UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2022

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: 001-40631

Caribou Biosciences, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**45-3728228**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2929 7th Street, Suite 105 Berkeley, California	**94710**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (510) 982-6030

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, par value $0.0001 per share	CRBU	The Nasdaq Global Select Market

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of May 4, 2022, the registrant had 60,705,391 shares of common stock, $0.0001 par value per share, outstanding.

Table of Contents

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES
Condensed Consolidated Balance Sheets
(Unaudited)
(in thousands, except share and per share amounts)

	March 31, 2022	December 31, 2021
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 147,630	$ 240,420
Marketable securities, short-term	206,101	135,412
Accounts receivable	374	1,153
Contract assets	1,494	1,488
Other receivables	4,169	5,483
Prepaid expenses and other current assets	8,242	7,236
Total current assets	368,010	391,192
NON-CURRENT ASSETS		
Investments in equity securities	7,666	7,626
Marketable securities, long-term	37,092	37,676
Property and equipment - net	6,016	4,887
Operating lease, right of use asset	25,749	—
Other assets	1,464	975
TOTAL ASSETS	$ 445,997	$ 442,356
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 1,814	$ 3,990
Accrued expenses and other current liabilities	11,190	13,136
Lease liabilities	825	—
Deferred revenue	12,838	8,703
Total current liabilities	26,667	25,829
LONG-TERM LIABILITIES		
Deferred revenue, net of current portion ($100 and $100 from related party)	17,326	22,032
Deferred rent and lease incentive liability	—	2,097
MSKCC success payments liability	2,484	4,080
Lease liabilities, non-current	27,238	—
Other liabilities	9	17
Deferred tax liabilities	476	476
Total liabilities	74,200	54,531
COMMITMENTS AND CONTINGENCIES (Note 9)		
STOCKHOLDERS' EQUITY		
Preferred stock, par value $0.0001 per share, 10,000,000 shares authorized at March 31, 2022 and December 31, 2021; no shares issued and outstanding as of March 31, 2022 and December 31, 2021, respectively	—	—
Common stock, par value $0.0001 per share, 300,000,000 shares authorized at March 31, 2022 and December 31, 2021, respectively; 60,689,609 and 60,263,158 shares issued and outstanding at March 31, 2022 and December 31, 2021, respectively	6	6
Additional paid-in-capital	489,762	485,748
Accumulated other comprehensive loss	(1,089)	(135)
Accumulated deficit	(116,882)	(97,794)
Total stockholders' equity	371,797	387,825
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 445,997	$ 442,356

The accompanying notes are an integral part of these condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES
Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)
(in thousands, except share and per share amounts)

	Three Months Ended March 31,	
	2022	2021
Licensing and collaboration revenue	$ 2,664	$ 1,586
Operating expenses:		
Research and development	13,924	10,165
General and administrative	9,593	4,596
Total operating expenses	23,517	14,761
Loss from operations	(20,853)	(13,175)
Other income (expense):		
Change in fair value of equity securities	(88)	—
Change in fair value of the MSKCC success payments liability	1,596	—
Other income - net	257	16
Total other income (expense)	1,765	16
Net loss	(19,088)	(13,159)
Other comprehensive loss:		
Net unrealized loss on available-for-sale marketable securities, net of tax	(954)	—
Net comprehensive loss	$ (20,042)	$ (13,159)
Net loss per share, basic and diluted	$ (0.32)	$ (1.39)
Weighted-average common shares outstanding, basic and diluted	60,546,170	9,499,448

The accompanying notes are an integral part of these condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES
Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(Unaudited)
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
BALANCE—December 31, 2021	—	$ —	60,263,158	$ 6	$ 485,748	$ (135)	$ (97,794)	$ 387,825
Stock-based compensation expense	—	—	—	—	3,024	—	—	3,024
Issuance of common stock under employee stock plans	—	—	36,596	—	361	—	—	361
Issuance of common stock on exercise of options	—	—	389,855	—	629	—	—	629
Net unrealized loss on available-for-sale marketable securities	—	—	—	—	—	(954)	—	(954)
Net loss	—	—	—	—	—	—	(19,088)	(19,088)
BALANCE—March 31, 2022	—	$ —	60,689,609	$ 6	$ 489,762	$ (1,089)	$ (116,882)	$ 371,797
BALANCE—December 31, 2020	7,766,582	$ 41,323	9,710,830	$ 1	$ 7,433	$ —	$ (30,871)	$ (23,437)
Issuance of Series C convertible preferred stock, net of issuance costs of $6.2 million	6,663,940	108,827	—	—	—	—	—	—
Issuance of common stock on exercise of options	—	—	584,614	—	564	—	—	564
Stock-based compensation expense	—	—	—	—	343	—	—	343
Net loss	—	—	—	—	—	—	(13,159)	(13,159)
BALANCE—March 31, 2021	14,430,522	$ 150,150	10,295,444	$ 1	$ 8,340	$ —	$ (44,030)	$ (35,689)

The accompanying notes are an integral part of these condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2022	**2021**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (19,088)	$ (13,159)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	308	221
Loss on disposal of fixed assets	—	3
Interest expense	—	4
Non-cash consideration for licensing and collaboration revenue	(128)	—
Change in fair value of equity securities	88	—
Stock-based compensation expense	3,024	343
Change in fair value of MSKCC success payments liability	(1,596)	686
Amortization of investment premiums	327	—
Non-cash lease expense	500	—
Changes in operating assets and liabilities:		
Accounts receivable	779	74
Contract assets	(6)	355
Other receivables	1,313	(1,095)
Prepaid expenses and other current assets	(1,296)	(562)
Other assets	(487)	(421)
Accounts payable	(1,915)	37
Accrued expenses and other current liabilities	(2,831)	3,879
Deferred revenue, current and long-term	(572)	29,964
Deferred rent and lease incentive liability	—	(8)
Operating lease liabilities	(85)	—
Other liabilities	(8)	(8)
Net cash provided by (used in) operating activities	(21,673)	20,313
CASH FLOWS FROM INVESTING ACTIVITIES:		
Maturities of marketable securities	39,300	—
Purchases of property and equipment	(723)	(22)
Purchases of marketable securities	(110,684)	—
Net cash used in investing activities	(72,107)	(22)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of Series C convertible preferred stock, net of issuance costs	—	109,235
Proceeds from exercise of stock options and purchases of common stock under employee stock purchase plan	990	564
Payments on capital lease	—	(119)
Net cash provided by financing activities	990	109,680
NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS, AND RESTRICTED CASH	(92,790)	129,971
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH — BEGINNING OF PERIOD	240,466	15,953
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH — END OF PERIOD	$ 147,676	$ 145,924
RECONCILIATION OF CASH, CASH EQUIVALENTS, AND RESTRICTED CASH		
Cash and cash equivalents	$ 147,630	$ 145,924
Restricted cash	46	—
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH ON THE BALANCE SHEET	$ 147,676	$ 145,924
SUPPLEMENTAL CASH FLOW INFORMATION:		

Cash paid for income taxes	$	—	$	—
Cash paid for interest	$	—	$	1
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:				
Acquisition of property and equipment included in accrued expenses and other current liabilities	$	981	$	95
Deferred issuance costs related to initial public offering unpaid at period end	$	—	$	422
Series C convertible preferred stock issuance costs unpaid at period end	$	—	$	408
Right-of-use-assets obtained in exchange for new operating lease liabilities	$	26,249	$	—

The accompanying notes are an integral part of these condensed consolidated financial statements.

CARIBOU BIOSCIENCES, INC. AND ITS SUBSIDIARIES
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Description of the Business, Organization, and Liquidity

Business and Organization

Caribou Biosciences, Inc. (the "Company" or "we") is a clinical-stage CRISPR genome-editing biopharmaceutical company dedicated to developing innovative, transformative therapies for patients with devastating diseases. CRISPR is an acronym for **C**lustered **R**egularly **I**nterspaced **S**hort **P**alindromic **R**epeats. Our novel CRISPR platform, **C**RISPR **h**ybrid **R**NA-**DNA** ("chRDNA," pronounced "chardonnay"), enables high genome-editing precision to develop cell therapies that are specifically engineered to target cancer and are armored for enhanced persistence. We are advancing a pipeline of allogeneic, or off-the-shelf, chimeric antigen receptor ("CAR")-T ("CAR-T") and CAR-natural killer ("CAR-NK") cell therapies for the treatment of patients with hematologic malignancies and solid tumors.

We incorporated in October 2011 as a Delaware corporation and are headquartered in Berkeley, California. We have four wholly owned subsidiaries: Antler Holdco, LLC, incorporated in Delaware in April 2019; Microbe Holdco, LLC, incorporated in Delaware in June 2020; Arboreal Holdco, LLC, incorporated in Delaware in November 2020; and Biloba Holdco, LLC, incorporated in Delaware in April 2021. Our wholly owned subsidiaries hold interests in our equity investments and do not have operating activities.

Liquidity

We have incurred net losses and negative cash flows from operations since our inception and we had an accumulated deficit of $116.9 million as of March 31, 2022. During the three months ended March 31, 2022, we incurred a net loss of $19.1 million and used $21.7 million of cash in operating activities. We expect to continue to incur substantial losses, and our ability to achieve and sustain profitability will depend on the successful development, approval, and commercialization of our product candidates and on our achievement of sufficient revenue to support our cost structure. We may never achieve profitability and, unless and until we do, we will need to continue to raise additional capital. Our management expects that existing cash, cash equivalents, and marketable securities of $390.8 million as of March 31, 2022, will be sufficient to fund our current operating plan for at least the next 12 months from the date of issuance of our condensed consolidated financial statements.

