents the only technology that can produce disease-targeted, fully human IgG in large quantities without the need for human donors.

Recent Milestones

We have recently achieved multiple milestones, including:

- Received Australian approval to commence Phase 1 clinical trial of SAB-142, a potential disease-modifying treatment for type 1 diabetes.
- Completed private placement of up to \$130 million to advance development of lead drug candidate for type 1 diabetes.
- Secured Fast Track Designation and Breakthrough Therapy Designation from FDA for SAB-176 for treatment and prophylaxis of influenza virus, providing an accelerated regulatory timeline for this asset as well as evidence of a clear regulatory strategy for all production system assets.

- Reported positive Phase 3 data for SAB-185 for treatment of SARS-CoV-2 infection across multiple tested variants of SARs-CoV-2, including Omicron, where SAB-185 showed a statistically significant lower number of days for high-risk patients for sustained symptoms resolution over the monoclonal antibody comparator.
- Presented positive IND-enabling GLP toxicology study for SAB-142 for type 1 diabetes at FOCIS 2023.
- Conducted clinical trials in multiple indication in more than 700 subjects and patients indicating both safety and efficacy of SAB produced, disease targeted immunoglobulins including no serum sickness and no neutralizing anti-drug antibodies.

October 2023 Private Placement

On September 29, 2023, we entered into a securities purchase agreement (the “Purchase Agreement”) pursuant to which we sold (i) 7,500 Series A Shares, (ii) the Preferred Tranche A Warrants, (iii) the Preferred Tranche B Warrants, and (iv) the Preferred Tranche C Warrants, for an aggregate offering price of \$7.5 million. None of the securities issued pursuant to the Purchase Agreement were initially registered under the Securities Act or any state securities laws, rather, we offered the securities in reliance on exemption from the registration requirements of the Securities Act by virtue of Section 4(a)(2) thereof and Rule 506 of Regulation D under the Securities Act. The registration statement of which this prospectus is a part relates to the offer and resale of the Resale Shares issued to, or issuable pursuant to, the Purchase Agreement, as applicable.

Pursuant to the Certificate of Designation of Preferences, Rights and Limitations of the Preferred Stock (the “Certificate of Designation”), upon receipt of stockholder approval of (i) the issuance of all Common Stock issuable upon conversion of the Series A Shares and the Preferred Warrant Shares, (ii) the issuance of the Preferred Warrant Shares upon exercise of the Preferred Warrants and (iii) an amendment to the Company’s Certificate of Incorporation to increase the number of authorized shares of Common Stock from 490,000,000 to 800,000,000 (collectively, the “Stockholder Approval”), each share of Series A-1 Preferred Stock shall automatically convert into Common Stock, at the conversion price of \$0.63 per share (the “Conversion Price”), subject to the terms and limitations contained in the Certificate of Designation, provided that to the extent such conversion would cause a Selling Stockholder of Series A-1 Preferred Stock to exceed the applicable beneficial ownership limitation, such Selling Stockholder will receive shares of Series A-2 Preferred Stock in lieu of Common Stock. Subject to the limitations set forth in the Certificate of Designation, at the option of the Selling Stockholder, each share of Series A-2 Preferred Stock and Series A-3 Preferred Stock shall be convertible into Common Stock, at the Conversion Price, in each case subject to the terms and limitations contained in the Certificate of Designation. We expect to receive the Stockholder Approval on November 22, 2023.

The aggregate exercise prices of the Preferred Tranche A Warrants is approximately \$70.5 million, exercisable for an aggregate of 70,500 shares of Series A-1 Preferred Stock and/or Series A-3 Preferred Stock, as set forth in the Preferred Tranche A Warrant, commencing on October 2, 2023 until the earlier of (i) fifteen (15) trading days following the date of public announcement of the fulsome data set from the Sanofi S.A. Protect trial and (ii) December 15, 2023. If any of the Selling Stockholders fail to exercise their Preferred Tranche A Warrants in full prior to its expiration date, such Selling Stockholder will forfeit all Preferred Tranche A Warrants, Preferred Tranche B Warrants and Preferred Tranche C Warrants issued to such Selling Stockholder.

The aggregate exercise price of the Preferred Tranche B Warrants is approximately \$52.0 million, exercisable for an aggregate of 52,000 shares of Series A-3 Preferred Stock commencing on the Exercisability Date (as defined in the Preferred Tranche B Warrants) until the later of (i) 15 days following the Company’s announcement of data from its SAB-142-101 clinical trial and (ii) March 31, 2025.

