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

FORM 10-K/A

(Amendment No. 1)

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number 001-39871

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** **(Address of principal executive offices)**	**57104** **(Zip Code)**

Registrant's telephone number, including area code: (605) 679-6980

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.0001 par value per share	SABS	The Nasdaq Stock Market LLC
Warrants, each exercisable for one share of Common Stock at an exercise price of $11.50 per share	SABSW	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price of the shares of common stock on The Nasdaq Stock Market on June 30, 2021, was $114,540,000.

The number of shares of the registrant's common stock outstanding as of March 25, 2022 was 42,955,121.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for the 2022 annual meeting of stockholders to be filed pursuant to Regulation 14A within 120 days after the registrant's fiscal year ended December 31, 2021, are incorporated by reference in Part III of this Form 10-K.

Auditor Firm Id:	199	Auditor Name:	Mayer Hoffman McCann P.C.	Auditor Location:	San Diego, California, United States

Explanatory Note

SAB Biotherapeutics, Inc., a Delaware corporation (“SAB” or the “Company”, “we”, “our” or “us”) is filing this Amendment No. 1 to the Annual Report on Form 10-K (the “Form 10-K/A” or “Amended Annual Report”) to amend our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities Exchange Commission (the “SEC”) on March 29, 2022 (the “Original Form 10-K”), to restate the financial statements as of and for the year ended December 31, 2021.

In March 2023, the Audit Committee of the Company’s Board of Directors and the Company’s management concluded that the Company’s Original Form 10-K should no longer be relied upon as a result of the following accounting errors:

- The Company concluded that it did not correctly account for a financed insurance premium whereby a third-party lender prepaid the Company's annual insurance premiums to our insurance companies in exchange for a short-term interest bearing note (the “Insurance Financing Agreement”). The Company previously recognized, on its consolidated balance sheet, a current prepaid asset for the amount paid by the Company under the Insurance Financing Agreement in excess of the total amortized value of the prepaid insurance policy. The Company reassessed its accounting for the Insurance Financing Agreement and determined that the Insurance Financing Agreement should be classified as a current note payable with the full amount of the insurance premium recognized as current prepaid asset at the time the Company entered into the Insurance Financing Agreement.

- The Company concluded that the Insurance Financing Agreement and corresponding payment to the third-party lender constitutes a constructive receipt and disbursement of cash. As a result, the Company determined the cash flows from financing activities contained within the Prior Year Financial Statements is understated—this error is accompanied by a corresponding overstatement in cash flows from operating activities due to an understated prepaid asset.

- Similar to the above assessment, the Company concluded that the cash payments to the third-party lender should be presented within cash flows from financing activities. As a result, the Company determined the cash flows from financing activities contained within the Prior Period Interim Financial Statements are overstated—this error is accompanied by a corresponding understatement in cash flows from operating activities due to the derecognition of the previously unrecognized prepaid asset.

Accordingly, the Company is filing this 10-K/A to amend Part II, Item 7 and to restate Part II, Item 8 and Part IV, Item 15 of the Original Form 10-K.

In addition, pursuant to Rule 12b-15 under the Securities Exchange Act of 1934, as amended, this Form 10-K/A also contains new certifications by the principal executive officer and the principal financial officer in Exhibits 31.1, 31.2, 32.1 and 32.2 as required by Sections 302 and 906 of the Sarbanes-Oxley Act of 2002. This Form 10-K/A also contains an updated consent of the Company’s independent registered public accounting firm, included as Exhibit 23.1.

Except as set forth in this Form 10-K/A, this Form 10-K/A does not amend or otherwise update any other information in the Original Form 10-K. Other than the information specifically amended and restated herein, this Form 10-K/A does not reflect events occurring after March 29, 2022, the date of the Original Form 10-K, or modify or update those disclosures that may have been affected by subsequent events. Accordingly, this Form 10- K/A should be read in conjunction with the Original Form 10-K and with our filings with the SEC after the Original Form 10-K.

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PART II

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the accompanying notes included in Part II, Item 8 of this Form 10-K. Some of the information contained in this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. As a result of many factors, including those factors set forth in the section titled "Risk Factors," our actual results could differ materially from those discussed in or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors." Please also refer to the section titled "Special Note Regarding Forward Looking Statements."

Notes payable

As of December 31, 2021 and December 31, 2020, we had a notes payable balance of $1,796,724 and $710,768, respectively.

Note payable, related party

On February 24, 2016, we entered into a loan agreement with Christiansen Land and Cattle, Ltd., a related party, for a $3.0 million revolving line of credit secured by a blanket security interest in our assets.

We borrowed $2.5 million from the line of credit in 2016, and $350,000 in 2017. The line of credit had a fixed rate per annum of 6% compounded annually. The initial agreement was based upon repayment following a significant capital event – closing of equity or debt financing with total proceeds to us of $15 million or more or one year from the agreement date, whichever occurred first. The agreement was amended in August 2018 to extend the repayment timeframe to August 31, 2019. The first payment to repay this loan was made on August 31, 2018 ($1.0 million payment). Additional voluntary payments were being made at the rate of $30,000 per month. In August 2019, the agreement was amended to extend the maturity date to the earlier of August 31, 2020 or the occurrence of a significant capital event. The note payable balance as of December 31, 2019 was $1,364,644, which included accrued interest of $3,580. In July 2020, the note payable was paid in full and the line of credit was terminated.

Notes payable

On November 15, 2017, we entered into a loan agreement with a bank, for the financing of an ultrasound machine for $18,997. The agreement was for a four-year term, with monthly payments of $440. The note payable had a balance as of December 31, 2019 of $9,203 and was paid off in full in September 2020.

In December 2017, we entered into two loan agreements with a financial institution. One agreement was for the purchase of a tractor for $116,661 at a 3.6% interest rate, and a second agreement for the purchase of a trailer, truck, scale, and chute for $47,721 at a 5.9% interest rate. The loan for the tractor included annual payments of $25,913 for the next five years starting in December 2018. The loan for the trailer, truck, scale, and chute included monthly payments of $920 for five years starting in January 2018 through December 2022. During 2019, the trailer, truck, scale, and chute loan was paid in full. As of December 31, 2021 and December 31, 2020, the tractor loan balance was $25,013 and $49,156, respectively.

On March 27, 2020, President Trump signed into law the "Coronavirus Aid, Relief and Economic Security Act ("CARES Act"). In April 2020, we entered into the PPP Loan with First Premier Bank under the PPP, which is part of the CARES Act administered by the SBA. As part of the application for these funds, we, in good faith, certified that the current economic uncertainty made the loan request necessary to support our ongoing operations. The certification further requires us to take into account our current business activity and our ability to access other sources of liquidity sufficient to support ongoing operations in a manner that is not significantly detrimental to the business. Under the PPP, we received proceeds of approximately $661,612. In accordance with the requirements of the PPP, we utilized the proceeds from the PPP Loan primarily for payroll costs. The PPP Loan has a 1.00% interest rate per annum, matures in April 2022 and is subject to the terms and conditions applicable to loans administered by the SBA under the PPP. Under the terms of PPP, all or certain amounts of the PPP Loan may be forgiven if they are used for qualifying expenses, as described in the CARES Act. We recorded the entire amount of the PPP Loan as debt. Under the terms of the PPP Loan, monthly payments of principal and interest were due to commence November 1, 2020, however, the SBA is deferring loan payments for borrowers who apply for loan forgiveness until the SBA remits the borrower's loan forgiveness amount to the lender. No payments were made in 2020 and, as of December 31, 2020, the PPP Loan balance was $661,612 with accrued interest of $3,984. An application for forgiveness of the PPP Loan was completed in February 2021. In March 2021, the SBA approved the forgiveness of the PPP Loan, plus accrued interest. We recorded a gain on extinguishment of PPP Loan of $665,596 for the forgiveness of the PPP Loan and accrued interest within gain on debt extinguishment of Paycheck Protection Program SBA Loan on the consolidated statement of operations for the year ended December 31, 2021.

Insurance Funding

We obtained financing for certain Director & Officer liability insurance policy premiums. The agreement assigns First Insurance Funding (Lender) a first priority lien on and security interest in the financed policies and any additional premium required in the financed policies including (a) all returned or unearned premiums, (b) all additional cash contributions or collateral amounts assessed by the insurance companies in relation to the financed policies and financed by Lender, (c) any credits generated by the financed policies, (d) dividend payments, and (e) loss payments which reduce unearned premiums. If any circumstances exist in which premiums related to any Financed Policy could become fully earned in the event of loss, Lender shall be named a loss-payee with respect to such policy.

The total premiums, taxes and fees financed is approximately $2,841,000 with an annual interest rate of 2.85%. In consideration of the premium payment by Lender to the insurance companies or the Agent or Broker, we unconditionally promise to pay Lender the amount Financed plus interest and other charges permitted under the Agreement. At December 31, 2021 we recognized approximately $1,772,000, respectively, as insurance financing note payable in its consolidated balance sheet. We will pay the insurance financing through installment payments with the last payment being on September 22, 2022.

Please refer to Note 10 to the Company's consolidated financial statements, *Notes Payable*, for additional information on our debt.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2021 and 2020:

	2021 (Restated)	2020
Net cash provided by operating activities	$ 1,986,873	$ 10,004,795
Net cash used in investing activities	(10,943,657)	(12,722,702)
Net cash provided by financing activities	35,891,419	8,982,321
Net decrease in cash, cash equivalents, and restricted cash	$ 26,934,635	$ 6,264,414

Operating Activities

Net cash provided by operating activities decreased by $8.0 million in 2021, primarily due to a $10.3 million increase in general and administrative expenses. Other main drivers include an increase in salaries and benefits of $4.6 million (added positions, higher stock compensation and bonus), an increase in business consulting of $2.0 million, and an increase in prepaid insurance of $1.4 million due to the Insurance Financing Agreement.

Investing Activities

Net cash used in investing activities decreased by $1.8 million in 2021, primarily due to a decrease in purchases of equipment. Net cash used in investing activities increased by $12.1 million in 2020, primarily due to investments in our manufacturing capabilities and equipment.

Financing Activities

Net cash provided by financing activities increased by $26.9 million in 2021, primarily due to a $24.4 million increase in cash flows from stock issuances and an increase of $2.5 million increase in net note issuances.

Contractual Obligations and Commitments

The following table summarizes our (restated) contractual obligations and commitments as of December 31, 2021:

	Payments Due by Period				
	Total	**Less than 1 year**	**1-3 years**	**3-5 years**	**Over 5 years**
Notes payable (1)	$ 1,796,724	$ 1,796,724	$ —	$ —	$ —
Forward share purchase liability (2)	6,338,306	6,338,306	—	—	—
Operating lease liabilities (3)	2,945,835	1,240,333	1,705,502	—	—
Finance lease liabilities (3)	6,840,249	444,928	807,835	802,992	4,784,494
Total	$ 17,921,114	$ 9,820,291	$ 2,513,337	$ 802,992	$ 4,784,494

(1) One remaining annual payment on the purchase of a tractor ($25,013) and insurance funding ($1,771,711).

(2) Pursuant to the Forward Share Purchase Agreement, the Company may be required to purchase up to 627,555 shares of its issued and outstanding common stock at a price of $10.10 per share. Please refer to Note 4 to the Company's consolidated financial statements, *Reverse Recapitalization and Business Combination*, and Note 18 to the Company's consolidated financial statements, *Subsequent Events*, for additional information.