2. Summary of Significant Accounting Policies

There have been no changes to the significant accounting policies disclosed in Note 2 to the annual consolidated financial statements for the year ended December 31, 2021 included in our Annual Report on Form 10-K ("Form 10-K"), other than changes to our leasing policy described below in connection with the adoption of the guidance under the Accounting Standards Codification ("ASC") 842, Leases.

Basis of Presentation and Principles of Consolidation

The condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include the accounts of Caribou Biosciences, Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions are eliminated in consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities; the disclosure of contingent assets and liabilities at the date of our condensed consolidated financial statements; and the reported amounts of revenue, income, and expenses during the applicable reporting period. On an ongoing basis, we evaluate our estimates and assumptions, including those related to revenue recognition, common stock valuation, stock-based compensation expense, accrued expenses related to research and development activities, valuation of the Memorial Sloan Kettering Cancer Center ("MSKCC") success payments liability, and income taxes. Our management bases its estimates on historical experience and on various other assumptions that they believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Segments

We operate and manage our business as one reportable and operating segment, which is the business of developing a pipeline of allogeneic CAR-T and CAR-NK cell therapies. Our president and chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for allocating resources and evaluating financial performance. All long-lived assets are maintained in the United States.

Concentrations of Credit Risk and Other Uncertainties

Financial instruments that potentially subject us to concentration of credit risk consist of cash and cash equivalents, accounts receivable, contract assets, other receivables, and investments in marketable securities and equity securities. Substantially all of our cash and cash equivalents are deposited in accounts at two financial institutions, and account balances may at times exceed federally insured limits. We mitigate the risks by investing in high-grade instruments, limiting our exposure to one issuer, and we monitor the ongoing creditworthiness of the financial institutions and issuers. We believe these financial institutions to be of high credit quality.

Licensees that represent 10% or more of our revenue and accounts receivable and contract assets are as follows:

	Revenue		Accounts Receivable and Contract Assets	
	Three Months Ended			
	March 31, 2022	March 31, 2021	As of March 31, 2022	As of December 31, 2021
Licensee A	23.1%	38.8%	*	*
Licensee B	19.6%	34.1%	28.0%	24.6%
Licensee C	35.0%	*	33.4%	45.1%
Licensee D	*	*	14.3%	*
Total	77.8%	72.9%	75.7%	69.7%

*Less than 10%

We monitor economic conditions to identify facts or circumstances that may indicate if any of our accounts receivable are not collectible or if the contract assets should be impaired. No allowance for doubtful accounts was recorded as of March 31, 2022 or December 31, 2021.

Leases

We adopted the guidance under ASC 842 on January 1, 2022 using the modified retrospective approach with a cumulative-effect adjustment as of January 1, 2022 in accordance with the Accounting Standard Update (“ASU”) 2016-02, Leases (Topic 842). We determine whether an arrangement is or contains a lease at the inception of the arrangement and whether such a lease is classified as a finance lease or operating lease at the commencement date of the lease. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities, and long-term lease liabilities. We elected not to recognize the right-of-use assets and lease liabilities for leases with lease terms of 12 months or less (short-term leases). Lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected lease term. As the interest rate implicit in our lease contracts is not readily determinable, we utilize a collateralized incremental borrowing rate based on the information available at the commencement date to determine the present value of lease payments. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received and impairment charges if we determine the right-of-use asset is impaired. There was no cumulative-effect adjustment recorded to retained earnings on January 1, 2022.

We consider the lease term to be the noncancellable period that we have the right to use the underlying asset, together with any periods where it is reasonably certain we will exercise an option to extend (or not terminate) the lease. Periods covered by an option to extend (or not terminate) the lease in which the exercise of the option is controlled by the lessor are included in the lease term.

Rent expense for operating leases is recognized on a straight-line basis over the lease term and is presented in operating expenses on the statements of operations and comprehensive loss. We have elected to not separate lease and non-lease components for our facilities leases and leases of electroporation devices and, instead, we account for each separate lease component and the non-lease components associated with that lease component as a single lease component. Variable lease payments are recognized as incurred and are presented in operating expenses on the statements of operations and comprehensive loss.

As of March 31, 2022 and December 31, 2021, we had no finance leases. For more information about the impact of adoption and disclosures on our leases, see Note 9.

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (the "FASB") or other standard-setting bodies and are adopted by us as of the specified effective date.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). This ASU requires a lessee to recognize in its statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. We adopted the new standard as of January 1, 2022, using the modified retrospective approach. Comparative periods were not adjusted and continue to be presented under the previous accounting guidance. We elected the package of practical expedients permitted under the transition guidance, which allowed us to carry forward the historical lease classification of contracts entered into prior to January 1, 2022.

Our adoption of the new standard impacted the condensed consolidated balance sheets as follows (in thousands):

	January 1, 2022		
	Pre-ASC 842 Balance	ASC 842 Adoption Impact	Post-ASC 842 Balance
Operating lease right-of-use assets	$ —	$ 22,818	$ 22,818
Prepaid rent	$ 291	$ (291)	$ —
Accrued expenses and other current liabilities*	$ 13,136	$ 683	$ 13,819
Long-term operating lease liabilities	$ —	$ 23,941	$ 23,941
Deferred rent and lease incentive liability	$ 2,097	$ (2,097)	$ —

*Adjustment represents the current portion of operating lease liabilities of $0.8 million and reclassification of the current portion of the lease incentive liability of $0.1 million to reduce the operating lease right-of-use assets.

New Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, Financial Instruments–Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326). This ASU provides guidance on the measurement of credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. ASU 2016-13 replaces the current incurred loss impairment approach with a methodology to reflect expected credit losses and requires consideration of a broader range of reasonable and supportable information to explain credit loss estimates. This ASU is to be applied on a modified retrospective approach and is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022, and interim reporting periods within fiscal years beginning after December 15, 2023. Early adoption is permitted for all entities for fiscal years beginning after December 15, 2018, and interim periods therein. We are currently evaluating the impact of adoption of ASU 2016-13 on our condensed consolidated financial statements.

3. Fair Value Measurements and Fair Value of Financial Instruments

The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Assets and liabilities measured at fair value are classified in their entireties based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires our management to make judgments and consider factors specific to the asset or liability.

Our financial instruments consist of Level 1, Level 2, and Level 3 financial instruments. We generally classify our marketable securities as Level 2. Instruments are classified as Level 2 when observable market prices for identical securities that are traded in less active markets are used. When observable market prices for identical securities are not available, such instruments are priced using benchmark curves, benchmarking of like securities, sector groupings, matrix pricing, and valuation models. These valuation models are proprietary to the pricing providers or brokers and incorporate a number of inputs, including in approximate order of priority: benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including market research publications. For certain security types, additional inputs may be used, or some of the standard inputs may not be applicable. Evaluators may prioritize inputs differently on any given day for any security based on market conditions, and not all inputs listed are available for use in the evaluation process for each security evaluation on any given day. Level 1 financial instruments are comprised of money market funds and U.S. Treasury bills. Level 2 financial instruments are comprised of commercial paper and corporate debt securities. Financial assets and liabilities are considered Level 3 when their fair values are determined using pricing models, discounted cash flow methodologies, or similar techniques, and at least one significant model assumption or input is unobservable. Level 3 financial instruments consist of the MSKCC success payments liability.

The following table sets forth our financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	Fair Value Measurements as of March 31, 2022			
	Total	Level 1	Level 2	Level 3
Assets:				
Commercial paper ($46,516 included in cash and cash equivalents)	$ 129,369	$ —	$ 129,369	$ —
U.S. Treasury bills ($26,990 included in cash and cash equivalents)	110,358	110,358	—	—
Money market fund investments (included in cash and cash equivalents)	64,730	64,730	—	—
Corporate debt securities ($2,999 included in cash and cash equivalents)	64,207	—	64,207	—
U.S. government agency bonds ($6,395 included in cash and cash equivalents)	22,159	—	22,159	—
Total fair value of assets	$ 390,823	$ 175,088	$ 215,735	$ —
Liabilities:				
MSKCC success payments liability	$ 2,484	$ —	$ —	$ 2,484
Total fair value of liabilities	$ 2,484	$ —	$ —	$ 2,484

	Fair Value Measurements as of December 31, 2021			
	Total	Level 1	Level 2	Level 3
Assets:				
Money market fund investments (included in cash and cash equivalents)	$ 181,528	$ 181,528	$ —	$ —
Commercial paper ($58,892 included in cash and cash equivalents)	141,676	—	141,676	—
Corporate debt securities	38,649	—	38,649	—
U.S. Treasury bills	26,590	26,590	—	—
U.S. government agency bonds	25,065	—	25,065	—
Total fair value of assets	$ 413,508	$ 208,118	$ 205,390	$ —
Liabilities:				
MSKCC success payments liability	$ 4,080	$ —	$ —	$ 4,080
Total fair value of liabilities	$ 4,080	$ —	$ —	$ 4,080

The fair value and amortized cost of cash equivalents and available-for-sale marketable securities by major security type as of March 31, 2022 and December 31, 2021 are presented in the following tables (in thousands):

	As of March 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Commercial paper ($46,516 included in cash and cash equivalents)	$ 129,544	$ 3	$ (178)	$ 129,369
U.S. Treasury bills ($26,990 included in cash and cash equivalents)	110,867	1	(510)	110,358
Money market investments (included in cash equivalents)	64,730	—	—	64,730
Corporate debt securities ($2,999 included in cash and cash equivalents)	64,479	3	(275)	64,207
U.S. government agency bonds ($6,395 included in cash and cash equivalents)	22,291	—	(132)	22,159
Total cash equivalents and marketable securities	$ 391,911	$ 7	$ (1,095)	$ 390,823