The aggregate exercise price of the Preferred Tranche C Warrants is approximately \$130.0 million, exercisable for an aggregate of 130,000 shares of Series A-3 Preferred Stock commencing on the Exercisability Date (as defined in the Preferred Tranche C Warrants) until the five (5) year anniversary of the Exercisability Date.

Corporate Information

We were incorporated in the State of Delaware on November 12, 2020, as a special purpose acquisition company under the name Big Cypress Acquisition Corp. (“BCYP”). On January 14, 2021, BCYP completed its initial public offering. On October 22, 2021, BCYP consummated a business combination with SAB Biotherapeutics, Inc. (the “Business Combination”), which changed its name to SAB Sciences, Inc. In connection with the closing of the business combination, BCYP changed its name to SAB Biotherapeutics, Inc. and SAB Sciences, Inc. became a subsidiary of SAB Biotherapeutics, Inc.

Our principal executive offices are located at 2100 East 54th Street North Sioux Falls, South Dakota 57104, and our telephone number is 605-679-6980. Our website is located at <https://www.sab.bio>. We do not incorporate by reference into this prospectus the information on, or accessible through, our website. Our common stock trades on The Nasdaq Capital Market under the symbol “SABS”.

THE OFFERING

Common Stock offered by the Selling Stockholders	412,698,389 shares of Common Stock, including (i) 42,033,326 shares of Common Stock issuable upon conversion of the Series A Shares, and (ii) 370,665,063 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares underlying the Preferred Warrants. See “ <i>Selling Stockholders</i> .”
Use of Proceeds	We will not receive any of the proceeds from the sale of the Resale Shares covered by this prospectus, except with respect to amounts received by us due to the exercise of any Preferred Warrants for cash. We intend to use the proceeds from the exercise of any Preferred Warrants for cash for working capital and general corporate purposes. See the section of this prospectus titled “Use of Proceeds.”
Risk Factors	Investing in our Common Stock involves a high degree of risk. For a discussion of factors to consider before deciding to invest in our Common Stock, you should carefully review and consider the “Risk Factors” section of this prospectus, as well as the risk factors described or referred to in any documents incorporated by reference in this prospectus, and in any applicable prospectus supplement or amendment.
Nasdaq Capital Market Symbol	“SABS”.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. Before deciding whether to invest in our Common Stock, you should consider carefully the risks and uncertainties discussed in this section and under the sections titled Risk Factors contained in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus, together with other information in this prospectus, the documents incorporated by reference, any prospectus supplement and any free writing prospectus that we may authorize. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our Common Stock could decline and you might lose all or part of your investment. Please also read carefully the section titled “Cautionary Note Regarding Forward-Looking Statements.”

Risks Related to this Offering by the Selling Stockholders

The sale of the securities registered for resale hereunder and future sales of substantial amounts of our securities in the public market (including the shares of Common Stock issuable upon conversion of Series A Shares and Preferred Warrant Shares), or the perception that such sales may occur, may cause the market price of our securities to decline significantly.

The shares of Common Stock offered for resale by the Selling Stockholders in this prospectus represent approximately 789% of total Common Stock outstanding as of October 30, 2023. The amount of Common Stock offered for resale by the Selling Stockholders exceeds the number of shares of Common Stock currently outstanding because a significant portion of the shares of Common Stock offered for resale are not currently outstanding and are issuable upon the conversion of the Series A Shares and Preferred Warrant Shares into shares of Common Stock. The sale of these securities in the public market, or the perception that holders of a large number of securities intend to sell their securities, could reduce the market price of our Common Stock and public warrants.

Although each stockholder for whom the shares of Common Stock registered for resale hereunder is not permitted to convert their Series A Shares or Preferred Warrant Shares into shares of Common Stock to the extent that after giving effect to such conversion, such holder would (together with such holder’s affiliates and related parties) beneficially own in excess of 4.99% (or 9.99% at the election of the holder) of the shares of Common Stock outstanding immediately after giving effect to such conversion, the market price of our Common Stock could decline if the holders of such shares sell them over time or are perceived by the market as intending to sell them.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, and the documents incorporated by reference herein, contain, or will contain, “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements can be identified by words such as “intends,” “believes,” “anticipates,” “indicates,” “plans,” “expects,” “suggests,” “may,” “would,” “should,” “potential,” “designed to,” “will,” “ongoing,” “estimate,” “forecast,” “predict,” “could,” and similar references, although not all forward-looking statements contain these words. Forward-looking statements are neither historical facts nor assurances of future performance. These statements are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Risks that could cause actual results to vary from expected results expressed in our forward-looking statements include, but are not limited to:

- the success, cost and timing of our product development activities and clinical trials, including statements regarding our plans for clinical development of our product candidates, the initiation and completion of clinical trials and related preparatory work and the expected timing of the availability of results of clinical trials;
- our ability to recruit and enroll suitable patients in our clinical trials;
- the potential indications, attributes and benefits of our product candidates;
- our ability to obtain and maintain regulatory approval for our product candidates, and any related restrictions, limitations or warnings in the label of an approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to complete further development, approval and, if approved, commercialization of our product candidates;
- the period over which we anticipate our existing cash and cash equivalents will be sufficient to fund our operating expense and capital expenditure requirements;
- the potential for our business development efforts to maximize the potential value of our portfolio;
- our ability to identify, in-license or acquire additional product candidates;
- our ability to compete with other companies currently marketing or engaged in the development of treatments for the indications that we are pursuing for our product candidates;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates and the duration of such protection;
- our ability to contract with and rely on third parties to assist in conducting our clinical trials and manufacturing our product candidates;
- our manufacturing capabilities, third-party contractor capabilities and strategy;
- our plans related to manufacturing, supply and other collaborative agreements;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets, either alone or in partnership with others;
- the rate and degree of market acceptance of our product candidates, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- regulatory developments in the United States and foreign countries;
- the impact of laws, regulations, accounting standards, regulatory requirements, judicial decisions and guidance issued by authoritative bodies;
- our ability to attract and retain key scientific, medical, commercial or management personnel;

- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- our ability to maintain our listing on The Nasdaq Capital Market;
- our ability to continue as a going concern;
- the effect of COVID-19 on the foregoing; and
- any other factors discussed under the headings “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus, together with other information in this prospectus, the documents incorporated by reference, any prospectus supplement and any free writing prospectus that we may authorize.

Forward-looking statements speak only as of the date the statements are made. Except as required under the federal securities laws and rules and regulations of the SEC, we undertake no obligation to update or revise forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. We caution you not to unduly rely on the forward-looking statements when evaluating the information presented herein.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the Resale Shares covered by this prospectus, except with respect to amounts received by us due to the exercise of any Preferred Warrants for cash. We intend to use the proceeds from the exercise of any Preferred Warrants for cash for working capital and general corporate purposes.

SELLING STOCKHOLDERS

The 412,698,389 Resale Shares being offered by the Selling Stockholders are those issuable upon conversion of the Series A Shares and the Preferred Warrant Shares. We are registering the Resale Shares in order to permit the Selling Stockholders to offer the Resale Shares for resale from time to time. For additional information regarding the Resale Shares being offered by the Selling Stockholders pursuant to this prospectus, see “*Summary—Private Placement*” above. The following table sets forth, as of the date of this prospectus, the names of the Selling Stockholders, and the aggregate number of shares of Common Stock that the Selling Securityholders may offer pursuant to this prospectus.

In accordance with the terms of the Purchase Agreement, as applicable, this prospectus generally covers the resale of the sum of (i) the aggregate number of Common Stock issued or issuable to the Selling Stockholders as a result of conversion of the Series A Shares and (ii) the number of shares of Common Stock issuable upon exercise of the Preferred Warrants (and conversion of the Preferred Warrant Shares). The fourth column assumes the sale of all of the Resale Shares offered by the Selling Stockholders pursuant to this prospectus.

Pursuant to the Certificate of Designation, a Selling Stockholder shall not have the right to convert any portion of the Preferred Stock and such Preferred Stock shall not be automatically converted, to the extent that after giving effect to such conversion, such Selling Stockholder, together with its affiliates, any other persons acting as a group together, and any other persons whose beneficial ownership of Common Stock would be aggregated with the Selling Stockholder’s and the other attribution parties for purposes of Section 13(d) of the Exchange Act would beneficially own in excess of 4.99% or 9.99% (at the discretion of the Selling Stockholder) of the shares of Common Stock outstanding immediately after giving effect to such conversion. The number of shares of Common Stock in the columns below do not reflect this limitation. The Selling Stockholder may sell all, some or none of their shares of Common Stock in this offering. See “*Plan of Distribution*.”

The information in the following table has been provided to us by or on behalf of the Selling Stockholders and the Selling Stockholders may have sold, transferred or otherwise disposed of all or a portion of their securities after the date on which they provided us with information regarding their securities. The Selling Stockholders may sell all, some or none of their Resale Shares in this offering. See “Plan of Distribution.”