(3) We are party to certain contractual arrangements for equipment, lab space, and an animal facility, which meet the definition of leases under FASB ASC Topic 842, *Leases* (“ASC 842”).

We enter into contracts in the normal course of business with third parties, including CROs. These payments are not included in the table above, as the amount and timing of such payments are not known.

As of December 31, 2021, there were no material changes outside of the ordinary course of business to our commitments and contractual obligations.

Item 8. Financial Statements and Supplementary Data.

The consolidated financial statements required pursuant to this item are included in Part IV, Item 15 of this Annual Report, and are presented beginning on page F-1.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(1) For a list of the financial statements included herein, see Index to the Consolidated Financial Statements on page F-1 of this Annual Report, incorporated into this Item by reference.

(2) Financial statement schedules have been omitted because they are either not required or not applicable or the information is included in the consolidated financial statements or the notes thereto.

(3) Exhibits:

Exhibit Number	Description	Schedule/ Form	File No.	Exhibit	Filing Date
23.1*	Consent of Independent Registered Public Accounting Firm, Mayer Hoffman McCann P.C.				
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Filed herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized**.**

	SAB BIOTHERAPEUTICS, INC.	
Date: April 28, 2023	By:	*/s/ Eddie J. Sullivan* **Eddie J. Sullivan** **Chief Executive Officer** **(Principal Executive Officer)**
	SAB BIOTHERAPEUTICS, INC.	
Date: April 28, 2023	By:	*/s/ Russell Beyer* **Russell Beyer** **Chief Financial Officer** **(Principal Financial and Accounting Officer)**

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
SAB Biotherapeutics, Inc. and Subsidiaries

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of **SAB Biotherapeutics, Inc. and Subsidiaries** (“Company”) as of December 31, 2021 and 2020, and the related consolidated statements of operations, consolidated statements of changes in redeemable preferred stock and stockholders’ equity (deficit), and cash flows for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Restatement of 2021 Financial Statements

As discussed in Note 2 to the financial statements, the 2021 financial statements have been restated to correct certain misstatements.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2019.

/s/ Mayer Hoffman McCann P.C.

San Diego, California

April 14, 2023

SAB Biotherapeutics, Inc. and Subsidiaries
Consolidated Balance Sheets

	December 31, 2021 (Restated)	December 31, 2020
Assets		
Current assets		
Cash and cash equivalents	$ 33,206,712	$ 12,610,383
Restricted cash	6,338,306	—
Accounts receivable, net	8,010,708	20,569,497
Prepaid expenses	2,636,224	1,275,134
Total current assets	50,191,950	34,455,014
Operating lease right-of-use assets	2,615,204	3,053,022
Financing lease right-of-use assets	4,019,322	4,184,427
Equipment, net	24,314,455	14,845,470
Total assets	**$ 81,140,931**	**$ 56,537,933**
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 4,458,525	$ 7,382,361
Forward share purchase liability	6,338,306	—
Notes payable – current portion	1,796,724	538,731
Operating lease liabilities, current portion	1,142,413	924,265
Finance lease liabilities, current portion	161,050	194,717
Due to related party	2,367	16,778
Deferred grant income	100,000	100,000
Accrued expenses and other current liabilities	12,455,888	1,904,878
Total current liabilities	26,455,273	11,061,730
Operating lease liabilities, noncurrent	1,653,185	2,372,777
Finance lease liabilities, noncurrent	3,762,430	3,923,554
Warrant liabilities	10,720,130	—
Notes payable, noncurrent	—	172,037
Total liabilities	42,591,018	17,530,098
Commitments and contingencies (Note 17)		
Stockholders' equity		
Preferred stock; $0.0001 par value; 10,000,000 shares authorized, 0 shares issued and outstanding at December 31, 2021 and 2020	—	—
Common stock; $0.0001 par value; 490,000,000 shares authorized at December 31, 2021 and 2020; 43,487,279 and 25,973,406 shares issued and outstanding at December 31, 2021 and 2020, respectively	4,349	2,598
Additional paid-in capital	67,674,515	50,989,657
Accumulated deficit	(29,128,951)	(11,984,420)
Total stockholders' equity	38,549,913	39,007,835
Total liabilities and stockholders' equity	**$ 81,140,931**	**$ 56,537,933**

See accompanying notes to the consolidated financial statements

SAB Biotherapeutics, Inc. and Subsidiaries
Consolidated Statements of Operations

	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenue		
Grant revenue	$ 60,876,078	$ 55,237,759
Total revenue	60,876,078	55,237,759
Operating expenses		
Research and development	57,183,589	27,908,659
General and administrative	17,085,692	6,772,303
Total operating expenses	74,269,281	34,680,962
(Loss) income from operations	(13,393,203)	20,556,797
Changes in fair value of warrant liabilities	(4,151,068)	—
Gain on debt extinguishment of Paycheck Protection Program SBA Loan	665,596	—
Other income	5,488	3,996
Interest expense	(294,459)	(469,151)
Interest income	23,115	26,131
Net (loss) income	$ (17,144,531)	$ 20,117,773
Earnings (loss) per common share attributable to the Company’s shareholders		
Basic (loss) earnings per common share	$ (0.63)	$ 0.79
Diluted (loss) earnings per common share	$ (0.63)	$ 0.74
Weighted-average common shares outstanding – basic	27,339,180	25,391,084
Weighted-average common shares outstanding – diluted	27,339,180	27,011,482

See accompanying notes to the consolidated financial statements.

SAB Biotherapeutics, Inc. and Subsidiaries
Consolidated Statements of Changes In Redeemable Preferred Stock and Stockholders' Equity (Deficit)
For the years ended December 31, 2021 and 2020

	Redeemable Preferred Stock		Stockholders' Equity (Deficit)												
	Series A-2A Redeemable Preferred Stock		Series A Preferred Stock		Series A-1 Preferred Stock		Series A-2 Preferred Stock		Series B Preferred Stock		Common stock				
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at December 31, 2019 (as previously reported)	**3,333,333**	**$ 9,999,999**	**6,615,000**	**$ 662**	**2,525,800**	**$ 253**	**4,039,963**	**$ 404**	**1,236,786**	**$ 124**	**35,216,000**	**$ 3,522**	**$29,791,662**	**$ (32,102,193)**	**$ (2,305,566)**
Retrospective application of reverse recapitalization	(3,333,333)	(9,999,999)	(6,615,000)	(662)	(2,525,800)	(253)	(4,039,963)	(404)	(1,236,786)	(124)	(10,570,449)	(1,057)	10,002,499	—	9,999,999
Balance at December 31, 2019, after effect of Business Combination	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**24,645,551**	**$ 2,465**	**$39,794,161**	**$ (32,102,193)**	**$ 7,694,433**
Issuance of stock in private offerings, net of issuance cost of $87,949	—	—	—	—	—	—	—	—	—	—	1,327,855	133	9,900,073	—	9,900,206
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	1,295,423	—	1,295,423
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	20,117,773	20,117,773
Balance at December 31, 2020	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**25,973,406**	**$ 2,598**	**$50,989,657**	**$ (11,984,420)**	**$ 39,007,835**
Effect of Business Combination and recapitalization, net of redemptions and issuance costs of $3,294,096	—	—	—	—	—	—	—	—	—	—	7,009,436	701	7,603,133	—	7,603,834
Issuance of restricted stock, subject to forfeiture	—	—	—	—	—	—	—	—	—	—	10,491,937	1,049	—	—	1,049
Forward Share Purchase Agreement, partial settlement	—	—	—	—	—	—	—	—	—	—	—	—	6,760,294	—	6,760,294
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	2,314,682	—	2,314,682
Issuance of common stock for exercise of stock options	—	—	—	—	—	—	—	—	—	—	12,500	1	6,749	—	6,750
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	(17,144,531)	(17,144,531)
Balance at December 31, 2021	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**—**	**$ —**	**43,487,279**	**$ 4,349**	**$67,674,515**	**$ (29,128,951)**	**$ 38,549,913**

See accompanying notes to the consolidated financial statements.

SAB Biotherapeutics, Inc. and Subsidiaries
Consolidated Statements of Cash Flows

	Year Ended December 31,	
	2021 (Restated)	2020
Cash flows from operating activities:		
Net (loss) income	$ (17,144,531)	$ 20,117,773
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Gain on debt extinguishment of Paycheck Protection Program SBA Loan	(665,596)	—
Depreciation and amortization	1,488,614	383,142
Amortization of right-of-use assets	164,983	165,036
Stock-based compensation expense	2,314,682	1,295,423
Gain on sale of equipment	(5,488)	(2,252)
Changes in fair value of warrant liabilities	4,151,068	—
Changes in operating assets and liabilities		
Accounts receivable	12,558,790	(17,750,762)
Prepaid expenses	(1,258,348)	(1,151,130)
Right-of-use assets – operating lease	(63,626)	215,122
Accounts payable	(2,935,521)	5,211,593
Deferred income	—	100,000
Due to related party	(2,727)	10,528
Accrued expense and other current liabilities	3,384,573	1,410,322
Net cash provided by operating activities	**1,986,873**	**10,004,795**
Cash flows from investing activities:		
Proceeds from the sale of equipment	—	9,000
Purchases of equipment	(10,943,657)	(12,731,702)
Net cash used in investing activities	**(10,943,657)**	**(12,722,702)**
Cash flows from financing activities:		
Proceeds from Business Combination, net of transaction costs	34,340,225	—
Proceeds from the sale of stock, net of issuance costs	—	9,900,206
Proceeds from Paycheck Protection Program SBA Loan	—	661,612
Payments on related party notes payable	—	(1,364,644)
Proceeds from issuance of notes payable	2,840,619	—
Payments of notes payable	(1,093,051)	(32,506)
Principal payments on finance leases	(203,124)	(182,347)
Proceeds from exercise of stock options	6,750	—
Net cash provided by financing activities	**35,891,419**	**8,982,321**
Net increase in cash, cash equivalents, and restricted cash	26,934,635	6,264,414
Cash, cash equivalents, and restricted cash		
Beginning of year	12,610,383	6,345,969
End of year	$ 39,545,018	$ 12,610,383
Supplemental information on non-cash investing and finance activities:		
Right-of-use assets obtained in exchange for operating lease liabilities	$ 505,187	$ 1,773,135
Warrant liabilities assumed related to the Business Combination	$ 6,569,062	$ —
Liabilities assumed related to the Forward Share Purchase Agreement	$ 6,338,306	$ —
Financing fee liabilities assumed related to the Business Combination included in accrued expense and other current liabilities	$ 3,100,000	$ —
Unpaid financing fees included in accrued expense and other current liabilities	$ 2,000,000	$ —
Reconciliation of cash, cash equivalents, and restricted cash:		
Cash and cash equivalents	$ 33,206,712	$ 12,610,383
Restricted cash	6,338,306	—
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	$ 39,545,018	$ 12,610,383

See accompanying notes to the consolidated financial statements.