Classified as:	
Cash and cash equivalents	$ 147,630
Marketable securities, short-term	206,101
Marketable securities, long-term	37,092
Total cash equivalents and marketable securities	$ 390,823

	As of December 31, 2021			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Money market investments (included in cash equivalents)	$ 181,528	$ -	$ —	$ 181,528
Commercial paper ($58,892 included in cash equivalents)	141,726	1	(51)	141,676
U.S. government agency bonds	25,102	-	(37)	25,065
Corporate debt securities	38,661	4	(16)	38,649
U.S. Treasury bills	26,626	1	(37)	26,590
Total cash equivalents and marketable securities	$ 413,643	$ 6	$ (141)	$ 413,508

Classified as:	
Cash and cash equivalents	$ 240,420
Marketable securities, short-term	135,412
Marketable securities, long-term	37,676
Total cash equivalents and marketable securities	$ 413,508

The following table sets forth a summary of the changes in the fair value of our Level 3 financial liability (in thousands):

	MSKCC Success Payments Liability
Balance at December 31, 2021	$ 4,080
Change in fair value	(1,596)
Balance at March 31, 2022	$ 2,484

Our liability for the MSKCC success payments is carried at fair value and changes are recognized as expense or income as part of other income (expense) until the success payments liability is paid or expires (Note 4). We recorded $1.6 million and $0.7 million change in fair value of the MSKCC success payments liability in other income (expense) and research and development expense in our condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2022 and 2021, respectively.

We utilize a Monte Carlo simulation model that models the future movement of stock prices based on several key variables. This model requires significant estimates and assumptions in determining the estimated fair value of the MSKCC success payments liability at each balance sheet date. The assumptions used to calculate the fair value of the MSKCC success payments are subject to a significant amount of judgment including the expected volatility that was estimated using available information about the historical volatility of stocks of publicly traded companies that are similar to us, the estimated term, and the estimated number and timing of valuation measurement dates. The table below summarizes key assumptions used in the valuation of MSKCC success payments liability:

	As of March 31, 2022	As of December 31, 2021
Fair value of common stock	$ 9.180	$ 15.090
Risk-free interest rate	2.32%	1.52%
Expected volatility	75%	75%
Probability	4.2% to 14.2%	7.0% to 20.9%
Expected term (years)	4.6 to 6.0	4.2 to 5.5

The computation of expected volatility was estimated using a combination of available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption and the historical and implied volatility of our stock. The risk-free interest rate, expected volatility, and expected term assumptions depend on the estimated timing of our phase 1 clinical trial for our CB-012 product candidate utilizing the know-how, biological materials, and intellectual property licensed under the MSKCC Agreement and the estimated timing of marketing approval for this product candidate from the U.S. Food and Drug Administration ("FDA"). In addition, we incorporated the estimated number and timing of valuation measurement dates in the calculation of the MSKCC success payments liability.

A small change in the assumptions and other inputs, such as the fair value of our common stock, may have a relatively large change in the estimated valuation and associated liability and expense or income.

4. Significant Agreements

The Regents of the University of California and the University of Vienna

We entered into an Exclusive License Agreement, dated April 16, 2013 (as amended, the "UC/Vienna Agreement") with The Regents of the University of California ("UC") and the University of Vienna ("Vienna") (together, "UC/Vienna") wherein UC/Vienna granted us an exclusive worldwide license, with the right to sublicense, in all fields to the foundational CRISPR-Cas9 patent family co-owned by UC, Vienna, and Dr. Emmanuelle Charpentier (the "CVC IP"). Dr. Charpentier has not granted us any rights, either directly or indirectly. The UC/Vienna Agreement continues until the last-to-expire patent or last-to-be-abandoned patent application within the CVC IP; provided, however, that UC/Vienna may terminate the UC/Vienna Agreement upon the occurrence of certain events, and we may terminate the UC/Vienna Agreement at our sole discretion upon written notice. Without patent term adjustment or patent term extension, the CVC IP will expire in 2033. The UC/Vienna Agreement includes certain diligence milestones that we must meet. For products and services sold by us that are covered by the CVC IP, we will owe low- to mid-single-digit percent royalties on net sales, subject to a minimum annual royalty. Prior to the time that we are selling products, we owe UC/Vienna an annual license maintenance fee. We may owe UC/Vienna up to $3.4 million in certain regulatory and clinical milestone payments in the field of human therapeutics and diagnostics for products that are covered by the CVC IP and developed by us, an affiliate, or a sublicensee. Additionally, we pay UC/Vienna a specified percentage of sublicensing revenue, including cash and equity, we receive from sublicensing the CVC IP, subject to certain exceptions. If we include intellectual property owned or controlled by us in a sublicense to the CVC IP, we pay UC/Vienna a low double-digit percentage of sublicensing revenues received under the sublicense. If we do not include intellectual property owned or controlled by us in a sublicense to the CVC IP, we pay UC/Vienna 50% of sublicensing revenues received under the sublicense. To date, we have entered into over 25 sublicensing agreements in a variety of fields such as human therapeutics, forestry, agriculture, research reagents, transgenic animals, certain livestock targets, internal research, bioproduction, cell lines, and microbial applications that include the CVC IP as well as other Cas9 intellectual property owned or controlled by us. We are obligated to reimburse UC for its prosecution and maintenance costs of the CVC IP.

For each of the three months ended March 31, 2022 and 2021, we incurred $0.3 million for payments we owe to UC related to sublicensing revenues, which we recorded in research and development expenses in our condensed consolidated statements of operations and comprehensive loss.

For the three months ended March 31, 2022 and 2021, we reimbursed UC $2.3 million and $3.2 million, respectively, for prosecution and maintenance costs of the CVC IP, which were recorded in general and administrative expenses in our condensed consolidated statements of operations and comprehensive loss.

On December 15, 2016, we entered into a Consent to Assignments, Licensing and Common Ownership and Invention Management Agreement ("IMA") relating to the CVC IP. Under the IMA, CRISPR Therapeutics AG ("CRISPR") reimburses us 50% of the amounts we reimburse UC for patent prosecution and maintenance costs of the CVC IP. For the three months ended March 31, 2022 and 2021, CRISPR reimbursed us $1.1 million and $1.6 million, respectively, which we recorded as reductions of general and administrative expenses in our condensed consolidated statements of operations and comprehensive loss.

Memorial Sloan Kettering Cancer Center ("MSKCC")

On November 13, 2020, we entered into an Exclusive License Agreement with MSKCC (the "MSKCC Agreement"), under which we exclusively licensed know-how, biological materials, and patent families relating to fully-human single-chain variable fragments targeting CD371 (also known as CLL-1) for use in T cells, NK cells, and genome-edited induced pluripotent stem cells ("iPSCs") for allogeneic CD371-targeted cell therapies (currently used in our CB-012 product candidate). We paid MSKCC an upfront payment of $0.5 million in cash and $2.1 million in stock. For each licensed CD371 product, we may owe potential clinical, regulatory, and commercial milestone payments totaling $112.0 million. In addition, in the event we, our affiliates, or sublicensees, receive regulatory approval for a licensed CD371 product, we will owe low- to mid-single-digit percent royalties on net sales by us, our affiliates, and our sublicensees. Our license from MSKCC includes the right to sublicense through multiple tiers and we will owe MSKCC a percentage of upfront cash or equity received from our sublicensees. The percentage owed decreases as our licensed CD371 product candidate moves through development, starting at a low-double-digit percentage if clinical trials have not yet begun and decreasing to a mid-single-digit percentage if our licensed CD371 product candidate is in later clinical trial stages. We are also responsible for paying a percentage of licensed patent costs. The MSKCC Agreement includes certain diligence milestones that we must meet by specified dates, which may be extended upon payment of additional fees.

MSKCC is entitled to certain success payments if our common stock fair value increases by certain multiples of increasing value based on a comparison of the fair market value of our common stock to $5.1914 per share, adjusted for any future stock splits (the "Initial Share Price"), during a specified time period. Under the MSKCC Agreement, as a publicly traded company, our common stock fair value is determined by any given 45-day volume weighted-average trading price. At our option, success payments to MSKCC may be made in cash or common stock. The relevant time period commences when the first patient is dosed with a licensed CD371 product candidate in the first phase 1 clinical trial and ends upon the earlier of the third anniversary from the approval of our, or our affiliate's, or sublicensee's, biologics license application ("BLA") by the FDA or 10 years from the date the first patient was dosed with a licensed CD371 product candidate in the first phase 1 clinical trial. The aggregate success payments will not exceed $35.0 million. Additionally, if we undergo a change of control during the specified time period, we may owe a change of control payment, depending upon the increase in our stock price due to the change of control and also to what extent success payments have already been paid by us to MSKCC. In no event will the combination of success payments and the change of control payment owed to MSKCC exceed $35.0 million.

The following table summarizes the amounts of the MSKCC success payments:

Multiple of Initial Share Price giving rise to a success payment	5x	10x	15x
MSKCC success payments (in millions)	$ 10.0	$ 10.0	$ 15.0

We may terminate the MSKCC Agreement upon 90 calendar days' prior written notice to MSKCC. MSKCC may terminate the MSKCC Agreement in the event of our uncured material breach, bankruptcy, or criminal activity. If MSKCC materially breaches the MSKCC Agreement in certain circumstances (e.g., granting a third party a license in our field) then, during the time of such uncured breach, MSKCC will not be entitled to receive any success payments or any change of control payment.

As of March 31, 2022, the estimated fair value of the total success payments obligation to MSKCC was $2.5 million, which was included in long-term liabilities in our condensed consolidated balance sheets. For the three months ended March 31, 2022 and 2021, we recognized a $1.6 million and $0.7 million, respectively, change in fair value of the MSKCC success payments liability, which was recorded in other income (expense) in our condensed consolidated statements of operations and comprehensive loss.