Name of Selling Stockholder	Before the Offering		After the Offering	
	Total Shares of Common Stock (including Common Stock issuable upon conversion of Series A Shares and Preferred Warrant Shares)	Number of Shares of Common Stock Being Offered	Total Shares of Common Stock (including Common Stock issuable upon conversion of Series A Shares and Preferred Warrant Shares)	Percentage of Shares of Common Stock Beneficially Owned After Offering*
ATW Opportunities Master Fund II, LP ⁽¹⁾	—	6,349,205	—	* %
Entities affiliated with BVF Partners ⁽²⁾	—	95,238,089	—	* %
Commodore Capital Master LP ⁽³⁾	—	63,492,062	—	* %
JDRF T1D Fund, LLC ⁽⁴⁾	—	9,523,807	—	* %
MW XO Health Innovations Fund, L.P. ⁽⁵⁾	—	15,873,013	—	* %
RA Capital Healthcare Fund, L.P. ⁽⁶⁾	—	95,238,094	—	* %
RTW Funds ⁽⁷⁾	—	31,746,025	—	* %
Sessa Capital (Master), L.P. ⁽⁸⁾	—	95,238,094	—	* %

* Percentage not listed if less than 1%.

** Assumes sale of all Resale Shares covered by this prospectus and no further acquisitions of shares of Common Stock by the Selling Stockholders.

- (1) Consists of 6,349,205 shares of Common Stock held by ATW Opportunities Master Fund II, L.P., including, 1,904,761 shares of Common Stock issuable upon conversion of 1,200 Series A Shares and 4,444,444 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. ATW Partners Opportunities Fund GP, LLC, the general partner to ATW Opportunities Master Fund II, L.P., has discretionary authority to vote and dispose of the shares held by ATW Opportunities Master Fund II, L.P. and may be deemed to be the beneficial owner of these shares. Kerry Propper and Antonio Ruiz-Gimenez, each in their capacity as Managing Members of ATW Partners Opportunities Fund GP, LLC, may also be deemed to have investment discretion and voting power over the shares held by ATW Opportunities Master Fund II, L.P. ATW Partners Opportunities Fund GP, LLC, Mr. Propper and Mr. Ruiz-Gimenez each disclaim any beneficial ownership of these shares. The address of the Selling Securityholder is c/o ATW Partners Opportunities Management, LLC 17 State Street, Suite 2100, New York, NY 10004.

- (2) Consists of (i) 50,803,173 shares of Common Stock held by Biotechnology Value Fund, L.P. (“BVF LP”), including, 1,465,079 shares of Common Stock issuable upon conversion of 923 Series A Shares and 49,338,094 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares, (ii) 38,636,506 shares of Common Stock held by Biotechnology Value Fund II, L.P. (“BVF2 LP”), including, 1,114,285 shares of Common Stock issuable upon conversion of 702 Series A Shares and 37,522,221 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares, (iii) 4,511,109 shares of Common Stock held by Biotechnology Value Trading Fund OS LP (“BVF OS”), including, 130,158 shares of Common Stock issuable upon conversion of 82 Series A Shares and 4,380,951 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares, and (iv) 1,287,301 shares of Common Stock held by MSI BVF SPV, LLC (“MSI BVF”, and together with BVF LP, BVF2 LP and BVF OS, the “BVF Entities”), including, 38,095 shares of Common Stock issuable upon conversion of 24 Series A Shares and 1,249,206 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. BVF I GP LLC is the general partner of BVF LP. BVF II GP LLC is the general partner of BVF2 LP. BVF Partners OS Ltd. is the general partner of BVF OS. BVF GP Holdings is the sole member of BVF I GP LLC and BVF II GP LLC. BVF Partners L.P. is the sole member of BVF Partners OS Ltd. and investment manager of BVF LP, BVF2 LP, BVF OS and MSI BVF. BVF Inc. is the general partner of BVF Partners L.P. Mark N. Lampert is director and officer of BVF Inc. Each of BVF I GP LLC, BVF II GP LLC, BVF Partners OS Ltd., BVF GP Holdings LLC, BVF Partners L.P. BVF Inc. and Mr. Lampert disclaims beneficial ownership of securities beneficially owned by the Selling Stockholders. The Selling Stockholder’s address is c/o BVF Partners L.P., 44 Montgomery St, 40th Floor, San Francisco, CA 94104.
- (3) Consists of 63,492,062 shares of Common Stock held by Commodore Capital Master LP, including, 1,831,746 shares of Common Stock issuable upon conversion of 1,154 Series A Shares and 61,660,316 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. Commodore Capital LP is the investment manager to Commodore Capital Master LP and may be deemed to beneficially own the shares held by Commodore Capital Master LP. Michael Kramarz and Robert Egen Atkinson are the managing partners of Commodore Capital LP and exercise investment discretion with respect to these shares. Commodore Capital LP and Commodore Capital Master LP have shared voting and dispositive power with respect to these Shares. The address of Commodore Capital LP and Commodore Capital Master LP is 444 Madison Avenue, 35th Floor, New York, NY 10022.
- (4) Consists of 9,523,807 shares of Common Stock held by JDRF T1D Fund, LLC, including 2,857,142 shares of Common Stock issuable upon conversion of 1,800 Series A Shares and 6,666,665 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. Based on information provided to the Company by the Selling Stockholder, Steven St. Peter may be deemed to beneficially own the shares owned by the Selling Stockholder.
- (5) Consists of 15,873,013 shares of Common Stock held by MW XO Health Innovations Fund, LP, including 457,142 shares of Common Stock issuable upon conversion of 288 Series A Shares and 15,415,871 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. Marshall Wace, LLC, as general partner of Marshall Wace North America, LP, is the investment manager of MW XO Health Innovations Fund, LP. No individual has ultimate beneficial ownership of the securities.
- (6) Consists of 95,238,094 shares of Common Stock held by RA Capital Healthcare Fund, L.P., including 2,747,619 shares of Common Stock issuable upon conversion of 1,731 Series A Shares and 92,490,475 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. RA Capital Management, L.P. is the investment manager for the RA Capital Healthcare Fund, L.P., or RACHF. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky and Rajeev Shah are the managing members. Each of Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by RACHF. Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such securities, except to the extent of any pecuniary interest therein.
- (7) Consists of an aggregate of 31,746,025 shares of Common Stock held by RTW Master Fund, Ltd., RTW Innovation Master Fund, Ltd. and RTW Biotech Opportunities Ltd (collectively, the “RTW Funds”), including 915,871 shares of Common Stock issuable upon conversion of 577 Series A Shares and 30,830,154 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. RTW Investments, LP (“RTW”), in its capacity as the investment manager of the RTW Funds, has the power to vote and the power to direct the disposition of the shares held by the RTW Funds. Accordingly, RTW may be deemed to be the beneficial owner of such securities. Roderick Wong, M.D., as the Managing Partner of RTW, has the power to direct the vote and disposition of the securities held by RTW. Dr. Wong disclaims beneficial ownership of the shares held by the RTW Funds, except to the extent of his pecuniary interest therein. The address and principal office