SAB BIOTHERAPEUTICS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) Nature of Business

On October 22, 2021 (the "Closing Date"), we consummated the business combination contemplated by the agreement and plan of merger, dated as of June 21, 2021, as amended on August 12, 2021, made by and among Big Cypress Acquisition Corp., a Delaware corporation (“BCYP”), Big Cypress Merger Sub Inc., a Delaware corporation (“Merger Sub”), SAB Biotherapeutics, Inc., a Delaware corporation (“SAB” or the “Company”), and Shareholder Representative Services LLC, a Colorado limited liability company, solely in its capacity as the representative, agent and attorney-in-fact of the SAB Stockholders. Upon closing of the Business combination, Big Cypress Merger Sub merged with SAB Biotherapeutics, with SAB Biotherapeutics as the surviving company of the merger. Upon closing of the business combination, Big Cypress Acquisition Corp. changed its name to “SAB Biotherapeutics, Inc.”.

SAB Biotherapeutics, Inc. is a clinical-stage biopharmaceutical company focused on the development and commercialization of a portfolio of products from its proprietary immunotherapy platform to produce fully targeted human polyclonal antibodies, without using human plasma or serum. SAB’s novel DiversitAb platform enables the rapid production of large amounts of targeted human polyclonal antibodies, leveraging transchromosomic cattle (Tc Bovine™) that have been genetically designed to produce human antibodies (immunoglobulin G) rather than bovine in response to an antigen. Animal antibodies have been made in rabbits, sheep and horses. However, SAB's platform is the first to produce fully human antibodies in large animals.

The COVID- 19 pandemic continues to evolve, and the extent to which it may impact the Company’s business will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions and social distancing in the U.S. and other countries, business closures or business disruptions, and the effectiveness of actions taken in the U.S. and other countries to contain and treat the disease. The Company is following, and will continue to follow, recommendations from the U.S. Centers for Disease Control and Prevention, as well as federal, state, and local governments. To date, the Company has not experienced material business disruptions, but it cannot be certain of the future impact of the COVID- 19 pandemic on its business and consolidated financial statements.

(2) Summary of Significant Accounting Policies

A summary of the significant accounting policies applied in preparation of the accompanying consolidated financial statements is set forth below.

Restatement of Previously issued Financial Statements

In March 2023, the Audit Committee of the Company’s Board of Directors and the Company’s management concluded that the Company’s previously issued audited financial statements contained within the Annual Report on Form 10-K for the year ended December 31, 2021
should no longer be relied upon as a result of the following accounting errors:

- The Company concluded that it did not correctly account for a financed insurance premium whereby a third-party lender prepaid the Company's annual insurance premiums to our insurance companies in exchange for a short-term interest bearing note (the “Insurance Financing Agreement”). The Company previously recognized, on its consolidated balance sheet, a current prepaid asset for the amount paid by the Company under the Insurance Financing Agreement in excess of the total amortized value of the prepaid insurance policy. The Company reassessed its accounting for the Insurance Financing Agreement and determined that the Insurance Financing Agreement should be classified as a current note payable with the full amount of the insurance premium recognized as current prepaid asset at the time the Company entered into the Insurance Financing Agreement.
- The Company concluded that the Insurance Financing Agreement and corresponding payment to the third-party lender constitutes a constructive receipt and disbursement of cash. As a result, the Company determined the cash flows from financing activities contained within the Annual Report on Form 10-K for the year ended December 31, 2021 is understated—this error is accompanied by a corresponding overstatement in cash flows from operating activities due to an understated prepaid asset.

Impact of the Restatement

The Company has restated herein its audited financial statements for the year ended December 31, 2021.

	December 31, 2021		
	As Previously Reported	Adjustment	As Restated
Assets			
Current assets			
Cash and cash equivalents	$ 33,206,712	$ —	$ 33,206,712
Restricted cash	6,338,306	—	6,338,306
Accounts receivable, net	8,010,708	—	8,010,708
Prepaid expenses	864,513	1,771,711	2,636,224
Total current assets	48,420,239	1,771,711	50,191,950
Operating lease right-of-use assets	2,615,204	—	2,615,204
Financing lease right-of-use assets	4,019,322	—	4,019,322
Equipment, net	24,314,455	—	24,314,455
Total assets	**$ 79,369,220**	**$ 1,771,711**	**$ 81,140,931**
Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable	$ 4,458,525	$ —	$ 4,458,525
Forward share purchase liability	6,338,306	—	6,338,306
Notes payable – current portion	25,013	1,771,711	1,796,724
Operating lease liabilities, current portion	1,142,413	—	1,142,413
Finance lease liabilities, current portion	161,050	—	161,050
Due to related party	2,367	—	2,367
Deferred grant income	100,000	—	100,000
Accrued expenses and other current liabilities	12,455,888	—	12,455,888
Total current liabilities	24,683,562	1,771,711	26,455,273
Operating lease liabilities, noncurrent	1,653,185	—	1,653,185
Finance lease liabilities, noncurrent	3,762,430	—	3,762,430
Warrant liabilities	10,720,130	—	10,720,130
Notes payable, noncurrent	—	—	—
Total liabilities	40,819,307	1,771,711	42,591,018
Commitments and contingencies (Note 17)			
Stockholders' equity			
Preferred stock; $0.0001 par value; 10,000,000 shares authorized, 0 shares issued and outstanding at December 31, 2021 and 2020	—	—	—
Common stock; $0.0001 par value; 490,000,000 shares authorized at December 31, 2021 and 2020; 43,487,279 and 25,973,406 shares issued and outstanding at December 31, 2021 and 2020, respectively	4,349	—	4,349
Additional paid-in capital	67,674,515	—	67,674,515
Accumulated deficit	(29,128,951)	—	(29,128,951)
Total stockholders' equity	38,549,913	—	38,549,913
Total liabilities and stockholders' equity	**$ 79,369,220**	**$ 1,771,711**	**$ 81,140,931**

	Year Ended December 31, 2021		
	As Previously Reported	Adjustment	As Restated
Cash flows from operating activities:			
Net (loss) income	$ (17,144,531)	$ —	$ (17,144,531)
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Gain on debt extinguishment of Paycheck Protection Program SBA Loan	(665,596)	—	(665,596)
Depreciation and amortization	1,488,614	—	1,488,614
Amortization of right-of-use assets	164,983	—	164,983
Stock-based compensation expense	2,314,682	—	2,314,682
Gain on sale of equipment	(5,488)	—	(5,488)
Changes in fair value of warrant liabilities	4,151,068	—	4,151,068
Changes in operating assets and liabilities			
Accounts receivable	12,558,790	—	12,558,790
Prepaid expenses	513,363	(1,771,711)	(1,258,348)
Right-of-use assets – operating lease	(63,626)	—	(63,626)
Accounts payable	(2,935,521)	—	(2,935,521)
Deferred income	—	—	—
Due to related party	(2,727)	—	(2,727)
Accrued expense and other current liabilities	3,384,573	—	3,384,573
Net cash provided by operating activities	**3,758,584**	**(1,771,711)**	**1,986,873**
Cash flows from investing activities:			
Proceeds from the sale of equipment	—	—	—
Purchases of equipment	(10,943,657)	—	(10,943,657)
Net cash used in investing activities	**(10,943,657)**	—	**(10,943,657)**
Cash flows from financing activities:			
Proceeds from Business Combination, net of transaction costs	34,340,225	—	34,340,225
Proceeds from issuance of notes payable	—	2,840,619	2,840,619
Payments of notes payable	(24,143)	(1,068,908)	(1,093,051)
Principal payments on finance leases	(203,124)	—	(203,124)
Proceeds from exercise of stock options	6,750	—	6,750
Net cash provided by financing activities	**34,119,708**	**1,771,711**	**35,891,419**
Net increase in cash, cash equivalents, and restricted cash	26,934,635	—	26,934,635
Cash, cash equivalents, and restricted cash			
Beginning of year	12,610,383	—	12,610,383
End of year	$ 39,545,018	$ —	$ 39,545,018

A summary of the significant accounting policies applied in preparation of the accompanying consolidated financial statements is set forth below.

Basis of presentation

The financial statements have been prepared in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") and include all adjustments necessary for the fair presentation of the Company's financial position for the years presented.

The Business Combination was accounted for as a reverse recapitalization in accordance with U.S. GAAP (the "Reverse Recapitalization"). Under this method of accounting, BCYP is treated as the "acquired" company and SAB Biotherapeutics is treated as the acquirer for financial reporting purposes. Accordingly, for accounting purposes, the Reverse Recapitalization was treated as the equivalent of SAB Biotherapeutics issuing stock for the net assets of BCYP, accompanied by a recapitalization. The net assets of BCYP are stated at historical cost, with no goodwill or other intangible assets recorded. SAB Biotherapeutics was determined to be the accounting acquirer based on the following predominant factors:

- SAB Biotherapeutics' shareholders have the largest portion of voting rights in the Company
- the Board and Management are primarily composed of individuals associated with SAB Biotherapeutics;
- the operations of SAB comprise the ongoing operations of the Company.

The consolidated assets, liabilities and results of operations prior to the Reverse Recapitalization are those of SAB Biotherapeutics. At the Closing Date, and subject to the terms and conditions of the Merger Agreement, each share of SAB Biotherapeutics common stock, par value $0.0001 per share, and each share of the SAB Biotherapeutics convertible preferred stock that was convertible into a share of SAB Biotherapeutics common stock at a one-to- one ratio, was converted into Common Stock equal to 0.4653 (the "Exchange Ratio"). The shares and corresponding capital amounts and losses per share, prior to the Business Combination, have been retroactively restated based on shares reflecting the Exchange Ratio established in the Business Combination.

Emerging growth company status

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Principles of consolidation

The accompanying consolidated financial statements include the results of the Company and its wholly owned subsidiaries, SAB Capra, LLC and Aurochs, LLC. Intercompany balances and transactions have been eliminated in consolidation.

Significant risks and uncertainties

The Company's operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include, but are not limited to, the results of research and development efforts, clinical trial activities of the Company's product candidates, the Company's ability to obtain regulatory approval to market its product candidates, competition from products manufactured and sold or being developed by other companies, and the Company's ability to raise capital.

The Company currently has no commercially approved products and there can be no assurance that the Company's research and development will be successfully commercialized. Developing and commercializing a product requires significant time and capital and is subject to regulatory review and approval as well as competition from other biotechnology and pharmaceutical companies. The Company operates in an environment of rapid change and is dependent upon the continued services of its employees and obtaining and protecting intellectual property.

Funding from government grants is not guaranteed to cover all costs, and additional funding may be needed to cover operational costs as the Company moves forward to with our efforts to develop a commercially approved product.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities in the financial statements. The Company has used significant estimates in its determination of stock-based compensation assumptions, determination of the fair value of the Company's common stock, determination of the fair value of the Private Placement Warrant liabilities, determination of the incremental borrowing rate ("IBR") used in the calculation of the Company's right of use assets and lease liabilities, and the valuation allowance on deferred tax assets. Actual amounts realized may differ from these estimates.

Cash, cash equivalents, and restricted cash

Cash equivalents include short-term, highly liquid instruments, consisting of money market accounts and short-term investments with original maturities at the date of purchase of 90 days or less.

Amounts held in escrow by the Company pursuant to the Forward Share Purchase Agreement were reported as restricted cash on the consolidated balance sheet as of December 31, 2021.