Intellia Therapeutics, Inc.

On July 16, 2014, we entered into a License Agreement (as amended, the "Intellia License Agreement") with Intellia, LLC, to which Intellia Therapeutics, Inc. ("Intellia") is a successor in interest. Under the Intellia License Agreement, we granted Intellia an exclusive worldwide license, with the right to sublicense, to certain CRISPR-Cas9 technology for a defined field of human therapeutics. Intellia granted us an exclusive worldwide license, with the right to sublicense, to certain of its CRISPR-Cas9 technology for all fields outside of the defined field of human therapeutics. Under the Intellia License Agreement, each party is responsible for 30% of the other party's expenses for prosecution and maintenance of the licensed intellectual property. For the three months ended March 31, 2022 and March 31, 2021, we reimbursed Intellia less than $0.1 million, which was recorded as general and administrative expenses in our condensed consolidated statements of operations and comprehensive loss. During each of the three months ended March 31, 2022 and 2021, Intellia reimbursed us $0.3 million and $0.5 million, respectively (including reimbursement for a portion of the patent prosecution and maintenance costs of the CVC IP paid to UC), which were recorded as reductions of general and administrative expenses in our condensed consolidated statements of operations and comprehensive loss. The term of the Intellia License Agreement continues for the life of the licensed patents and patent applications; provided, however, either party may terminate the agreement upon the occurrence of certain events.

On June 16, 2021, we entered into a leaseback agreement with Intellia (the "Leaseback Agreement"). Pursuant to the Leaseback Agreement, in exchange for Intellia's grant to us of an exclusive license to certain intellectual property relating to CRISPR-Cas9, including Cas9 chRDNAs, for use solely in the manufacture of our CB-010 product candidate, we paid Intellia an upfront cash payment of $1.0 million and will pay up to $23.0 million in potential future regulatory and sales milestones. Additionally, we will owe Intellia low- to mid-single-digit percent royalties on net sales of our CB-010 product candidate by us, our affiliates, and sublicensees until the expiration, abandonment, or invalidation of the last patent within the intellectual property relating to CRISPR-Cas9, including that relating to Cas9 chRDNAs (i.e., 2036, without patent term adjustment or patent term extension).

Pioneer Hi-Bred International, Inc. (now Corteva Agriscience)

On July 13, 2015, we and Pioneer Hi-Bred International, Inc. ("Pioneer") (now Corteva Agriscience), then a DuPont company ("DuPont"), entered into an Amended and Restated Collaboration and License Agreement, as amended (the "Pioneer Agreement"). Under the terms of the Pioneer Agreement, we and Pioneer cross-licensed CRISPR intellectual property portfolios. Pioneer granted us an exclusive worldwide license, with the right to sublicense, to its CRISPR intellectual property in the field of research tools, as well as a non-exclusive worldwide license to such intellectual property in human and animal therapeutics, industrial biotechnology, certain agriculture segments, and other fields; and we granted Pioneer an exclusive worldwide license, with the right to sublicense, to our CRISPR intellectual property, including the CVC IP, in a defined field of agriculture relating to specified row crops, as well as a non-exclusive worldwide license to the intellectual property in other agricultural applications, industrial biotechnology, nutrition and health, and other fields. The Pioneer Agreement continues until the expiration, abandonment, or invalidation of the last patent or patent application within the licensed intellectual property; provided, however, that the parties may terminate the Pioneer Agreement by mutual consent or either party may unilaterally terminate the Pioneer Agreement in the event of an uncured breach of a payment obligation, bankruptcy, or failure to maintain or own licensed intellectual property by the other party if the non-breaching party is materially adversely affected by the failure. We are obligated to pay low-single-digit percent royalties to Pioneer for the sales of our products in the research tools field as well as certain sublicensing revenues in that field. We are eligible to receive milestone payments from Pioneer if certain regulatory and commercial milestones are met related to specified row crops, for a total of up to $22.4 million, as well as to receive low-single-digit percent royalties for sales of defined agricultural products and certain sublicensing revenues in that field. In March 2021, we received a milestone payment of $0.3 million from Pioneer. Initially, Pioneer owned the patents and patent applications developed under the collaboration, including the chRDNA patent family, and granted us an exclusive license to these patents and patent applications in the fields of research tools and therapeutics.

In December 2020, we and Pioneer entered into an amendment to the Pioneer Agreement under which Pioneer assigned to us the chRDNA patent family developed under the research collaboration, and we paid Pioneer an upfront payment of $0.5 million. We considered the payment to Pioneer in accordance with revenue recognition guidance and accounted for it as a reduction of the licensing and collaboration revenue in our condensed consolidated statements of operations and comprehensive loss. In addition to the upfront payment, we are now obligated to pay all patent prosecution and maintenance costs for the chRDNA patent family; up to $2.8 million in regulatory milestone payments for therapeutic products developed by us, our affiliates, or licensees that are covered by the chRDNA patent family; up to $20.0 million in sales milestones over a total of four therapeutics products sold by us, our affiliates, or licensees that are covered by the chRDNA patent family; and a low-single-digit percentage of licensing revenue we receive for licensing the chRDNA patent family after December 2020.

No licensing fee payments were incurred to Pioneer during the three months ended March 31, 2022. During the three months ended March 31, 2021, we incurred $0.8 million for payments we owed to Pioneer related to licensing revenues, which were recorded as a research and development expense in our condensed consolidated statements of operations and comprehensive loss.

AbbVie Manufacturing Management Unlimited Company

On February 9, 2021, we entered into a Collaboration and License Agreement (the "AbbVie Agreement") with AbbVie Manufacturing Management Unlimited Company ("AbbVie"). Pursuant to the AbbVie Agreement, AbbVie selects one target or, for a dual CAR-T cell product, two targets (each selection, a "Program Slot") to develop collaboration CAR-T cell products (and corresponding licensed products). For each of AbbVie's two Program Slots (or up to four Program Slots, if AbbVie elects to expand the number as set forth below), we are collaborating to develop one or more collaboration allogeneic CAR-T cell products directed toward the single cancer target or target combination chosen by AbbVie as described in an applicable research plan, utilizing our Cas12a chRDNA genome-editing and cell therapy technologies. We granted AbbVie an exclusive (even as to us), royalty-bearing, worldwide license, with the right to grant sublicenses, under our Cas12a chRDNA and cell therapy intellectual property, as well as certain genome-editing technology that we may gain rights to in the future and intellectual property that may be developed under the collaboration, solely for AbbVie to develop, commercialize, manufacture, and otherwise exploit the collaboration CAR-T cell products in the field of human diagnostics, prophylactics, and therapeutics. Under the terms of the AbbVie Agreement, we conduct certain preclinical research, development, and manufacturing activities under the collaboration, including certain activities for the manufacture and supply of licensed product for AbbVie's phase 1 clinical trials. AbbVie reimburses us for all such activities, including reimbursement for time spent by employees at a designated FTE rate. The duration of the collaboration is not fixed. Under the terms of the AbbVie Agreement, AbbVie has selected its initial Program Slot and has reserved six additional targets, which AbbVie may choose to be used or substituted into the two Program Slots or used for the third or fourth Program Slots if AbbVie expands the number of Program Slots during the collaboration.

During the collaboration, AbbVie may expand from two Program Slots to a total of four Program Slots by paying us an additional $15.0 million for each Program Slot, provided that AbbVie must make such payment within the earlier of (a) 60 calendar days following completion of the phase 1 clinical trials for the initial collaboration CAR-T cell product and (b) December 31, 2025. Under the terms of the AbbVie Agreement, we are eligible to receive up to $150.0 million in future developmental and regulatory milestone payments for each Program Slot and up to $200.0 million in sales-based milestones for each Program Slot. We are also eligible to receive global royalties on net sales of licensed products sold by AbbVie, its affiliates, and sublicensees in the high-single-digit to low-teens percent range, subject, in certain instances, to various reductions.

The term of the AbbVie Agreement continues in force and effect until the date of expiration of the last royalty term of the last country in which a licensed product is exploited. On a licensed product-by-licensed product and country-by-country basis, the royalty term is the period of time beginning on the first commercial sale of a licensed product in a country and ending on the latest of the following three dates: (a) the expiration, invalidation, revocation, cancellation, or abandonment date of the last patent that includes a valid claim to either (i) the collaboration CAR-T cell product in the licensed product or (ii) the method of making the collaboration CAR-T cell product in the licensed product in such country (in the case of (ii), only for so long as no biosimilar product is commercially available in such country); (b) 10 years from the date of the first commercial sale of such licensed product in such country; and (c) the expiration date of regulatory exclusivity for such licensed product in such country. The AbbVie Agreement may be terminated during the term by either party for an uncured material breach or bankruptcy by the other party. Additionally, AbbVie may terminate the AbbVie Agreement, in its entirety or on a licensed product-by-licensed product basis, effective immediately upon written notice to us, if AbbVie in good faith believes that it is not advisable for AbbVie to continue to exploit the collaboration CAR-T cell products or licensed products as a result of a perceived serious safety issue. AbbVie may also terminate the AbbVie Agreement in its entirety at its sole discretion upon 90 days' prior written notice to us.