of RTW Investments, LP is 40 10th Avenue, Floor 7, New York, NY 10014, and the address of Dr. Wong and each of the RTW Funds is c/o RTW Investments, LP, 40 10th Avenue, Floor 7, New York, NY 10014.

- (8) Consists of 95,238,094 shares of Common Stock held by Sessa Capital (Master), L.P. (“Sessa Capital”), including 28,571,428 shares of Common Stock issuable upon conversion of 18,000 Series A Shares and 66,666,666 shares of Common Stock issuable upon conversion of the Preferred Warrant Shares. These securities are beneficially owned by (i) Sessa Capital, directly, (ii) Sessa Capital GP, LLC, indirectly as a result of being the sole general partner of Sessa Capital, (iii) Sessa Capital IM, L.P., indirectly as a result of being the investment adviser for Sessa Capital, (iv) Sessa Capital IM GP, LLC, indirectly as a result of being the sole general partner of Sessa Capital IM, L.P., and (v) John Petry, indirectly as a result of being the manager of Sessa Capital GP, LLC and Sessa Capital IM GP, LLC. Andrew Moin, an Analyst and Partner with Sessa Capital, is a member of the board of directors of the Registrant. Each of the foregoing persons disclaims beneficial ownership of any securities reported by any person except to the extent of their pecuniary interest therein.

Relationship with Selling Stockholders

On September 29, 2023, we entered into a Board Designation Agreement, dated as of September 29, 2023, with Sessa Capital, pursuant to which Andrew Moin, who is a partner of Sessa Capital, has been appointed as a director of the Company’s board of directors.

Other than this relationship with Sessa Capital (Master), L.P., none of the Selling Stockholders has had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our shares of Common Stock or other securities.

PLAN OF DISTRIBUTION

The Selling Stockholders, which includes any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their Resale Shares covered hereby on the principal trading market or any other stock exchange, market or trading facility on which the Common Stock are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling the Resale Shares:

- ordinary brokerage transactions and transactions in which the broker dealer solicits purchasers;
- block trades in which the broker dealer will attempt to sell the securities 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;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- in transactions through broker dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplements to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121.