The reconciliation of cash, cash equivalents, and restricted cash as of the years ended December 31, 2021 and 2020 was as follows:

	December 31, 2021	December 31, 2020
Cash and cash equivalents	$ 33,206,712	$ 12,610,383
Restricted cash	6,338,306	—
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	$ 39,545,018	$ 12,610,383

Accounts receivable

Accounts receivable are carried at original invoice amount, less an allowance for doubtful accounts. The Company estimates an allowance for doubtful accounts for potential credit losses that are expected to be incurred, based on management's assessment of the collectability of specific accounts, the aging of the accounts receivable, historical information and other currently available evidence. Receivables are written off when deemed uncollectible. To date, no receivables have been written off. The Company had no allowance for doubtful accounts as of December 31, 2021 and 2020.

Concentration of credit risk

The Company maintains its cash and cash equivalent balances in the form of business checking accounts and money market accounts, the balances of which, at times, may exceed federally insured limits. Exposure to credit risk is reduced by placing such deposits in high credit quality federally insured financial institutions.

The Company received 100% and approximately 96% of its total revenue through grants from government organizations during the years ended December 31, 2021 and 2020, respectively, and 0% and approximately 4% of its total revenue through a grant from a non-government organization during the years ended December 31, 2021 and 2020, respectively.

Lease liabilities and right-of-use assets

The Company is party to certain contractual arrangements for equipment, lab space, and an animal facility, which meet the definition of leases under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 842, *Leases* ("ASC 842"). In accordance with ASC 842, the Company recorded right-of-use assets and related lease liabilities for the present value of the lease payments over the lease terms. The Company's IBR was used in the calculation of its right-of-use assets and lease liabilities.

Research and development expenses

Expenses incurred in connection with research and development activities are expensed as incurred. These include licensing fees to use certain technology in the Company's research and development projects, fees paid to consultants and various entities that perform certain research and testing on behalf of the Company, and expenses related to salaries, benefits, and stock-based compensation granted to employees in research and development functions.

During the years ended December 31, 2021 and 2020, the Company had contracts with multiple contract research organizations ("CRO") to complete studies as part of research grant agreements. In the case of SAB- 185, the CRO has been contracted and paid by the US government. For SAB- 176, PPD Development, LP acting as the CRO oversaw the Phase 1 safety study. The terms of that agreement are subject to confidentiality, and the status of the agreement is that it is current, in good standing and approximately 90% of the contract has been paid as of December 31, 2021. SAB has also contracted with hVIVO Services Limited to conduct the Phase 2a influenza study on SAB- 176. The terms of that agreement are subject to confidentiality, and the status of the agreement is that it is current, in good standing and approximately 90% of the contract has been paid as of December 31, 2021.

Equipment

The Company records equipment at cost less depreciation. Depreciation is calculated using straight-line methods over the following estimated useful lives:

(in years)	
Animal facility equipment	7
Laboratory equipment	7
Leasehold improvements	Shorter of asset life or lease term
Office furniture & equipment	5
Vehicles	5

Repairs and maintenance expenses are expensed as incurred.

Impairment of long-lived assets

The Company reviews the recoverability of long-lived assets, including the related useful lives, whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. If necessary, the Company compares the estimated undiscounted future net cash flows to the related asset's carrying value to determine whether there has been an impairment. If an asset is considered impaired, the asset is written down to fair value, which is based either on discounted cash flows or appraised values in the period the impairment becomes known. The Company believes that long-lived assets are recoverable, and no impairment was deemed necessary, during the years ended December 31, 2021 and 2020.

Stock-based compensation

FASB ASC Topic 718, *Compensation – Stock Compensation*, prescribes accounting and reporting standards for all share-based payment transactions in which employee and non-employee services are acquired. The Company recognizes compensation cost relating to stock-based payment transactions using a fair-value measurement method, which requires all stock-based payments to employees, directors, and non-employee consultants, including grants of stock options, to be recognized in operating results as compensation expense based on fair value over the requisite service period of the awards. Prior to the Business Combination, the grant date fair value of the Company's common stock was typically be determined by the Company's board of directors with the assistance of management and a third-party valuation specialist.

Subsequent to the Business Combination, the board of directors elected to determine the fair value of our post-merger common stock based on the closing market price at closing on the date of grant. In determining the fair value of stock-based awards, the Company utilizes the Black-Scholes option-pricing model, which uses both historical and current market data to estimate fair value. The Black-Scholes option-pricing model incorporates various assumptions, such as the value of the underlying common stock, the risk-free interest rate, expected volatility, expected dividend yield and expected life of the options. For awards with performance-based vesting criteria, the Company estimates the probability of achievement of the performance criteria and recognizes compensation expense related to those awards expected to vest. No awards may have a term in excess of ten years. Forfeitures are recorded when they occur. Stock-based compensation expense is classified in the consolidated statements of operations based on the function to which the related services are provided. The company recognizes stock-based compensation expense over the expected term.

Income taxes

Deferred income taxes reflect future tax effects of temporary differences between the tax and financial reporting basis of the Company's assets and liabilities measured using enacted tax laws and statutory tax rates applicable to the periods when the temporary differences will affect taxable income. When necessary, deferred tax assets are reduced by a valuation allowance, to reflect realizable value, and all deferred tax balances are reported as long-term on the consolidated balance sheet. Accruals are maintained for uncertain tax positions, as necessary.

The Company uses a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken, or expected to be taken, in a tax return. The Company has elected to treat interest and penalties related to income taxes, to the extent they arise, as a component of income taxes.

Revenue recognition

The Company's revenue is primarily generated through grants from government and other (non-government) organizations.

Grant revenue is recognized during the period that the research and development services occur, as qualifying expenses are incurred or conditions of the grants are met. The Company concluded that payments received under these grants represent conditional, nonreciprocal contributions, as described in ASC 958, *Not-for-Profit Entities*, and that the grants are not within the scope of ASC 606, *Revenue from Contracts with Customers*, as the organizations providing the grants do not meet the definition of a customer. Expenses for grants are tracked by using a project code specific to the grant, and the employees also track hours worked by using the project code.

Comprehensive income (loss)

The Company had no items of comprehensive income (loss) other than its net income (loss).

Litigation

From time to time, the Company is involved in legal proceedings, investigations and claims generally incidental to its normal business activities. In accordance with U.S. GAAP, the Company accrues for loss contingencies when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Legal costs in connection with loss contingencies are expensed as incurred.

Earnings per share

On the Closing Date, the Company completed the Business Combination with BCYP, whereby the Company received 36,465,343 shares in exchange for all of its share capital. The effect of the Business Combination was reflected retroactively to January 1, 2020 and will be utilized for the calculation of earnings per share in all prior periods. The per share amounts have been updated to show the effect of the Exchange Ratio on earnings per share as if the exchange occurred at the beginning of both years for the consolidated financial statements of the Company. The impact of the stock exchange is also shown on the Company’s statements of changes in redeemable preferred stock and stockholders' equity (deficit).

In accordance with ASC 260, *Earnings per Share* (“ASC 260”), basic net income (loss) per share attributable to common stockholders is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common stock outstanding during the period. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted-average number of common stock outstanding for the period including potential dilutive common shares such as stock options.

Segment reporting

In accordance with ASC 280, *Segment Reporting*, the Company’s business activities are organized into one reportable segment, as only the Company’s operating results in their entirety are regularly reviewed by the Company’s chief operating decision maker to make decisions about resources to be allocated and to assess performance.

Common stock valuations

Prior to the Business Combination, the Company was required to periodically estimate the fair value of its common stock with the assistance of an independent third-party valuation firm, as discussed above, when issuing stock options and computing estimated stock-based compensation expense. The assumptions underlying these valuations represented the Company's best estimates, which involved inherent uncertainties and the application of significant levels of judgment. In order to determine the fair value of its common stock, the Company considered, among other items, previous transactions involving the sale of our securities, our business, financial condition and results of operations, economic and industry trends, the market performance of comparable publicly traded companies, and the lack of marketability of our common stock.

Subsequent to the Business Combination, the Company now determines the fair value of common stock based on the closing market price at closing on the date of grant.

Compensation expense related to stock-based transactions is measured and recognized in the financial statements at fair value of the post-merger common stock based on the closing market price at closing on the date of grant. Stock-based compensation expense is measured at the grant date based on the fair value of the equity award and is recognized as expense over the requisite service period, which is generally the vesting period, on the straight-line method. The Company estimates the fair value of each stock option award on the date of grant using the Black-Scholes option-pricing model. Determining the fair value of stock option awards at the grant date requires judgment, including estimating the expected volatility, expected term, risk-free interest rate, and expected dividends.

(3) New accounting standards

Recently-adopted standards

In December 2019, the FASB issued Accounting Standards Update (“ASU”) 2019- 12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC Topic 740, *Income Taxes* (“ASC 740”) and by clarifying and amending existing ASC 740 guidance. The guidance was effective for fiscal years, and interim periods within those years, beginning after December 15, 2020. Early adoption was permitted. The Company adopted the guidance as of January 1, 2021. The adoption did not have a material impact on the Company’s consolidated financial statements.

In August 2020, the FASB issued ASU 2020- 06, *Debt— Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging— Contracts in Entity' s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity' s Own Equity*, which simplifies the accounting for convertible instruments by removing major separation models required under current U.S. GAAP. The guidance removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify for such exception and simplifies the diluted earnings per share calculation in certain areas. The guidance is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted in annual reporting periods ending after December 15, 2020. The Company early adopted the guidance as of January 1, 2021. The adoption did not have a material impact on the Company’s consolidated financial statements.

(4) Reverse Recapitalization and Business Combination

On the Closing Date, BCYP closed the Business Combination with SAB Biotherapeutics, as a result of which SAB Biotherapeutics became a wholly-owned subsidiary of BCYP. While BCYP was the legal acquirer of SAB Biotherapeutics in the Business Combination, for accounting purposes, the Business Combination is treated as a Reverse Recapitalization. SAB Biotherapeutics is treated as the accounting acquirer with historical financial statements of SAB Biotherapeutics becoming the historic financial statements of BCYP (renamed SAB Biotherapeutics, Inc.) upon consummation of the Business Combination. Under this method of accounting, BCYP is treated as the "acquired" company and SAB Biotherapeutics is treated as the acquirer for financial reporting purposes. For accounting reporting purposes, the Business Combination was treated as the equivalent of SAB Biotherapeutics issuing stock for the net assets of BCYP, accompanied by a recapitalization. The net assets of BCYP were stated at historical cost, with no goodwill or other intangible assets recorded.

Pursuant to the Business Combination Agreement, the aggregate consideration payable to stockholders of SAB Biotherapeutics at the Closing Date consisted of 36,465,343 shares of New SAB Biotherapeutics common stock, par value $0.0001 per share ("Common Stock"). Each option of SAB Biotherapeutics that was outstanding and unexercised immediately prior to the Effective Time (whether vested or unvested) was assumed by BCYP and converted into an option to acquire an adjusted number of shares of Common Stock at an adjusted exercise price per share, in each case, pursuant to the terms of the Business Combination Agreement (the "Rollover Options").

Additionally, the Business Combination Agreement included an earnout provision whereby the shareholders of SAB Biotherapeutics shall be entitled to receive additional consideration (“Earnout Shares”) if the Company meets certain Volume Weighted Average Price (“VWAP") thresholds, or a change in control with a per share price exceeding the VWAP thresholds within a five-year period immediately following the Closing.

The Earnout Shares shall be released in four equal increments as follows:

(i) 25% of the Earnout Shares shall be released if, at any time during the five (5)-year period immediately following the Closing Date, the VWAP of the Company's publicly traded common stock is greater than or equal to $15.00 for any twenty (20) trading days within a period of thirty (30) consecutive trading days (the “First Earnout”).