The transaction price we received under the AbbVie Agreement associated with the first two Program Slots consisted of a $30.0 million upfront cash payment and the estimated variable consideration related to our performance of preclinical, development, and manufacturing activities under the collaboration and the developmental and regulatory milestone payments. We constrain the estimated variable consideration if we assess that it is probable that a significant reversal in the amount of cumulative revenue recognized may occur in future periods. We constrained all developmental and regulatory milestone payments as of March 31, 2022. The transaction price is reevaluated at the end of each reporting period and as changes in circumstances occur. We determined that the licenses we granted to AbbVie and our participation in the joint governance committee are not capable of being distinct from the preclinical research, development, and manufacturing activities and therefore are combined into one performance obligation. We recognize revenue based on the measure of progress using an estimated cost-based input method each reporting period.

We received an upfront cash payment of $30.0 million from AbbVie during the year ended December 31, 2021. We recognized short-term deferred revenue in the amount of $12.5 million and long-term deferred revenue in the amount of $14.5 million related to this upfront cash payment in our condensed consolidated balance sheets as of March 31, 2022. We recognized short-term deferred revenue in the amount of $8.3 million and long-term deferred revenue in the amount of $19.1 million related to these payments in our consolidated balance sheets as of December 31, 2021.

We recognized $0.9 million in revenue for the three months ended March 31, 2022, relating to the AbbVie Agreement. As of March 31, 2022, and December 31, 2021, we also recorded $0.2 and $1.0 million in accounts receivable, respectively, and $0.4 and $0.2 million, respectively, in contract assets in our condensed consolidated balance sheets.

5. Revenue

Disaggregation of Revenue

We disaggregate revenue by geographical market based on the location of research and development activities of our licensees and collaborators. The following is a summary of revenue by geographic location for the three months ended March 31, 2022 and 2021 (in thousands):

	Three Months Ended March 31,	
	2022	2021
United States	$ 2,612	$ 1,475
Rest of world	52	111
Total	$ 2,664	$ 1,586

During the three months ended March 31, 2022, we recognized $1.7 million of revenue related to performance obligations satisfied at a point in time, and we recognized $0.9 million of revenue related to performance obligations satisfied over time.

During the three months ended March 31, 2021, we recognized $1.6 million of revenue related to performance obligations satisfied at a point in time, and no revenue related to performance obligations satisfied over time.

Contract Balances

Accounts receivable relate to our right to consideration for performance obligations completed (or partially completed) for which we have an unconditional right to consideration. Our accounts receivable balances represent amounts that we billed to our licensees with invoices outstanding as of the end of a reporting period.

Contract assets are rights to consideration in exchange for a license that we have granted to a licensee when the right is conditional on something other than the passage of time. Our contract asset balances represent royalties, milestone payments, and research costs related to the AbbVie Agreement that are unbilled as of the end of a reporting period.

Contract liabilities consist of deferred revenue and relate to amounts invoiced to, or advance consideration received from, licensees that, precede our satisfaction of the associated performance obligations. Our deferred revenue primarily results from the upfront payment received relating to the performance obligation that is satisfied over time under the AbbVie Agreement. The remaining deferred revenue relates to upfront payments received under license agreements that also include non-refundable annual license fees, which are accounted for as material rights for license renewals and are recognized at the point in time annual license fees are paid by the licensees and the renewal periods begin.

The following table presents changes in our contract assets and liabilities during the three months ended March 31, 2022 (in thousands):

	Balance as of December 31, 2021	Additions	Deductions	Balance as of March 31, 2022
Accounts receivable	$ 1,153	$ 1,971	$ (2,750)	$ 374
Contract assets:				
Unbilled accounts receivable	$ 1,488	$ 1,494	$ (1,488)	$ 1,494
Contract liabilities:				
Deferred revenue, current and long-term	$ 30,735	$ 977	$ (1,548)	$ 30,164

Unbilled accounts receivable did not change significantly during the three months ended March 31, 2022.

Deferred revenue decreased during the three months ended March 31, 2022, primarily due to offsetting of $0.5 million in deferred revenue recognized in connection with the AbbVie Agreement (Note 4).

During the three months ended March 31, 2022 and 2021, we recognized $0.6 million and $0.1 million of revenue, respectively, which were included in the opening contract liabilities balances as of December 31, 2021 and 2020, respectively.

Transaction Prices Allocated to Remaining Performance Obligations

Remaining unsatisfied performance obligations represent in aggregate the amount of a transaction price that has been allocated to performance obligations not delivered as of the end of a reporting period. The value of transaction prices allocated to remaining unsatisfied performance obligations as of March 31, 2022 was approximately $46.4 million. We expect to recognize approximately $12.8 million of remaining performance obligations as revenue in the next 12 months and the remainder thereafter.

Capitalized Contract Acquisition Costs and Fulfillment Costs

We did not incur any expenses to obtain license and collaboration agreements, and costs to fulfill those contracts do not generate or enhance our resources. As such, no costs to obtain or fulfill a contract have been capitalized in any period.

6. Balance Sheet Items

Other receivables consisted of the following as of March 31, 2022 and December 31, 2021, respectively (in thousands):

	March 31, 2022	December 31, 2021
Patent cost reimbursements	$ 3,377	$ 4,702
Accrued interest on marketable securities	436	226
Other	356	555
Total	$ 4,169	$ 5,483

Prepaid expenses and other current assets consisted of the following as of March 31, 2022 and December 31, 2021, respectively (in thousands):

	March 31, 2022	December 31, 2021
Prepaid contract manufacturing and clinical costs	$ 4,704	$ 2,714
Prepaid insurance	1,086	1,897
Prepaid income taxes	1,486	1,486
Prepaid rent	—	468
Other	966	671
Total	$ 8,242	$ 7,236

Property and equipment, net, consisted of the following as of March 31, 2022 and December 31, 2021, respectively (in thousands):

	March 31, 2022	December 31, 2021
Lab equipment	$ 8,004	$ 6,848
Leasehold improvements	1,701	1,701
Computer equipment	477	273
Furniture and equipment	133	133
Construction in progress	86	9
Total property and equipment, gross	10,401	8,964
Less: accumulated depreciation and amortization	(4,385)	(4,077)
Property and equipment, net	$ 6,016	$ 4,887

Depreciation and amortization expenses related to property and equipment were $0.3 and $0.2 million, respectively, for each of the three months ended March 31, 2022 and 2021.

Accrued expenses and other current liabilities consisted of the following as of March 31, 2022 and December 31, 2021, respectively (in thousands):

	March 31, 2022	December 31, 2021
Accrued employee compensation and related expenses	$ 2,479	$ 4,225
Accrued research and development expenses	4,149	4,065
Accrued patent expenses	3,180	3,213
Accrued sublicensing fees	582	586
Credit card liability	—	259
Other	800	788
Total	$ 11,190	$ 13,136

7. Related Party Transactions

Private Company, Related Party

On May 15, 2020, we entered into an Exclusive License Agreement, as amended, with a private company, related party (the "Private Company License Agreement"), under which we granted the private company an exclusive worldwide license to certain CRISPR intellectual property rights and know-how in a defined field. As consideration for the exclusive license, the private company issued to us 7,500,000 shares of convertible preferred stock with an estimated fair value of $7.5 million, which was the price paid for similar shares by another investor, and which was an arm's length transaction. This represents a material voting interest in the private company and entitles us to hold one of the four private company's board of director seats and to jointly vote with another stockholder on a second board of director seat. As of March 31, 2022, we have appointed one of the four directors. We concluded that the private company is a variable interest entity and that we are not its primary beneficiary based on our representation on its board of directors. As the private company's convertible preferred stock is not in substance common stock, we record this investment using the measurement alternative in accordance with ASC 321, Investments–Equity Securities. Under the measurement alternative, our investment in the private company's convertible preferred stock was initially recorded at its estimated fair value, but the carrying value may be adjusted through earnings upon an impairment or when there is an observable price change involving the same or a similar investment with the private company. As of each of March 31, 2022 and December 31, 2021, the carrying value of investment was $7.5 million. There have been no changes to the carrying value of the investment during the three months ended March 31, 2022. We did not recognize any revenue in connection with the Private Company License Agreement for the three months ended March 31, 2022 and 2021.

Pioneer

As of March 31, 2022 and December 31, 2021, DuPont held a greater than 5% of our voting interest and Pioneer, then a DuPont company, is considered a related party (Note 4).

Scientific Advisory Board Payments

Dr. Jennifer A. Doudna, a co-founder and stockholder of the Company, receives compensation for participating on our scientific advisory board (the "SAB"). During each of the three months ended March 31, 2022 and 2021, we paid Dr. Doudna less than $0.1 million for her participation on our SAB.

Loan to our President and Chief Executive Officer

In November 2018, our president and chief executive officer entered into a promissory note with us for $1.1 million, as a means to provide liquidity without triggering a taxable event. The note bore interest at a rate of 3.04%, compounded annually, and was payable in five years, together with principal and accrued interest. The promissory note was secured by 409,795 shares of our common stock owned by our president and chief executive officer and was determined to be non-recourse for accounting purposes. As such, the issuance of the promissory note was effectively the grant of a new share option. The promissory note was repaid in full amount in June 2021 by our president and chief executive officer and recognized as an increase in additional paid in capital of $1.2 million.

8. Paycheck Protection Program Loan

On May 6, 2020, we entered into a promissory note with WebBank (the "Lender") pursuant to the Paycheck Protection Program for a total amount of $1.6 million (the "PPP Loan"). Our PPP Loan had a two-year term and bore interest at a stated rate of 1.0% per annum, accrued monthly, beginning on the date our PPP Loan was issued by the Lender. No monthly principal and interest payments were required under our PPP Loan. We did not provide any collateral or guarantees for our PPP Loan, nor did we pay any facility charge to obtain our PPP Loan. Our PPP Loan provided for customary events of default, including those relating to failure to make payment, bankruptcy, breaches of representations, and material adverse effects. We could have prepaid the principal of our PPP Loan at any time without incurring any prepayment charges. On May 22, 2021, our PPP Loan was forgiven in full by the SBA and, at that time, we recognized a PPP Loan extinguishment gain of $1.6 million in our condensed consolidated statements of operations and comprehensive loss.