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

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

We are required to pay certain fees and expenses that we incur incident to the registration of the Resale Shares covered by this prospectus. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective continuously effective under the Securities Act until the date that all the Resale Shares being offered by the Selling Stockholders (i) have been sold pursuant to this registration statement or pursuant to Rule 144, or (ii) may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 and without the requirement for us to be in compliance with the current public information requirement under Rule 144. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the Common Stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the Common Stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

The validity of the shares of Common Stock to be offered for resale by the Selling Stockholders under this prospectus will be passed upon for us by Dentons US LLP, New York, New York.

EXPERTS

The consolidated financial statements of SAB Biotherapeutics, Inc. as of and for the years ended December 31, 2022 and 2021, included in our Annual Report on Form 10-K for the year ended December 31, 2022, have been audited by Mayer Hoffman McCann P.C., independent registered public accounting firm, as set forth in their report (which report includes an explanatory paragraph regarding the existence of substantial doubt about our ability to continue as a going concern), and have been incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing, in giving said reports.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, 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>.

You may also access our SEC filings at our website www.sab.bio. Our website and the information contained on, or that can be accessed through, our website will not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. You should not rely on our website or any such information in making your decision whether to purchase our securities.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus, to the extent that a statement contained in or omitted from this prospectus, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below which have been filed by us:

- Our Amendment No. 1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on [April 28, 2023](#);
- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with SEC on [April 14, 2023](#);
- Our Quarterly Reports on Form 10-Q for the fiscal periods ended March 31, 2023 and June 30, 2023, filed with the SEC on [May 15, 2023](#) and [August 21, 2023](#), respectively;
- Our Current Reports on Form 8-K filed with the SEC on [January 5, 2023](#), [January 9, 2023](#), [January 10, 2023](#), [January 27, 2023](#), [February 7, 2023](#), [March 24, 2023](#), [March 31, 2023](#), [April 4, 2023](#), [April 14, 2023](#), [April 19, 2023](#), [April 28, 2023](#), [May 12, 2023](#), [June 14, 2023](#), [June 21, 2023](#), [July 3, 2023](#), [July 31, 2023](#), [August 21, 2023](#), [October 2, 2023](#), and [October 27, 2023](#);
- The description of our common stock and warrants in our registration statement on [Form 8-A filed with the SEC on January 8, 2021](#), including any amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this prospectus and prior to the termination of the offering of the securities to which this prospectus relates, shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing of such documents. However, any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed “filed” with the SEC, including without limitation any information furnished pursuant to Item 2.02 or 7.01 of Form 8-K or certain exhibits furnished pursuant to Item 9.01 of Form 8-K, shall not be deemed to be incorporated by reference in this prospectus.

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

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

SAB Biotherapeutics, Inc.
2100 East 54th Street North
Sioux Falls, South Dakota 57104
Attn: Corporate Secretary
605-679-6980

* * *



**Up to 412,698,389 Shares of
Common Stock Offered by the Selling Stockholders**

PROSPECTUS

, 2023

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth various expenses being borne by the Company in connection with the sale and distribution of the securities being registered. All of the amounts shown are estimates except for the Securities and Exchange Commission Registration Fee.

SEC Registration Fee	\$	60,914.28
Accounting Fees and Expenses	\$	30,000.00
Legal Fees and Expenses	\$	250,000.00
Miscellaneous	\$	35,000.00
Total	\$	375,914.28

Item 15. Indemnification of Directors and Officers.

Section 145 of the DGCL provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent of the registrant. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaws, agreement, vote of stockholders or disinterested directors or otherwise. The Registrant's Certificate of Incorporation and Bylaws provide for indemnification by the Registrant of its directors and officers to the fullest extent permitted by the DGCL.

Section 102(b)(7) of the DGCL permits a corporation to provide in its Certificate of Incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for unlawful payments of dividends or unlawful stock repurchases redemptions or other distributions or (4) for any transaction from which the director derived an improper personal benefit. The registrant's Certificate of Incorporation provides for such limitation of liability to the fullest extent permitted by the DGCL.

The registrant has entered into indemnification agreements with each of its directors and executive officers to provide contractual indemnification in addition to the indemnification provided in our Certificate of Incorporation. Each indemnification agreement provides for indemnification and advancements by the registrant of certain expenses and costs relating to claims, suits or proceedings arising from his or her service to the registrant or, at our request, service to other entities, as officers or directors to the maximum extent permitted by applicable law. We believe that these provisions and agreements are necessary to attract qualified directors.

The registrant also maintains standard policies of insurance under which coverage is provided (1) to its directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, while acting directors and officers of the registrant, and (2) to the registrant with respect to payments which may be made by the Registrant to such officers and directors pursuant to any indemnification provision contained in the Registrant's Certificate of Incorporation and Bylaws or otherwise as a matter of law.