(ii) 25% of the Earnout Shares shall be released if, at any time during the five (5)-year period immediately following the Closing Date, the VWAP of the Company's publicly traded common stock is greater than or equal to $20.00 for any twenty (20) trading days within a period of thirty (30) consecutive trading days (the “Second Earnout”).

(iii) 25% of the Earnout Shares shall be released if, at any time during the five (5)-year period immediately following the Closing Date, the VWAP of the Company's publicly traded common stock is greater than or equal to $25.00 for any twenty (20) trading days within a period of thirty (30) consecutive trading days (the “Third Earnout”).

(iv) 25% of the Earnout Shares shall be released if, at any time during the five (5)-year period immediately following the Closing Date, the VWAP of the Company's publicly traded common stock is greater than or equal to $30.00 for any twenty (20) trading days within a period of thirty (30) consecutive trading days (the “Fourth Earnout” and together with the First Earnout, the Second Earnout and the Third Earnout, the “Earnouts”).

At the Effective Time, each outstanding share of SAB Biotherapeutics common stock, including shares of SAB Biotherapeutics common stock resulting from the conversion of outstanding shares of SAB Biotherapeutics preferred stock (as calculated pursuant to the SAB Biotherapeutics certificate of incorporation), immediately prior to the Effective Time, was converted into the right to receive a pro rata portion of the total consideration and the contingent right to receive a pro rata portion of the Earnout Shares.

Pursuant to the terms of the Business Combination Agreement, SAB Biotherapeutics’ securityholders (including vested option holders) who own SAB Biotherapeutics securities immediately prior to the Closing Date will have the contingent right to receive their pro rata portion of (i) an aggregate of 12,000,000 shares of Common Stock (“Earnout Shares”), of which 1,508,063 are contingently issuable based upon future satisfaction of the aforementioned VWAP thresholds. The remaining 10,491,937 are legally issued and outstanding, if the Company does not meet the above VWAP thresholds, or a change in control with a per share price below the VWAP thresholds occurs within a five-year period immediately following the Closing Date, the shares will be returned to the Company.

The Earnout Shares are indexed to our equity and meet the criteria for equity classification. On the Closing Date, the fair value of the 12,000,000 Earnout Shares was $101.3 million. We reflected the Earnout Shares in the consolidated balance sheet at December 31, 2021 as a stock dividend by reducing additional paid-in capital, which was offset by the increase in additional paid-in capital associated with the Business Combination.

Preceding the Business Combination, on October 12, 2021, BCYP entered into a Forward Share Purchase Agreement (the “Forward Share Purchase Agreement”) with Radcliffe SPAC Master Fund, L.P., a Cayman Islands exempted limited partnership (“Radcliffe”). Under the Forward Share Purchase Agreement, Radcliffe shall sell and transfer to BCYP, and BCYP shall purchase from Radcliffe, up to 1,390,000 shares of common stock owned by Radcliffe at the closing of the Business Combination at a per Share price (the “Purchase Price”) equal to $10.10 per share (the "Market Sales Price"). Further, BCYP shall purchase the remaining shares held by Radcliffe not sold in the open market in excess of the Market Sales Price at the later of (a) the 90th day after the closing of the Business Combination, or (b) the first business day following the 95th day after the closing of the Business Combination if BCYP directs Radcliffe to sell shares at a mutually agreed upon price other than the Market Sales Price. As of the Closing Date, 1,296,891 shares of common stock were held by Radcliffe under the Forward Share Purchase Agreement.

Pursuant to the treatment of the Business Combination as a reverse recapitalization, SAB Biotherapeutics assumed the liability position as it existed as of the Effective Time. The net assets of the acquired entity were adjusted to include a forward share purchase liability of $13,098,599. In connection with the Business Combination, an amount matching the assumed forward share purchase liability was transferred into escrow, pending final settlement of the Forward Share Purchase Agreement in January 2022. Given the short-term nature of the Forward Share Purchase Agreement, the Company did not present value the forward share purchase liability. Subsequent settlements whereby Radcliffe sold shares in the open market in excess of the Market Sales Price were treated as a reduction in the assumed forward share purchase liability, with an offsetting increase in equity of the Company. Prior to December 31, 2021, a portion of the forward share purchase liability was settled. As of December 31, 2021, the forward share purchase liability balance was $6,338,306 on the consolidated balance sheet.

The following table reconciles the elements of the Business Combination to the consolidated statement of cash flows for the year ended December 31, 2021:

		Recapitalization
Cash - BCYP trust and cash, net of redemptions	$	22,535,723
Plus: restricted cash - Forward Share Purchase Agreement		13,098,599
Less: cash transaction costs allocated to the Company's equity		(1,294,097)
Total	$	34,340,225

The following table reconciles the elements of the Business Combination to the consolidated statement of changes in redeemable preferred stock and stockholders' equity (deficit) for the year ended December 31, 2021:

		Recapitalization
Cash - BCYP trust and cash, net of redemptions	$	22,535,723
Plus: restricted cash - Forward Share Purchase Agreement		13,098,599
Less: non-cash net working capital assumed from BCYP		(5,067,682)
Less: forward share purchase liability assumed from BCYP		(13,098,599)
Less: fair value of redeemable warrants		(6,569,062)
Less: transaction costs allocated to the Company's equity		(3,294,096)
Total	$	7,604,883

The following table details the number of shares of common stock issued immediately following the consummation of the Business Combination:

	Shares
Common stock, reedeemable and outstanding prior to Business Combination	11,500,000
Less: redemption of BCYP shares	(8,030,289)
Common stock of BCYP	3,469,711
BCYP Founder and private shares	3,292,200
Shares issued for services	247,525
Total BCYP shares	7,009,436
SAB Biotherapeutics, Inc and subsidiaries shareholders	36,465,343
Total shares of common stock immediately after Business Combination	43,474,779

The following table details the allocated assets acquired and liabilities assumed as follows:

Assets Acquired		
BCYP trust and cash, net of redemptions	$	22,535,723
Restricted cash - Forward Share Purchase Agreement		13,098,599
Other assets		102,742
Assets acquired	$	35,737,064
Liabilities Assumed		
Forward share purchase liability	$	13,098,599
Fair value of redeemable warrants		6,569,062
Other liabilities and accrued expenses		5,170,424
Liabilities assumed		24,838,085
Net Assets Acquired	$	10,898,979

(5) Revenue

During the years ended December 31, 2021 and 2020, the Company worked on the following grants:

Government grants

The total revenue for government grants was approximately $60.9 million and $52.8 million respectively, for the years ended December 31, 2021 and 2020.

National Institute of Health – National Institute of Allergy and Infectious Disease (“NIH-NIAID”) (Federal Award #1R44AI117976- 01A1) – this grant was for $1.4 million and started in September 2019 through August 2021. For the years ended December 31, 2021 and 2020, there was approximately $518,000 and $228,000, respectively, in grant income recognized. The corporation applied for an extension on the grant funding, and the extension is pending approval. If approved, there is approximately $203,000 in funding remaining for this grant as of December 31, 2021.

NIH-NIAID (Federal Award #1R41AI131823- 02) – this grant was for approximately $1.5 million and started in April 2019 through March 2021. The grant was subsequently amended to extend the date through March 2022. For the years ended December 31, 2021 and 2020, there was approximately $51,000 and $99,000 respectively, in grant income recognized. There is approximately $823,000 in funding remaining for this grant as of December 31, 2021.

NIH-NIAID through Geneva Foundation (Federal Award #1R01AI132313- 01, Subaward #S- 10511- 01) – this grant was for approximately $2.7 million and started in August 2017 through July 2021. For the years ended December 31, 2021 and 2020, there was approximately $94,000 and $351,000, respectively, in grant income recognized from this grant. The corporation applied for an extension on the grant funding, and the extension is pending approval. If approved, there is approximately $1.5 million in funding remaining for this grant as of December 31, 2021.

Department of Defense, Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense Enabling Biotechnologies ("JPEO") through Advanced Technology International – this grant was for a potential of $25 million, awarded in stages starting in August 2019 and with potential stages running through February 2023. Additional contract modifications were added to this contract in 2020 and 2021 for work on a COVID therapeutic, bringing the contract total to $204 million. For the years ended December 31, 2021 and 2020, there was approximately $60.2 million and $52.1 million, respectively, in grant income recognized from this grant. There is approximately $89.2 million in funding remaining for this grant as of December 31, 2021.

The grants for the JPEO contract are cost reimbursement agreements, with reimbursement of our direct research and development expense (labor and consumables) with an overhead charge (based on actual, reviewed quarterly) and a fixed fee (9%). However, a portion of the funding ($12 million in 2020) from this contract was for capacity building, including funding for equipment and facilities. A majority of this was for a 200L purification suite and two production barns, which are in locations that are currently leased by the corporation. While the government and the Company have agreed to negotiate in good faith to afford government access to this equipment, the Company is allowed to use this equipment for any project. As a majority of the value is in leasehold improvements (and therefore cannot be returned to the government), the corporation is treating the assets as company owned, and recognized the proceeds from the reimbursement as revenue. Therefore, revenue significantly exceeded research and development expenses, as there were no research and development expenses to offset the $12 million in revenue.

Other grants (non-government)

The total revenue for other grants (non-government) was approximately $0 and $2.4 million for the years ended December 31, 2021 and 2020, respectively.

CSL Behring – there were three contracts for a combined $2.4 million that were started and completed in 2020. These contracts were related to research and development for a COVID- 19 therapeutic ($2 million) and two other targets ($400,000).

(6) Earnings per share

On the Closing Date, the Company completed the Business Combination with BCYP, whereby the Company received 36,465,343 shares in exchange for all of its share capital. The effect of the Business Combination was recast to reflect the Exchange Ratio to January 1, 2020, and will be utilized for the calculation of earnings per share in all prior periods. The per share amounts have been updated to show the effect of the exchange on earnings per share as if the exchange occurred at the beginning of both years for the annual financial statements of the Company. The impact of the stock exchange is also shown on the Company's consolidated statements of changes in redeemable preferred stock and stockholders' equity (deficit).

Since the Company reported a net loss for the year ended December 31, 2021, it was required by ASC 260 to use basic weighted-average shares outstanding when calculating diluted net loss per share for the year ended December 31, 2021, as the potential dilutive securities are anti-dilutive.

		Year Ended December 31, 2021
Calculation of basic and diluted EPS attributable to the Company's shareholders		
Net loss attributable to the Company's shareholders	$	(17,144,531)
Weighted-average common shares outstanding – basic and diluted		27,339,180
Net loss per common share, basic and diluted	$	(0.63)

The shares in the table below were excluded from the calculation of diluted net loss per share due to their anti-dilutive effect:

	Year Ended December 31, 2021
Stock options	3,724,957
Common stock warrants	5,958,600
Earnout shares (1)	10,491,937
Contingently issuable earnout shares from unexercised Rollover Options	1,508,063
Total	21,683,557

(1) As the Earnout shares are subject to certain vesting requirements not satisfied as of the year ended December 31, 2021, the Earnout Shares held in escrow are excluded from calculating both basic and diluted earnings per share.