9. Commitments and Contingencies

Facility Lease Agreements

We lease laboratory and office space under non-cancellable operating agreements. In March 2021, we entered into a ten-year lease agreement, which superseded and replaced our prior lease, as amended, for our corporate headquarters and the new lease included additional office and laboratory space located within the same building in Berkeley, California. This lease agreement contains a renewal option for an additional term of five years. In addition to base rent, we pay our share of operating expenses and taxes.

In January 2022, we entered into a ten-and-a-half-year lease agreement for approximately 10,000 square feet of office and laboratory space in Berkeley, California near our current corporate headquarters. In connection with signing this lease, we paid a deposit in the amount of $0.4 million to the lessor. This lease agreement contains an escalation clause for increased base rent over the term and a renewal option for an additional term of five years. In addition to base rent, we pay our share of operating expenses and taxes. To complete certain leasehold improvements, the lessor has agreed to provide us a tenant improvement allowance of $1.8 million. The leasehold improvements constructed are presented under property and equipment on our condensed consolidated balance sheets and are depreciated on a straight-line basis over the remaining lease term.

The components of lease costs, which are included in our statements of operations and comprehensive loss, are as follows (in thousands):

	Three Months Ended March 31, 2022
Operating lease cost*	$ 1,799
Short-term lease cost	63
Total lease cost	$ 1,862

*Includes $0.5 million of variable lease cost related to operating expenses and taxes.

Supplemental information related to our leases is as follows (in thousands):

	Three Months Ended March 31, 2022
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 871

As of March 31, 2022, the weighted-average remaining lease term was 9.0 years for our corporate office and laboratory leases, and the weighted-average discount rate was 11.3%.

The following table summarizes a maturity analysis of our operating lease liabilities showing the aggregate lease payments as of March 31, 2022 (in thousands):

Remainder of 2022*	$ 1,074
2023**	4,212
2024	4,527
2025	4,475
2026	5,720
Thereafter	28,037
Total undiscounted lease payments	48,045
Less: imputed interest	(19,982)
Total discounted lease payments	28,063
Less: current portion of lease liability	(825)
Noncurrent portion of lease liability	$ 27,238

*Reflects an offset of $1.6 million related to incentives expected to be received in 2022.
**Reflects an offset of $0.2 million related to incentives expected to be received in 2023.

Capital Lease

We accounted for certain leased equipment as a capital lease due to the ownership of such equipment transferring to us at the end of the lease term. As of December 31, 2021, the capital lease obligation was repaid in full and we do not have any remaining future minimum lease payments related to this capital lease.

Research and Development Agreements

We enter into various agreements in the ordinary course of business, such as those with suppliers, contract research organizations (“CROs”), contract manufacturing organizations (“CMOs”), clinical trial sites, and the like. These agreements provide for termination at the request of either party, generally with less than one-year notice and are, therefore, cancellable contracts and, if cancelled, are not anticipated to have a material effect on our condensed consolidated financial condition, results of operations, or cash flows.

Guarantees and Indemnifications

In the normal course of business, we enter into agreements that contain a variety of representations and warranties and provide for certain indemnifications by us. Our exposure under these agreements is unknown because claims may be made against us in the future. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. As of March 31, 2022 and December 31, 2021, we did not have any material indemnification claims that were probable or reasonably possible, and consequently, we have not recorded related liabilities.

Litigation

From time to time, we may become involved in legal proceedings arising in the ordinary course of business. We record a liability for such matters when it is probable that future losses will be incurred and if such losses can be reasonably estimated. Significant judgment by us is required to determine both probability and the estimated amount. We are not currently subject to any material legal proceedings, and we are not aware of any unasserted claims pending that could, individually or in the aggregate, have a material adverse effect on our results of operations or financial condition.

10. Common Stock

Common stock reserved for future issuance, on an as converted basis, consists of the following:

	As of March 31, 2022	As of December 31, 2021
Stock options, issued and outstanding	6,286,542	6,757,591
Stock options, authorized for future issuance	6,783,690	3,749,339
Stock available under our Employee Stock Purchase Plan	1,077,035	511,000
Unvested restricted stock units	60,000	-
	14,207,267	11,017,930

11. Stock-Based Compensation

Equity Incentive Plans

In July 2021, our board of directors adopted and our stockholders approved the 2021 Equity Incentive Plan (the "2021 Plan") that became effective on July 22, 2021. We reserved 5,200,000 shares of common stock for issuance under the 2021 Plan. In addition, 934,562 shares available for issuance under the 2013 Equity Incentive Plan, adopted in 2013 and amended and restated in 2019, were transferred into the 2021 Plan. Furthermore, any shares subject to awards under the 2013 Plan that terminate, expire, or lapse for any reason without the delivery of shares, or are reacquired or withheld (or not issued) to satisfy a tax withholding obligation or the purchase or exercise price, will be added to the 2021 Plan. The 2021 Plan also provides that the number of shares initially reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2022 and ending on January 1, 2031, by an amount equal to the lesser of (a) 5% of the shares of common stock outstanding on the last day of the immediately preceding fiscal year and (b) such smaller number of shares of stock as determined by our Board. No more than 56,000,000 shares of stock may be issued upon the exercise of incentive stock options under the 2021 Plan. Options under the 2021 Plan may be granted for periods of up to 10 years at exercise prices no less than the fair market value of our common stock on the date of grant; provided, however, that the exercise price of an incentive stock option granted to a 10% stockholder may not be less than 110% of the fair market value of the shares on the date of grant and such option may not be exercisable after the expiration of five years from the date of grant. The grant date fair market value of all awards made under the 2021 Plan and all cash compensation paid by us to any non-employee director for services as a director in any fiscal year may not exceed $750,000, increased to $1,000,000 in the fiscal year of their initial service as a non-employee director. As of March 31, 2022, we had 6,783,690 shares available for issuance under the 2021 Plan.

The following table summarizes stock option activity under our equity incentive plans during the three months ended March 31, 2022:

	Shares Available to Grant	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)*
Outstanding at December 31, 2021	3,749,339	6,757,591	$ 8.57	8.7	$ 50,085
Addition to option pool	3,013,157				
Options granted	(339,030)	339,030	10.47		
Options exercised	—	(389,855)	1.61		
Options cancelled or forfeited	420,224	(420,224)	7.04		
Outstanding at March 31, 2022	6,843,690	6,286,542	$ 9.20	8.7	$ 19,821
Exercisable at March 31, 2022		1,555,480	$ 4.11	7.1	$ 8,617
Vested and expected to vest at March 31, 2022		6,286,542	$ 9.20	8.7	$ 19,821

*The aggregate intrinsic value is calculated as the difference between the stock option exercise price and the estimated fair value of the underlying common stock at the end of each reporting period referenced above.

Grant Date Fair Value

During the three months ended March 31, 2022 and 2021, we granted 339,030 and 1,561,079 stock options to employees and non-employees with a weighted-average grant date fair value of $6.68 and $2.73 per share, respectively.

We estimated the fair value of each employee and non-employee stock option award on the grant date using the Black-Scholes option-pricing model based on the following assumptions for the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,	
	2022	**2021**
Volatility	71.7% - 72.0%	76.4% to 76.5%
Expected term (in years)	5.5 to 6.0	6.0 to 6.1
Risk-free interest rate	1.7% to 2.3%	1.1% to 1.2%
Expected dividend yield	0.0%	0.0%

As of March 31, 2022, there was $32.0 million of unrecognized stock-based compensation expense related to employee and non-employee stock options that is expected to be recognized over a weighted-average period of 3.0 years.

Restricted Stock Units ("RSUs")

During the three months ended March 31, 2022, we granted 60,000 RSUs under the 2021 Plan. A summary of the status of and change in unvested RSUs as of March 31, 2022 was as follows:

	Number of Shares Underlying Outstanding Restricted Stock	**Weighted-Average Grant Date Fair Value per RSU**
Unvested, January 1, 2022	-	$ -
Granted	60,000	10.64
Unvested, March 31, 2022	60,000	$ 10.64

As of March 31, 2022, the total unrecognized stock-based compensation expense related to unvested RSUs was $0.6 million, which is expected to be recognized over the remaining weighted-average vesting period of 3.8 years.

Employee Stock Purchase Plan ("ESPP")

In July 2021, our board of directors adopted and our stockholders approved the ESPP, which became effective on July 22, 2021. The ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended ("Tax Code"). We reserved 511,000 shares of our common stock for employee purchases under the ESPP. The number of shares of common stock reserved for issuance under the ESPP will be automatically increased each January 1, beginning on January 1, 2022 and ending on January 1, 2031 by an amount equal to the lesser of (a) 1% of the shares of common stock outstanding on the last day of the immediately preceding fiscal year and (b) such smaller number of shares of stock as determined by our Board; provided that the maximum number of shares that may be issued under the ESPP is 10,000,000 shares. The ESPP allows an eligible employee to purchase shares of our common stock at a discount through payroll deductions of up to 15% of the employee's eligible compensation. At the end of each purchase period, employees are able to purchase shares at 85% of the lower of the fair market value of our common stock at the beginning of the offering period or at the end of each applicable offering period. The first offering period commenced on August 16, 2021 and ended on February 15, 2022. We have issued 36,596 shares of common stock under the ESPP as of March 31, 2022. We recorded $0.1 million in accrued liabilities related to contributions withheld as of March 31, 2022.