Item 16. Exhibits.

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

Incorporated by Reference

Exhibit Number	Description	Schedule/ Form	File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation	8-K	001-39871	3.1	October 28, 2021
3.2	Amended and Restated Bylaws	8-K	001-39871	3.2	October 28, 2021
4.1	Specimen common stock Certificate of Registrant	S-1/A	333-258869	4.2	January 4, 2021
4.2	Form of Preferred Tranche A Warrant	8-K	001-39871	4.1	October 2, 2023
4.3	Form of Preferred Tranche B Warrant	8-K	001-39871	4.2	October 2, 2023
4.4	Form of Preferred Tranche C Warrant	8-K	001-39871	4.3	October 2, 2023
5.1*	Opinion of Dentons US LLP				
10.1	Form of Securities Purchase Agreement, dated September 29, 2023 by and among SAB Biotherapeutics, Inc. and the purchasers named therein	8-K	001-39871	10.1	October 2, 2023
23.1*	Consent of Independent Registered Public Accounting Firm				
23.2*	Consent of Dentons US LLP (included in Exhibit 5.1)				
24.1	Power of Attorney (included on a signature page of the initial filing of this Registration Statement)				
107*	Filing Fee Table				

* Filed herewith

Item 17. Undertakings.

The Registrant hereby undertakes:

(a)

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

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.

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

provided, however, that paragraphs a(i), a(ii) and a(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 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the 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.

/s/ Andrew Moin

Andrew Moin

Director

November 3, 2023

/s/ William Polvino, MD, PhD

William Polvino, MD, PhD

Director

November 3, 2023

/s/ Jeffrey G. Spragens

Jeffrey G. Spragens

Director

November 3, 2023

November 3, 2023

SAB Biotherapeutics, Inc.
2100 East 54th Street North
Sioux Falls, South Dakota 57104

Re: SAB Biotherapeutics, Inc. Registration Statement on Form S-3

Ladies and Gentlemen:

In our capacity as counsel to SAB Biotherapeutics, Inc. a Delaware corporation (the “**Company**”), we have been asked to render this opinion in connection with a Registration Statement on Form S-3, filed by the Company with the Securities and Exchange Commission (the “**Commission**”) on November 3, 2023 (the “**Registration Statement**,” and the prospectus which forms a part of the Registration Statement, the “**Prospectus**”) under the Securities Act of 1933, as amended (the “**Act**”), covering the resale of up to an aggregate of 412,698,389 shares (the “**Shares**”) of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”), consisting of (i) up to 42,033,326 shares of Common Stock issuable upon conversion of 26,481 shares of Series A-1 Convertible Preferred Stock, par value \$0.0001 per share (the “**Series A-1 Preferred Stock**”) that are currently outstanding (the “**Series A-1 Shares**”), and (ii) up to 370,665,063 shares of Common Stock (the “**Warrant Shares**”) consisting of (a) 81,776,186 shares of Common Stock issuable upon conversion of 51,519 shares of Series A-1 Preferred Stock and/or Series A-3 Convertible Preferred Stock, par value \$0.0001 per share (the “**Series A-3 Preferred Stock**”) issuable on the exercise of preferred stock tranche A warrants (the “**Tranche A Warrants**”), (b) 82,539,678 shares of Common Stock issuable upon conversion of 52,000 shares of Series A-3 Preferred Stock issuable on the exercise of preferred stock tranche B warrants (the “**Tranche B Warrants**”), and (c) 206,349,199 shares of Common Stock issuable upon conversion of 130,000 shares of Series A-3 Preferred Stock issuable on the exercise of preferred stock tranche C warrants (the “**Tranche C Warrants**”) and together with the Tranche A Warrants and Tranche B Warrants, the “**Preferred Warrants**”). The Series A-1 Shares, Warrant Shares and Preferred Warrants were issued pursuant to a Securities Purchase Agreement, dated September 29, 2023 by and among the Company and the purchasers named therein (the “**Purchase Agreement**”).

We are delivering this opinion to you at your request in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection with rendering this opinion, we have examined and are familiar with the Company’s (i) certificate of incorporation and bylaws, each as amended and restated; (ii) the Registration Statement, including the Prospectus; (iii) corporate proceedings of the Company relating to the issuance of the securities described herein; (iv) the Purchase Agreement, (v) the Preferred Warrants, and (vi) such other instruments and documents as we have deemed relevant under the circumstances.