The following is a reconciliation of the numerator and denominator used to calculate basic earnings per share and diluted earnings per share for the year ended December 31, 2020:

		Year Ended December 31, 2020
Calculation of basic EPS attributable to the Company's shareholders		
Net income attributable to the Company's shareholders	$	20,117,773
Weighted-average common shares outstanding – basic		25,391,084
Net earnings per share, basic	$	0.79
Calculation of diluted EPS attributable to the Company's shareholders		
Net income attributable to the Company's shareholders	$	20,117,773
Weighted-average common shares outstanding – diluted		27,011,482
Net earnings per share, diluted	$	0.74

The following table reconciles the weighted-average common shares outstanding used in the calculation of basic earnings per share ("EPS") to the weighted-average common shares outstanding used in the calculation of diluted EPS for the year ended December 31, 2020:

	Year Ended December 31, 2020
Weighted-average common shares outstanding – basic	25,391,084
Stock options	1,620,398
Total	27,011,482

(7) Equipment

As of December 31, 2021 and 2020, the Company's equipment was as follows:

	2021	2020
Laboratory equipment	$ 7,431,988	$ 5,205,346
Animal facility	8,357,667	3,371,125
Animal facility equipment	1,253,879	1,003,629
Construction-in-progress	4,608,778	6,729,673
Leasehold improvements	5,700,364	185,971
Vehicles	135,593	96,693
Office furniture and equipment	46,202	20,219
Less: accumulated depreciation and amortization	3,220,016	1,767,186
Property, plant and equipment net	$ 24,314,455	$ 14,845,470

Depreciation and amortization expense for the years ended December 31, 2021 and 2020 was $1,488,614 and $383,142, respectively.

All tangible personal property with a useful life of at least three years and a unit acquisition cost of $5,000 or more will be capitalized and depreciated over its useful life using the straight-line method of depreciation. The Company will expense the full acquisition cost of tangible personal property below these thresholds in the year of purchase. The basis of accounting for depreciable fixed assets is acquisition cost and any additional expenditures required to make the asset ready for use. The carrying amount at the balance sheet date of long-lived assets under construction-in-progress includes assets purchased, constructed, or being developed internally that are not yet in service. Depreciation commences when the assets are placed in service.

The Company has several ongoing construction projects related to the expansion of its operating capacity. As of December 31, 2021 and 2020, the Company's construction-in-progress was as follows:

	2021	2020
200L commercial facility	$ —	$ 4,148,113
200L commercial facility equipment	—	486,381
New animal barn (#6)	—	1,551,167
New office space (at Headquarters)	11,183	477,907
Laboratory space at Headquarters	2,506,482	—
Lab equipment at Headquarters	246,801	—
IT equipment for new office space	212,209	—
Software	137,811	—
Bioreactors	1,280,728	—
Other	213,564	66,105
Total construction-in-progress	$ 4,608,778	$ 6,729,673

The Bioreactors, the laboratory space and equipment at Headquarters were placed into service at the end of March 2022.

(8) Leases

The Company has an operating lease for lab space from Sanford Health (a related party), under a lease that started in June 2014 and ran through June 2019, at which time the lease was amended to run through August 2024. This lease can be terminated with one year advance written notice. The lease is for $66,993 per month. The operating lease does not include an option to extend beyond the life of the current term. The lease does not provide an implicit rate, and, therefore, the Company used an IBR of 4.54% as the discount rate when measuring the operating lease liability. The Company estimated the incremental borrowing rate based upon comparing interest rates available in the market for similar borrowings and the credit quality of the Company.

The Company entered into a lease for office, laboratory, and warehouse space in November 2020. This lease has a 3-year term, with options to extend for 3 additional periods of 3 years each. The options were not included in the right of use calculation as it is unclear as to whether or not the location will meet the Company’s requirements beyond the next three years. The lease cost is $36,125 per month. The Company used an IBR of 4.69% as the discount rate when measuring the operating lease liability. The Company estimated the incremental borrowing rate based upon comparing interest rates available in the market for similar borrowings and the credit quality of the Company.

The Company entered into a lease for barn space for the housing of goats in April 2020. This lease has a 2-year term, with automatic renewals for a one-year period after the initial term expires until either party terminates. The options were not included in the right of use calculation, as the goat project is mostly funded by government grants, and those grants do not currently extend beyond the initial lease term. The lease cost is $665 per month for the first year, then $678 per month for the second year. The Company used an IBR of 4.08% as the discount rate when measuring the operating lease liability. The Company estimated the incremental borrowing rate based upon comparing interest rates available in the market for similar borrowings and the credit quality of the Company.

The Company has the following finance leases:

- In December 2018, the Company entered into a finance lease with Dakota Ag Properties for a new animal facility which includes the surrounding land. The facility and the land have been accounted for as separate lease components. The lease is based upon payback of $4,000,000 in construction costs, with a 20-year term at an interest rate of 8%. The monthly payment for this lease is $33,458. The Company has the option to purchase the asset at any time during the term of the lease for the balance of the unamortized lease payments.
- In December 2018, the Company entered into an equipment lease for a 12,000-gallon propane tank that is located on the Company’s animal facility. The lease is for five years, with an annual payment of $8,199. The Company has the option to purchase the asset at any time during the term of the lease for the balance of the unamortized lease payments.
- In July 2018, the Company entered into a lease agreement with a bank, for a Ruby Cell Analyzer. The lease agreement is for a five-year term. The monthly payment for this lease is $807. The Company has the option to purchase the asset at the end of the lease for $1.
- In March 2019, the Company entered into two lease agreements for laboratory equipment. The leases are each for a 3-year term and a combined monthly payment of $5,956. Both leases have a $1 purchase option at the end of the lease term.

The lease agreements do not require material variable lease payments, residual value guarantees or restrictive covenants.

The amortizable lives of the operating lease assets are limited by their expected lease terms. The amortizable lives of the finance lease assets are limited by their expected lives, as the Company intends to exercise the purchase options at the end of the leases. The following is the estimated useful lives of the finance lease assets:

Animal Facility	40 years
Equipment	3 - 7 years
Land	Indefinite

The Company's weighted-average remaining lease term and weighted-average discount rate for operating and finance leases as of December 31, 2021 are:

	Operating	Finance
Weighted-average remaining lease term	2.44 years	16.80 years
Weighted-average discount rate	4.58%	7.71%

The table below reconciles the undiscounted future minimum lease payments under non-cancelable leases with terms of more than one year to the total lease liabilities recognized on the consolidated balance sheet as of December 31, 2021:

	Operating	Finance
2022	$ 1,240,333	$ 444,928
2023	1,169,559	406,339
2024	535,943	401,496
2025	—	401,496
2026	—	401,496
Thereafter	—	4,784,494
Undiscounted future minimum lease payments	2,945,835	6,840,249
Less: Amount representing interest payments	(150,237)	(2,916,769)
Total lease liabilities	2,795,598	3,923,480
Less current portion	(1,142,413)	(161,050)
Noncurrent lease liabilities	$ 1,653,185	$ 3,762,430

Operating lease expense was approximately $1,083,000 and $710,000, respectively, for the years ended December 31, 2021 and 2020. Operating lease costs are included within research and development expenses on the consolidated statements of operations.

Finance lease costs for the years ended December 31, 2021 and 2020 included approximately $165,000 and $165,000, respectively, in right-of-use asset amortization and approximately $296,000 and $445,000, respectively, of interest expense. Finance lease costs are included within research and development expenses on the consolidated statements of operations.

Cash payments under operating and finance leases were approximately $1,147,000 and $491,000 , respectively, for the year ended December 31, 2021. Cash payments under operating and finance leases were approximately $564,000 and $491,000, respectively, for the year ended December 31, 2020.

(9) Accrued Expenses and Other Current Liabilities

As of December 31, 2021 and 2020, accrued expenses and other current liabilities consisted of the following:

	2021	2020
Accrued vacation	$ 552,629	$ 438,936
Accrued payroll	674,858	314,451
Accrued construction-in-progress	548,988	637,776
Accrued supplies	709,027	301,989
Accrued consulting	179,082	120,744
Accrued clinical trial expense	423,634	—
Accrued outside laboratory services	128,752	—
Accrued bonus & severance	1,804,288	—
Accrued contract manufacturing	1,000,824	—
Accrued legal	833,646	—
Accrued financing fees payable	5,100,000	—
Accrued franchise tax payable	216,251	—
Other accrued expenses	283,909	90,982
	12,455,888	1,904,878

(10) Notes Payable

As of December 31, 2021 and 2020, notes payable was as follows:

	2021 (Restated)	2020
Tractor loan	$ 25,013	$ 49,156
PPP loan	—	661,612
Insurance financing note payable	1,771,711	—
Total notes payable	1,796,724	710,768
Less: notes payable - current portion	1,796,724	538,731
Notes payable, noncurrent	$ —	$ 172,037

On November 15, 2017, the Company entered into a loan agreement with a bank, for the financing of an ultrasound machine for $18,997. The agreement was for a four-year term, with monthly payments of $440. The note payable was paid off in full in September 2020.

In December 2017, the Company entered into a loan agreement for the purchase of a tractor for $116,661 at a 3.6% interest rate. The loan included annual payments of $25,913 for the next five years starting in December 2018. The tractor loan balance as of December 31, 2021 and 2020 was $25,013 and $49,156, respectively. The total amount of the remaining loan balance is due in full in 2022.

On March 27, 2020, President Trump signed into law the “Coronavirus Aid, Relief and Economic Security Act (“CARES Act”). In April 2020, the Company entered into a loan agreement (the “PPP Loan”) with First Premier Bank under the Paycheck Protection Program (the “PPP”), which is part of the CARES Act administered by the United States Small Business Administration (“SBA”). As part of the application for these funds, the Company, in good faith, certified that the current economic uncertainty made the loan request necessary to support the ongoing operations of the Company. The certification further requires the Company to take into account its current business activity and its ability to access other sources of liquidity sufficient to support ongoing operations in a manner that is not significantly detrimental to the business. Under the PPP, the Company received proceeds of approximately $661,612. In accordance with the requirements of the PPP, the Company utilized the proceeds from the PPP Loan primarily for payroll costs. The PPP Loan has a 1.00% interest rate per annum, matures in April 2022 and is subject to the terms and conditions applicable to loans administered by the SBA under the PPP. Under the terms of PPP, all or certain amounts of the PPP Loan may be forgiven if they are used for qualifying expenses, as described in the CARES Act. The Company recorded the entire amount of the PPP Loan as debt. In February 2021, the Company submitted a forgiveness application related to its PPP Loan. In March 2021, the SBA approved the forgiveness of the PPP Loan, plus accrued interest. We recorded a gain on extinguishment of PPP Loan of $665,596 for the forgiveness of the PPP Loan and accrued interest within gain on debt extinguishment of Paycheck Protection Program SBA Loan on the consolidated statement of operations for the year ended December 31, 2021.

Note payable, related party

On February 24, 2016, the Company entered into a loan agreement with Christiansen Land and Cattle, Ltd. (“CLC”), a related party, for a $3.0 million revolving line of credit secured by a blanket security interest in the assets of the Company.

The Company borrowed $2.5 million from the line of credit in 2016, and $350,000 in 2017. The line of credit bears a fixed rate per annum of 6% compounded annually. The initial agreement was based upon repayment following a significant capital event – closing of equity or debt financing with total proceeds to the Company of $15 million or more or one year from the agreement date, whichever occurred first. The agreement was amended in August 2018 to extend the repayment timeframe to August 31, 2019. The first payment to repay this loan was made on August 31, 2018 ($1.0 million payment). Additional voluntary payments were being made at the rate of $30,000 per month. In August 2019, the agreement was amended to extend the maturity date to the earlier of August 31, 2020 or the occurrence of a significant capital event, as defined above. In July 2020, the note payable was paid in full.