Stock-Based Compensation Expense

We recorded stock-based compensation expense related to employee and non-employee equity-based awards in our condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2022 and 2021 as follows (in thousands):

	Three Months Ended March 31,	
	2022	2021
Research and development	$ 1,100	$ 197
General and administrative	1,924	146
Total	$ 3,024	$ 343

The above stock-based compensation expense related to the following equity-based awards (in thousands):

	Three Months Ended March 31,	
	2022	2021
Stock options	$ 2,930	$ 343
ESPP	63	-
RSUs	31	-
Total	$ 3,024	$ 343

Stock-based compensation expense related to employees was $2.9 million and $0.3 million for the three months ended March 31, 2022 and 2021, respectively. Stock-based compensation expense related to non-employees was $0.1 million and less than $0.1 million for the three months ended March 31, 2022 and 2021, respectively.

12. 401(k) Savings Plan

In 2017, we established a defined-contribution savings plan under Section 401(k) of the Tax Code. Our 401(k) plan is available to all employees and allows participants to defer a portion of their annual compensation on a pretax basis subject to applicable laws. We also provide a 4% match for employee contributions up to a certain limit. During the three months ended March 31, 2022 and 2021, we contributed $0.2 million and $0.1 million, respectively, to our 401(k) plan.

13. Income Taxes

No income tax expense was recorded during the three months ended March 31, 2022 and 2021 due to our operating losses.

14. Net Loss Per Share

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except share and per share amounts):

	Three Months Ended March 31,	
	2022	2021
Numerator:		
Net loss	$ (19,088)	$ (13,159)
Denominator:		
Weighted-average common shares outstanding used to compute net loss per share, basic and diluted	60,546,170	9,499,448
Net loss per share, basic and diluted	$ (0.32)	$ (1.39)

Because we were in a net loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods, as the inclusion of all common stock equivalents outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were, as of March 31, 2022 and 2021, as follows:

	As of March 31, 2022	As of March 31, 2021
Convertible preferred stock	—	26,234,654
Stock options outstanding	6,286,542	5,463,543
RSUs issued and outstanding	60,000	
Shares committed under ESPP	51,687	—
Common shares subject to nonrecourse notes	—	409,795
	6,398,229	32,107,992

15. Subsequent Events

We did not have any subsequent events as of the filing date of this Quarterly Report on Form 10-Q (“Form 10-Q”).

Item 2. 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 unaudited condensed consolidated financial statements and related notes included in Part I, Item 1, of this Form 10-Q and with the audited consolidated financial statements and the related notes for the fiscal year ended December 31, 2021 included in our Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 21, 2022.

Special Note Regarding Forward-Looking Statements

This Form 10-Q contains forward-looking statements. All statements other than statements of historical facts contained in this Form 10-Q, including statements regarding our business strategy, plans, and objectives; expectations regarding our clinical and preclinical development programs, including our timing expectations with respect to such programs and the expected timing of disclosure of initial data from such programs; future regulatory filings; our results of operations and financial position; plans and objectives of management for future operations; and the like, are forward-looking statements . In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential," or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words.

As a result of many factors, including but not limited to risks related to our financial position and our ability to raise additional capital as needed to fund our operations and product candidate development; risks associated with the initiation, cost, timing, progress, and results of current and future research and development programs, preclinical studies, and clinical trials; risks related to our ability to obtain and maintain regulatory approval for our product candidates; risks that our product candidates, if approved, may not gain market acceptance due to negative public opinion and increased regulatory scrutiny of cell therapies involving genome editing; risks related to our ability to meet future regulatory standards with respect to our products; risks related to our ability to establish and/or maintain intellectual property rights covering our product candidates and genome-editing technology; risks of third parties asserting that our product candidates infringe their patents; risks related to developments of our competitors and our industry; risks related to our reliance on third parties to conduct our clinical trials and manufacture our product candidates; risks caused by the impact of COVID-19 or geopolitical events on our business and operations; and other risks described in greater detail in the section of our Form 10-K titled "Risk Factors," the events and circumstances reflected in our forward-looking statements may not be achieved or may not occur, and actual results could differ materially from those described in or implied by the forward-looking statements contained in the following discussion and analysis. As a result of these risks, you should not place undue reliance on these forward-looking statements. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Overview

We are a clinical-stage CRISPR genome-editing biopharmaceutical company dedicated to developing innovative, transformative therapies for patients with devastating diseases. We are advancing a pipeline of allogeneic, or off-the-shelf, CAR-T and CAR-NK cell therapies for the treatment of patients with hematologic malignancies and solid tumors. Our renowned founders, including a Nobel Prize laureate, are pioneers in the field of CRISPR genome editing. Our chRDNA technology has demonstrated superior specificity and high efficiency in preclinical studies and enables us to perform multiple, precise genomic edits, while maintaining genomic integrity.

Our lead product candidate, CB-010, is, to our knowledge, the first clinical-stage allogeneic anti-CD19 CAR-T cell therapy with programmed cell death protein 1 ("PD-1") removed from the CAR-T cell surface by a genome-edited knockout of the *PDCD1* gene. We have demonstrated in preclinical models that the PD-1 knockout improves the persistence of antitumor activity by disrupting a pathway that leads to rapid T cell exhaustion. CB-010 is being evaluated in our ANTLER phase 1 clinical trial in patients with relapsed or refractory B cell non-Hodgkin lymphoma. We have announced that the European Hematology Association ("EHA") has accepted an abstract with initial clinical data from our ANTLER phase 1 trial for the EHA 2022 Hybrid Congress, to be held in Vienna, Austria, in June 2022.

Our CB-011 product candidate is an allogeneic CAR-T cell product candidate that is, to our knowledge, the first anti-BCMA CAR-T cell therapy incorporating an immune cloaking approach that includes both the removal of the endogenous beta-2 microglobulin ("B2M") protein by a genome-edited knockout of the *B2M* gene and insertion of a beta-2-microglobulin–human-leukocyte-antigen-E–peptide transgene ("B2M–HLA-E"), enabling expression of HLA-E on the CAR-T cell surface. This strategy is designed to blunt CAR-T cell rejection by both patient T cells and natural killer ("NK") cells to enable more durable antitumor activity. CB-011 is in preclinical development for relapsed or refractory multiple myeloma. We expect to submit an investigational new drug ("IND") application for CB-011 in the second half of 2022.

CB-012 is our allogeneic armored CAR-T cell product candidate targeting CD371 (also known as CLL-1), currently in preclinical development for the treatment of relapsed or refractory acute myeloid leukemia ("AML"). We expect to submit an IND application for CB-012 in 2023. CD371 is an attractive target for AML due to its expression on myeloid cancer cells, its enrichment in leukemic stem cells, and its absence on hematopoietic stem cells.

We are also developing allogeneic CAR-NK cell therapies derived from genome-edited iPSCs for the treatment of solid tumors. CB-020 is our first CAR-NK product candidate and it will contain genome edits designed to overcome some of the challenges of targeting solid tumors, such as trafficking, tumor infiltration, heterogeneity, and the immunosuppressive tumor microenvironment. We expect to select a tumor cell-surface target for our CB-020 product candidate in 2022. Also in 2022, we expect to disclose armoring strategies we are developing for our CAR-NK platform.

Since our founding in 2011, we have devoted substantially all of our resources to organizing and staffing, business planning, raising capital, developing our genome-editing platform technologies, developing our product candidates and building our pipeline, creating and maintaining our intellectual property portfolio, and establishing arrangements with third parties for the manufacture and testing of our product candidates. We do not have any products approved for commercial sale and have not generated any revenue from product sales. We have incurred net losses since commencement of our operations.

To date, we have primarily funded our operations through revenue from our license agreements, license and collaboration agreements, and a service agreement; the sale of shares of Intellia common stock that we received as consideration for the Intellia License Agreement; the sale of our convertible preferred stock in private placements before our initial public offering ("IPO"); and proceeds from our IPO. In total, we received an aggregate of approximately $321.0 million in net proceeds from our IPO, after deducting underwriting discounts and commissions and offering expenses. In connection with the closing of our IPO, all outstanding shares of our convertible preferred stock automatically converted into 26,234,654 shares of our common stock.

Our net losses for the three months ended March 31, 2022 and 2021 were $19.1 million and $13.2 million, respectively. We had an accumulated deficit of $116.9 million as of March 31, 2022. Our net losses and operating losses may fluctuate from quarter to quarter and year to year depending primarily on the timing of our clinical trials and nonclinical studies and our other research and development expenses. In addition, we are incurring increased costs associated with operating as a public company, including legal, audit, and accounting fees; maintaining compliance with the rules and regulations of the SEC and Nasdaq; director and officer insurance premiums; investor and public relations activities; and other accompanying compliance and governance requirements. We anticipate that our expenses will increase substantially if and as we:

- progress our ANTLER phase 1 clinical trial for our CB-010 product candidate;
- continue our current research programs and our preclinical and clinical development of our other current product candidates, including CB-011, CB-012, and CB-020, and any other product candidates we identify and choose to develop;
- hire additional clinical, quality control, and scientific personnel;
- seek to identify additional research programs and additional product candidates;
- further develop our genome-editing technologies;
- acquire or in-license technologies;
- expand, maintain, enforce, and defend our intellectual property portfolio;
- seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical trials, if any;
- establish and expand manufacturing capabilities and supply chain capacity for our product candidates;
- add operational, legal, financial, and management information systems and personnel;
- experience any delays, challenges, or other issues associated with any of the above, including the failure of clinical trials meeting endpoints, the generation of unanticipated preclinical results or clinical trial data subject to differing interpretations, or the occurrence of potential safety issues or other development or regulatory challenges;
- make royalty, milestone, or other payments under current, and any future, in-license or assignment agreements;
- establish a sales, marketing, and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval; and
- continue to operate as a public company.