In making the aforesaid examinations, we have assumed the genuineness of all signatures and the conformity to original documents of all copies furnished to us as original or photostatic copies. We have also assumed that the corporate records furnished to us by the Company include all corporate proceedings taken by the Company to date. We have assumed without investigation that there has been no relevant change or development between the dates as of which the information cited in the preceding sentence was given and the date of this letter. As to certain factual

matters, we have relied upon a certificate of officers of the Company and have not sought to independently verify such matters.

Based upon the foregoing, and in reliance thereon, and subject to the qualifications, limitations and exceptions stated herein, we are of the opinion, having due regard for such legal considerations as we deem relevant, that (i) the Series A-1 Shares, Series A-2 Shares and Series A-3 Shares when issued in accordance with the terms of the Series A-1 Preferred Stock, Series A-2 Preferred Stock or Series A-3 Preferred Stock, will be validly issued, fully paid and nonassessable, and (iii) the Warrant Shares when issued in accordance with the Series A-3 Preferred Stock upon exercise and in accordance with the terms of the Preferred Warrants, will be validly issued, fully paid and nonassessable.

Our opinion herein is expressed solely with respect to the Delaware General Corporation Law of the State of Delaware. Our opinion is based on these laws as in effect on the date hereof and as of the effective date of the Registration Statement, and we assume no obligation to revise or supplement this opinion after the effective date of the Registration Statement should the law be changed by legislative action, judicial decision or otherwise. Where our opinions expressed herein refer to events to occur at a future date, we have assumed that there will have been no changes in the relevant law or facts between the date hereof and such future date. Our opinions expressed herein are limited to the matters expressly stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Not in limitation of the foregoing, we are not rendering any opinion as to the compliance with any other federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

We hereby consent to the use of our opinion as Exhibit 5.1 to the Registration Statement and to the reference to this firm and this opinion under the heading "Legal Matters" in the Prospectus comprising a part of the Registration Statement and any amendment thereto. In giving such consent, we do not hereby admit that we come within the category of persons whose consent is required under Section 7 of the Act, or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Dentons US LLP
Dentons US LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Form S-3 and related prospectus of our report dated April 14, 2023, with respect to the consolidated financial statements of SAB Biotherapeutics, Inc. and Subsidiaries as of December 31, 2022 and 2021 and for each of the two years in the period ended December 31, 2022 (which report includes an explanatory paragraph relating to the existence of substantial doubt about the Company's ability to continue as a going concern), included in the Annual Report on Form 10-K for the year ended December 31, 2022, and to the reference to us under the heading "Experts" in the prospectus, which is part of this Registration Statement.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
November 3, 2023

Calculation of Filing Fee Tables
Form S-3
(Form Type)
SAB Biotherapeutics, Inc.
(Exact Name of Registrant as Specified in its Charter)
Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity Common Stock, par value \$0.0001 per share	457(c)	412,698,389 ⁽²⁾	\$ 1.00 ⁽³⁾	\$ 412,698,389	0.0001476	\$ 60,914.28
Total Offering Amounts					\$ 412,698,389		\$ 60,914.28
Total Fee Offsets					\$ —		\$ —
Net Fee Due					\$ 412,698,389		\$ 60,914.28

- (1) Represents the shares of common stock, \$0.0001 par value per share (the “Common Stock”), of SAB Biotherapeutics, Inc. (the “Registrant”) that will be offered for resale by the selling stockholders pursuant to the registration statement to which this exhibit is attached. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), the shares being registered hereunder include such indeterminate number of additional shares of common stock as may be issuable as a result of stock splits, stock dividends or similar transactions with respect to the shares being registered hereunder.
- (2) Consists of (i) 42,033,326 shares of Common Stock, issuable upon conversion of 26,481 shares (the “Series A Shares”) of Series A-1 Convertible Preferred Stock, par value \$0.0001 per share (the “Series A-1 Preferred Stock”) and/or Series A-2 Convertible Preferred Stock, par value \$0.0001 per share, (ii) 81,776,186 shares of Common Stock issuable upon conversion of 51,519 shares of Series A-1 Preferred Stock and/or Series A-3 Convertible Preferred Stock, par value \$0.0001 per share (the “Series A-3 Preferred Stock”) issuable upon exercise of tranche A warrants, (iii) 82,539,678 shares of Common Stock issuable upon conversion of 52,000 shares of Series A-3 Preferred Stock issuable upon exercise of tranche B warrants, and (iv) 206,349,199 shares of Common Stock issuable upon conversion of 130,000 shares of Series A-3 Preferred Stock issuable upon exercise of tranche C warrants.
- (3) 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 October 30, 2023, as reported on the Nasdaq Capital Market.