Insurance Funding

The Company obtained financing for certain Director & Officer liability insurance policy premiums. The agreement assigns First Insurance Funding (Lender) a first priority lien on and security interest in the financed policies and any additional premium required in the financed policies including (a) all returned or unearned premiums, (b) all additional cash contributions or collateral amounts assessed by the insurance companies in relation to the financed policies and financed by Lender, (c) any credits generated by the financed policies, (d) dividend payments, and (e) loss payments which reduce unearned premiums. If any circumstances exist in which premiums related to any Financed Policy could become fully earned in the event of loss, Lender shall be named a loss-payee with respect to such policy.

The total premiums, taxes and fees financed is approximately $2,841,000 with an annual interest rate of 2.85%. In consideration of the premium payment by Lender to the insurance companies or the Agent or Broker, the Company unconditionally promise to pay Lender the amount Financed plus interest and other charges permitted under the Agreement. At December 31, 2021 the Company recognized approximately $1,772,000 as insurance financing note payable in its consolidated balance sheet. The Company will pay the insurance financing through installment payments with the last payment being on September 22, 2022.

(11) Preferred Stock

On the Closing Date, pursuant to the Business Combination (as described in Note 4), 17,750,882 outstanding shares of Preferred Stock were automatically converted into 8,259,505 shares of common stock pursuant to the Exchange Ratio.

In addition, upon the closing of the Business Combination, pursuant to the terms of the Second Amended and Restated Certificate of Incorporation, the Company authorized 10,000,000 shares of preferred stock with a par value $0.0001.

Prior to the Business Combination, in August 2019, the Company’s Certificate of Incorporation was amended to authorize the Company to issue 50,000,000 shares of preferred stock, of which 6,615,000 shares were designated as Series A preferred stock, 2,525,800 shares were designated as series A- 1 preferred stock, 4,039,963 shares were designated as series A- 2 preferred stock, 3,333,333 shares were designated as series A- 2A preferred stock, and 8,571,429 shares were designated as series B preferred stock. The carrying value of Series A preferred stock was $1 per share, Series A- 1 $1.88 per share, Series A- 2 & A-2A $3.00 per share, and Series B $3.50 per share.

The preferred stock was entitled to receive noncumulative dividends in preference to any dividend on the common stock when, as, and if declared by the Company’s board of directors. The holders of the preferred stock also were entitled to participate pro rata in any dividends paid on the common stock on an as-if-converted basis.

Each holder of preferred stock was entitled to the number of votes equal to the number of shares of common stock that it could be converted into. As long as there were 8,000,000 shares of preferred stock outstanding, the vote or written consent of the holder of the majority of the outstanding preferred stock (all series voting as a single class) was required to approve any amendment of the certificate of incorporation that changes voting, preferences or privileges or restrictions of the preferred stock.

In the event of liquidation or winding up of the Company, the preferred stockholders also were entitled to receive in preference to the holders of the common stock the greater of: a) a per share amount equal to their respective original purchase price plus any declared but unpaid dividends (the "Liquidation Preference"); or b) the amount to be paid on the common stock on an as-if-converted basis. The remaining assets would be distributed to the common stockholders.

The holders of preferred stock had the right to convert the preferred stock into common stock, at any time, utilizing the then- effective conversion rate. The effective conversion rate as of December 31, 2020 was 1:1. All preferred shares were automatically converted into common shares utilizing the then effective preferred conversion rate upon: a) the closing of the Company's sale of its common stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, covering the sale of the Company's common stock if gross proceeds are at least $20,000,000 and the Company's shares have been listed on a stock exchange, as defined; or b) the election of the holders of a majority of the outstanding shares of preferred stock.

With any change of control of the Company or financing, the preferred stockholders were to approve through majority vote any such change in control or financing event approved by the board of directors or the majority of the common stockholders. The preferred stock contained certain anti-dilution provisions, as defined.

In addition to the rights described above, series A- 2A preferred stock was redeemable at a price equal to $5 per preferred share at the option of the investor at any time during the redemption period, which was scheduled to commence in August 2022 and end in August 2023. As a result of the redemption feature, the Company classified the series A- 2A preferred stock as mezzanine equity as of January 1, 2020. However, the redemption feature was terminated during the year ended December 31, 2020, and the series A- 2A preferred stock was reclassified from mezzanine equity to permanent equity.

(12) Stock Option Plans

On August 5, 2014, the Company approved a stock option grant plan (the "2014 Equity Incentive Plan") for employees, directors, and non-employee consultants, which provides for the issuance of options to purchase common stock. The total shares authorized under the plan was originally 8,000,000; however, during 2019, the Plan was amended to increase the total shares authorized under the plan to 16,000,000. As a result of the Business Combination, the 2014 Equity Incentive Plan was amended to reduce the shares authorized to 7,444,800 based upon the impact of the Exchange Ratio.

As a result of the Business Combination, the Company adopted the 2021 Omnibus Equity Incentive Plan (hereinafter collectively with the 2014 Equity Incentive Plan referred to as the "Equity Compensation Plans"), representing 11,000,000 shares of common stock reserved for issuance upon exercise of stock options.

Vesting of the stock options is based upon years of service (employment). As of December 31, 2021 and 2020, 3,724,957 and 3,202,354 stock options, respectively, were vested and exercisable. During the year ended December 31, 2021, 12,500 of the vested options were exercised, while as of December 31, 2020, none of the vested stock options were exercised. As of December 31, 2021, the aggregate intrinsic value of stock options outstanding was $28.9 million, of which $4.1 million was unvested and $24.8 million was vested and exercisable.

The Company uses the Black Scholes model to estimate the fair value of the stock options granted. For stock options granted during the years ended December 31, 2021 and 2020, the Company utilized the following weighted-average assumptions: A risk free interest rate of 0.85% and 0.13%, respectively; expected term of 6.25 years (both years); expected dividend yield of 0% (both years); and a volatility factor of 92.8% and 106.1%, respectively. There were 328,718 forfeitures and zero expirations during the year ended December 31, 2021. There were no forfeitures or expirations during the year ended December 31, 2020.

The expected term of the stock options was estimated using the "simplified" method, as defined by the SEC's Staff Accounting Bulletin No. 107, *Share-Based Payment*. The volatility assumption was determined by examining the historical volatilities for industry peer companies, as the Company does not have sufficient trading history for its common stock. The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected term of the options. The dividend assumption is based on the Company's history and expectation of dividend payouts. The Company has never paid dividends on its common stock and does not anticipate paying dividends on its common stock in the foreseeable future. Therefore, the Company has assumed no dividend yield for purposes of estimating the fair value of the options.

Stock option activity for employees and non-employees under the Equity Compensation Plans for the years ended December 31, 2021 and 2020 was as follows:

	Options	Weighted Average Fair Value	Weighted Average Exercise Price
Balance, December 31, 2019	3,139,855	$ 0.82	$ 0.88
Granted	962,088	$ 3.44	$ 2.69
Balance, December 31, 2020	4,101,943	$ 1.43	$ 1.30
Granted	1,346,947	$ 5.36	$ 5.81
Forfeited	328,718	$ 2.17	$ 2.06
Exercised	12,500	$ 0.39	$ 0.54
Balance, December 31, 2021	5,107,672	$ 2.30	$ 2.44
Unvested at December 31, 2021	1,382,715	$ 5.41	$ 5.92
Vested and exercisable at December 31, 2021	3,724,957	$ 1.14	$ 1.16

Total unrecognized compensation cost related to non-vested stock options as of December 31, 2021 was approximately $6.6 million and is expected to be recognized within future operating results over a weighted-average period of 2.31 years. As of December 31, 2021, the weighted-average contractual term of the options outstanding was approximately 5.78 years. As of December 31, 2021, the weighted-average contractual term of the vested options was approximately 4.46 years. During the years ended December 31, 2021 and 2020, 461,701 shares and 400,632 shares, respectively, vested.

Stock-based compensation expense for the years ended December 31, 2021 and 2020 was as follows:

	2021	2020
Research and development	$ 964,926	$ 635,824
General and administrative	1,349,756	659,599
Total	$ 2,314,682	$ 1,295,423

(13) Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The following fair value hierarchy classifies the inputs to valuation techniques that would be used to measure fair value into one of three levels:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3: Unobservable inputs that reflect the reporting entity's own assumptions.

The following table presents information about the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2021, and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

	Total	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Liabilities:				
Public Warrant liability	$ 10,292,500	$ 10,292,500	$ —	$ —
Private Placement Warrant liability	$ 427,630	—	—	427,630
Total	$ 10,720,130	$ 10,292,500	$ —	$ 427,630

Public Warrants

Each whole Public Warrant entitles the holder to purchase one share of the Company's common stock at a price of $11.50 per share, subject to adjustment as discussed herein. The Public Warrants became exercisable 30 days after the Closing Date of the Business Combination, and will expire five years after the Closing Date of the Business Combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

Once the warrants become exercisable, the Company may call the warrants for redemption:

- in whole and not in part;
- at a price of $0.01 per warrant;
- upon not less than 30 days' prior written notice of redemption (the "30-day redemption period") to each warrant holder; and
- if, and only if, the reported last sale price of the common stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within a
- 30-trading day period ending three business days before the Company send the notice of redemption to the warrant holders.

If the Company calls the warrants for redemption as described above, the management will have the option to require any holder that wishes to exercise its warrant to do so on a "cashless basis." If the management takes advantage of this option, all holders of warrants would pay the exercise price by surrendering their warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the excess of the "fair market value" (defined below) over the exercise price of the warrants by (y) the fair market value. The "fair market value" shall mean the average reported last sale price of the common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

As of December 31, 2021, 5,750,000 Public Warrants were outstanding.

Private Placement Warrants

The Private Placement Warrants and the common stock issuable upon the exercise of the Private Placement Warrants were not transferable, assignable or saleable until after the completion of the Company's Business Combination. Additionally, the Private Placement Warrants will be exercisable on a cashless basis and be non-redeemable so long as they are held by the initial purchasers or their permitted transferees. If the Private Placement Warrants are held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by such holders on the same basis as the Public Warrants.

As of December 31, 2021, 208,600 Private Placement Warrants were outstanding.

Presentation and Valuation of the Warrants

The Warrants (both the Public Warrants and Private Placement Warrants) are accounted for as liabilities in accordance with ASC 815- 40, *Derivatives and Hedging— Contracts in Entity' s Own Equity* and were presented within warrant liabilities on the consolidated balance sheet as of December 31, 2021. The initial fair value of the warrant liabilities were measured at fair value at the Closing Date, and changes in the fair value of the warrant liabilities were presented within changes in fair value of warrant liabilities in the consolidated statement of operations for the year ended December 31, 2021.

On the Closing Date, the Company established the fair value of the Private Placement Warrants utilizing both the Black-Scholes Merton formula and a Monte Carlo Simulation ("MCS") analysis. Specifically, the Company considered an MCS to derive the implied volatility in the publicly-listed price of the Public Warrants. The Company then considered this implied volatility in selecting the volatility for the application of a Black-Scholes Merton model for the Private Placement Warrants. The Company determined the fair value of the Public Warrants by reference to the quoted market price.

The Public Warrants were classified as a Level 1 fair value measurement, due to the use of the quoted market price, and the Private Placement Warrants held privately by Big Cypress Holdings LLC, a Delaware limited liability company which acted as the Company's sponsor in connection with the IPO (the "Sponsor"), were classified as a Level 3 fair value measurement, due to the use of unobservable inputs.

The following table provides a summary of the changes in our Level 3 fair value measurements:

		2021
Balance, December 31, 2020	$	—
Initial measurement on the Closing Date		244,062
Change in fair value of Private Placement Warrant liability		183,568
Balance, December 31, 2021	$	427,630

The initial measurement on the Closing Date for the Public Warrant liability was approximately $6.3 million and the change in fair value of the Public Warrant liability was approximately $4.0 million for the year ended December 31, 2021.

The key inputs into the valuations as of the Closing Date and December 31, 2021 were as follows:

		(Initial Measurement) October 22, 2021		December 31, 2021
Risk-free interest rate		1.22%		1.24%
Expected term remaining (years)		5.00		4.81
Implied volatility		25.5%		43.0%
Closing common stock price on the measurement date	$	8.44	$	7.81

As of December 31, 2021 and 2020, the Company did not have any other assets or liabilities that are recorded at fair value on a recurring basis.

The Company believes that the carrying amounts of its cash and cash equivalents, accounts receivable, and notes payable approximate their fair values due to their near-term maturities.

(14) Income Taxes

Net deferred tax assets as of December 31, 2021 and 2020 consisted of the following:

	2021	2020
Deferred tax assets:		
Net operating loss carryforwards	$ 5,078,429	$ 2,659,082
Stock-based compensation	1,156,235	600,592
Vacation accrual	99,300	84,553
Lease liabilities	623,286	727,587
Other accrued expenses	1,119,721	—
Start-up costs	297,136	—
Total deferred tax assets	$ 8,374,107	$ 4,071,814
Less valuation allowance	(5,300,689)	(2,320,958)
Total deferred tax assets after valuation allowance	3,073,418	1,750,856
Deferred tax liabilities:		
Operating lease right-of-use asset	551,547	641,135
Depreciation and amortization	2,521,871	1,109,721
Total deferred tax liabilities	3,073,418	1,750,856
Net deferred tax asset (liability)	$ —	$ —

The reconciliation between the Company's effective tax rate and the statutory tax rate of 21% includes the following significant items: changes in the valuation allowance and permanent items including meals and entertainment. The rate reconciliation was as follows:

	2021		2020	
Rate reconciliation:				
Net (loss) income before tax	$ (17,144,531)		$ 20,117,773	
Federal income tax at statutory rate	(3,600,352)	21.00%	4,224,732	21.00%
State income tax	(9,849)	0.06%	—	—%
Permanent items	1,029,874	(6.01)%	918	(0.01)%
Valuation allowance	2,679,238	(15.63)%	(4,225,651)	(20.99)%
Other	(98,911)	0.58%	1	—%
	$ —	—%	$ —	—%

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of the deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. Based upon the level of historical losses and the uncertainty of future taxable income over the periods which the Company will realize the benefits of its net deferred tax assets, management believes it is more likely than not that the Company will not fully realize the benefits on the balance of its net deferred tax asset and, accordingly, the Company has established a valuation allowance on its net deferred tax assets. The valuation allowance increased by approximately $2,980,000 and decreased by approximately $4,226,000, respectively, for the years ended December 31, 2021 and 2020.

As of December 31, 2021, the Company had approximately $25,175,483 of federal net operating losses, which were generated after December 31, 2017 and can be carried forward indefinitely under the Tax Cuts and Jobs Act and may generally be used to offset up to 80% of future taxable income.

The Company has historically experienced ownership change(s) pursuant to Section 382 of the Internal Revenue Code ("the Code") of 1986, as amended, as well as similar state provisions. Utilization of the Company's net operating loss carryforwards are subject to annual limitation(s) due to historical ownership change(s) that have occurred and may be further restricted in the event future ownership changes occur. These ownership changes may limit the amount of the net operating loss carryover that can be utilized annually to offset future taxable income. In general, an "ownership change", as defined by Section 382 of the Code results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders.

U.S. GAAP provides that the tax effects from uncertain tax positions can be recognized in the consolidated financial statements only if the position is more likely than not of being sustained on audit, based on the technical merits of the position. As of December 31, 2021 and 2020, there were no uncertain tax provisions. There was no interest or penalties related to income taxes for the years ended December 31, 2021 and 2020, and there was no accrued interest or penalties associated with uncertain tax positions as of December 31, 2021 and 2020.

The Company files tax returns as prescribed by the laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. The Company's tax years are still open under the statute from 2018 to present. However, to the extent allowed by law, the taxing authorities may have the right to examine the period from 2015 through 2021 where net operating losses were generated and carried forward and make adjustments to the amount of the net operating loss carryforward amount. The Company is not currently under examination by federal or state jurisdictions.

As discussed in Note 10, *Notes Payable*, on March 27, 2020, the CARES Act was enacted in response to the COVID- 19 pandemic. It was determined the CARES Act did not materially impact the Company's tax provision as of December 31, 2021.

(15) Related Party Transactions

For the years ended December 31, 2021 and 2020, the Company paid consulting fees to a board member, Christine Hamilton, who is also an owner, of $25,000 and $25,000, respectively. As of December 31, 2021 and 2020, there was $6,250 (both years) in accrued board member fees for this related party.

For the year ended December 31, 2020, the Company paid Network Plus, LLC (owner is the spouse of an employee) approximately $19,000 for IT assistance and computer setups. The spouse became an employee of the Company in July 2020, and there was no further activity with this vendor.

For the years ended December 31, 2021 and 2020, the Company made lease payments to Dakota Ag Properties of $435,000 and $401,000, respectively. Dakota Ag Investments (part of Dakota Ag Properties) is a shareholder and owner of the Company.

For the years ended December 31, 2021 and 2020, not including lease payments, the Company made lab supply payments to Sanford Health (which is a shareholder of the Company) totaling approximately $108,000 and $152,000, respectively. The Company had no related party payables with Sanford Health as of December 31, 2021, and $10,000 of related party payables with Sanford Health as of December 31, 2020.

As discussed in Note 10, *Notes Payable*, on February 24, 2016, the Company entered into a loan agreement with CLC for a $3.0 million revolving line of credit secured by a blanket security interest in the assets of the Company. The principal owners of CLC are owners, members of the board of directors, and former employees of the Company. In July 2020, the note payable was paid in full. Please refer to Note 10, *Notes Payable*, for additional information.

(16) Employee Benefit Plan

The Company sponsors a defined contribution retirement plan. All the Company's employees are eligible to be enrolled in the employer-sponsored contributory retirement savings plan, which include features under Section 401(k) of the Internal Revenue Code of 1986, as amended, and provides for Company matching contributions. The Company's contributions to the plan are determined by its Board of Directors, subject to certain minimum requirements specified in the plan. For the years ended December 31, 2021 and 2020 the Company made matching contributions of 100% on 3% of the employee contributions, with an additional 50% match on the next 2% of employee contributions, resulting in approximately $325,000 and $188,000, respectively, of matching contributions paid by the Company.

(17) Commitments and Contingencies

The Company is not a party to any litigation, and, to its best knowledge, no action, suit or proceeding has been threatened against the Company which are expected to have a material adverse effect on its financial condition, results of operations or liquidity.

(18) Joint Development Agreement

In June 2019, the Company entered into a joint development agreement with the University of South Dakota Research Park, Inc. ("USDRP") for the construction of a multi-tenant office building and a manufacturing building. Pursuant to the agreement, the Company also entered into a lease agreement for 41,195 square feet of leasable area located in the building. The lease will commence upon completion of the building for an initial term of 12 years at a monthly payment of approximately $118,000. Aurochs, LLC, a wholly owned subsidiary, was founded to manage the construction funds for this project. All pre-construction costs up to a budgeted $2.7 million were paid directly by the Company and reimbursed by USDRP. As of December 31, 2021 and 2020, USDRP has spent approximately $2.12 million in design costs for this facility, with approximately $580,000 of the $2.7 million budget remaining. There were no receivables or payables for this project as of December 31, 2021 and 2020. USDRP and the Company intend to secure outside funding for all expenses incurred after the pre-construction phase. If funding cannot be secured to finance the construction of this facility, the Company will not be required to refund any of the design costs incurred to date. Due to the work around SARS- 2 and the JPEO contract (please refer to Note 5, *Revenue*, for additional information), this project is on hold as the Company focuses on development of our current internal manufacturing capabilities and completion of the JPEO contract work which will continue through the end of 2022.

(19) Subsequent Events

In January 2022, the Company received a final settlement notice related to the Forward Share Purchase Agreement. In conjunction with the final settlement, the Company repurchased 546,658 shares of common stock from Radcliffe at the Market Sales Price. The Company settled the repurchase with $5.5 million of the total $6.3 million held in restricted cash as of December 31, 2021, with the remaining balance of $0.8 million released to the Company. As a result of the final settlement transaction, the forward share purchase liability was reduced to zero.

On March 28, 2022, the Company entered into a Third Amendment to the Amended and Restated Lease Agreement with Sanford. The Third Amendment, among other things, provides for the least by the Company from Sanford of an additional 4,035 square feet of storage, laboratory and office space. The Third Amendment modifies the rent due under the Sanford Lease Agreement to $25.27 per square foot, or $841,061 due on an annual basis ($70,088 due on a monthly basis), until increased pursuant to the terms of the Sanford Lease Agreement. The associated amendment was retroactively applied to October 2021, and accounted for under ASC 842 as a separate right-of-use asset. The consolidated financial statements and Note 8, *Leases*, include the relevant adjustments for the Third Amendment.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement on Form S-8 (File No. 333-262452) and Form S-3 (File No. 333-269565) of our report dated April 14, 2023, relating to the consolidated financial statements of SAB Biotherapeutics, Inc. and Subsidiaries as of December 31, 2021 and 2020 and for each of the two years in the period ended December 31, 2021, included in this Amendment No. 1 to the Annual Report on Form 10-K for the year ended December 31, 2021.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
April 28, 2023

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Eddie J. Sullivan, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of SAB Biotherapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the small business issuer as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the small business issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) (Omitted pursuant to Exchange Act Rule 13a-14(a));

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 28,2023

/s/ Eddie J. Sullivan
Eddie J. Sullivan
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Russell Beyer, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of SAB Biotherapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the small business issuer as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the small business issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Omitted pursuant to Exchange Act Rule 13a-14(a))

    (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (d) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 28, 2023

/s/ Russell Beyer
Russell Beyer
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Amendment No. 1 to the Annual Report of SAB Biotherapeutics, Inc. (the “Company”) on Form 10-K for the period ending December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2023	By:	*/s/ Eddie J. Sullivan*
		Eddie J. Sullivan
		Chief Executive Officer
		(Principal Executive Officer)

Exhibit 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Amendment No. 1 to the Annual Report of SAB Biotherapeutics, Inc. (the "Company") on Form 10-K for the period ending December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2023	By:	*/s/ Russell Beyer*
		Russell Beyer
		Chief Financial Officer
		(Principal Financial and Accounting Officer)