We do not own or operate any manufacturing facilities and we outsource a substantial portion of our clinical trial studies to third parties. We use multiple CMOs to individually manufacture, under cGMP, chRDNA guides, Cas proteins, plasmids, and AAV6 vectors used in the manufacture of our CAR-T cells as well as our CAR-NK cell therapy product candidates. We expect to rely on our CMOs for the manufacturing of our product candidates to expedite readiness for future clinical trials, and most of these CMOs have capabilities for commercial manufacturing. Additionally, we may decide to build our own manufacturing facility in the future to provide us greater flexibility and control over our clinical or commercial manufacturing needs.

Because of the numerous risks and uncertainties associated with therapeutic product development, we may never achieve profitability and, unless and until we are able to develop and commercialize our product candidates, we will need to continue to raise additional capital. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through public or private equity or debt financings, collaborations, strategic alliances, and licensing arrangements with third parties. There are no assurances that we will be successful in obtaining an adequate level of financing to support our business plans when needed on acceptable terms, or at all. If we raise additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise capital as and when needed or on attractive terms, we may have to significantly delay, reduce, or discontinue the development and commercialization of our product candidates or scale back or terminate our pursuit of new in-licenses and acquisitions.

Impact of the COVID-19 Pandemic and Geopolitical Events

We are unable to predict the effect that the COVID-19 pandemic or geopolitical events, including the conflict in Ukraine, may have on our operations. To the extent the COVID-19 pandemic or geopolitical events adversely affect our business prospects, financial condition, and results of operation, they may also have the effect of exacerbating many of the other risks described or referenced in the section of our Form 10-K titled “Risk Factors,” such as those relating to the supply of materials for our product candidates, and the timing and possible disruptions of our ongoing and future preclinical studies and clinical trials, and our access to the financial markets.

Components of Results of Operations

Licensing and Collaboration Revenue

We have not generated any revenue from product sales to date and do not expect to generate any revenue from the sale of products in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval and commercialization, we may generate revenue in the future from product sales. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our product candidates if we succeed in obtaining regulatory approval for these product candidates.

To date, all of our revenue consists of licensing and collaboration revenue earned from collaboration and/or licensing agreements entered into with third parties, including related parties. Under these agreements, we license rights to certain intellectual property controlled by us. The terms of these arrangements typically include payments to us of one or more of the following: nonrefundable, upfront license fees or exclusivity fees; annual maintenance fees; regulatory and/or commercial milestone payments; research and development payments; and royalties on the net sales of products and/or services. Each of these payments results in licensing and collaboration revenue. Revenue under such licensing and collaboration agreements was $2.7 million and $1.6 million for the three months ended March 31, 2022 and 2021, respectively. See Notes 4 and 5 to our condensed consolidated financial statements included elsewhere in this Form 10-Q.

For additional information about our revenue recognition policy related to our licensing and collaboration agreements, see Note 2 to the annual consolidated financial statements included in our Form 10-K.

For the foreseeable future we expect substantially all of our revenue will be generated from licensing and collaboration agreements.

Operating Expenses

Research and Development Expenses

Our research and development expenses consist of internal and external expenses incurred in connection with the development of our product candidates, development of our platform technologies, and our in-licensing and assignment agreements.

External costs include:

- costs associated with acquiring technology and intellectual property licenses that have no alternative future uses;
- costs incurred in connection with the preclinical and clinical development of our product candidates, including under agreements with CROs and clinical sites;
- costs of supplying the components for, and the manufacturing of, our product candidates for use in our preclinical studies and clinical trials; and
- other research and development costs, including laboratory materials and supplies, and consulting services.

Internal costs include:

- personnel-related costs, including salaries, benefits, and share-based compensation expense, for our research and development personnel; and
- allocated facilities and other overhead expenses, including expenses for rent and facilities maintenance and depreciation.

We expense research and development costs as incurred. Costs of certain activities are recognized based on an evaluation of the progress to completion of specific tasks. However, payments made prior to the receipt of goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses and other current assets on our condensed consolidated balance sheets. The capitalized amounts are recognized as expense as the goods are delivered or as related services are performed. Historically, we have not tracked external costs by clinical program. We intend to separately track certain external costs for each clinical program. However, we do not currently track, and do not intend to track, costs that are deployed across multiple programs.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will increase substantially for the foreseeable future as we continue to implement our business strategy; advance our CB-010 product candidate through clinical trials and later stages of development; conduct preclinical studies and clinical trials for our other product candidates; seek regulatory approvals for any product candidates that successfully complete clinical trials; expand our research and development efforts and incur expenses associated with hiring additional personnel to support our research and development efforts; and seek to identify, in-license, acquire, and/or develop additional product candidates.

The successful development of our CB-010, CB-011, CB-012, and CB-020 product candidates, as well as other potential future product candidates, is highly uncertain. Accordingly, at this time, we cannot reasonably estimate or know the nature, timing, and costs of the efforts that will be necessary to complete the development of our product candidates. We are also unable to predict when, if ever, we will generate revenue and material net cash inflows from the commercialization and sale of any of our product candidates for which we may obtain marketing approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs, and timing of preclinical studies, clinical trials, and development of our product candidates will depend on a variety of factors, including:

- sufficiency of our financial and other resources;
- acceptance of our CRISPR chRDNA genome-editing technology;
- ability to develop differentiating features so that our products have a competitive edge;
- completion of preclinical studies;
- establishment, maintenance, enforcement, and defense of our patents and other intellectual property rights;

- our ability to not infringe, misappropriate, or otherwise violate third-party intellectual property rights;
- clearance of IND applications to initiate clinical trials on product candidates;
- successful enrollment in, and completion of, our clinical trials on our product candidates;
- data from our clinical trials that support an acceptable risk-benefit profile of our product candidates for the intended patient populations and that demonstrate safety and efficacy;
- entry into collaborations to further the development of our product candidates or for the development of new product candidates;
- successful development of our internal process development and transfer to larger-scale facilities;
- establishment of agreements with CMOs for clinical and commercial supplies and scaling up manufacturing processes and capabilities to support our clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- grant of regulatory exclusivity for our product candidates;
- establishment of sales, marketing, and distribution capabilities necessary for commercialization of our product candidates if and when approved, whether by us or in collaboration with third parties;
- maintenance of a continued acceptable safety profile of our products post-approval;
- acceptance of our product candidates, if and when approved by the applicable regulatory authorities, by patients, the medical community, and third-party payors;
- ability of our products to compete with other therapies and treatment options;
- establishment and maintenance of healthcare coverage and adequate reimbursement; and
- expanded indications and patient populations for our products.

The following table summarizes our research and development expenses for the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,		
	2022	2021	Change
		(in thousands)	
External costs:			
Expenses related to licensing, sublicensing revenue, and milestones	$ 308	$ 1,175	$ (867)
Services provided by CROs, CMOs, and other third parties that conduct preclinical studies and clinical trials on our behalf	3,972	2,858	1,114
Other research and development expenses	2,336	2,722	(386)
Total external costs	6,616	6,755	(139)
Internal costs:			
Personnel-related expenses	5,597	2,435	3,162
Facilities and other allocated expenses	1,711	975	736
Total internal costs	7,308	3,410	3,898
Total research and development expenses	$ 13,924	$ 10,165	$ 3,759

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel-related costs, intellectual property costs, consulting costs, and allocated overhead, including rent, equipment depreciation, and utilities. Personnel-related costs consist of salaries, benefits, and stock-based compensation for our general and administrative personnel. Intellectual property costs include expenses for filing, prosecuting, and maintaining patents and patent applications, including certain patents and patent applications that we license from third parties. We are entitled to receive reimbursement from third parties of a portion of the costs for filing, prosecuting, and maintaining certain patents and patent applications. We accrue for these reimbursements as the respective expenses are incurred and classify such reimbursements as a reduction of general and administrative expenses. During the three months ended March 31, 2022 and 2021, we recorded $1.5 million and $2.1 million, respectively, of patent cost reimbursements as a reduction to general and administrative expense.

We expect that our general and administrative expenses will increase substantially in the future as a result of expanding our operations, including hiring personnel, preparing for potential commercialization of our product candidates, and additional facility occupancy costs, as well as increased costs associated with operating as a public company (including legal, audit, and accounting fees; maintaining compliance with the rules and regulations of the SEC and Nasdaq; director and officer insurance premiums; investor and public relations activities; and other accompanying compliance and governance requirements). We also expect to increase the size of our administrative function to support the growth of our business.

Other Income (Expense)

Other income (expense) consists primarily of interest income earned on cash and marketable securities, change in the fair value of our equity investments, change in fair value of the MSKCC success payments liability under the MSKCC Agreement, and other income from the sale of certain intellectual property rights.

Results of Operations

Comparison of the Three Months Ended March 31, 2022 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,		
	2022	2021	Change
		(in thousands)	
Licensing and collaboration revenue	$ 2,664	$ 1,586	$ 1,078
Operating expenses			
Research and development	13,924	10,165	3,759
General and administrative	9,593	4,596	4,997
Total operating expenses	23,517	14,761	8,756
Loss from operations	(20,853)	(13,175)	(7,678)
Other income (expense)			
Interest income	251	4	247
Interest expense	—	(5)	5
Change in fair value of equity securities	(88)	—	(88)
Change in fair value of the MSKCC success payments liability	1,596	—	1,596
Other income	6	17	(11)
Total other income (expense)	1,765	16	1,749
Net loss	$ (19,088)	$ (13,159)	$ (5,929)

Licensing and Collaboration Revenue

Licensing and collaboration revenue increased by $1.1 million, or 68%, to $2.7 million for the three months ended March 31, 2022 from $1.6 million for the three months ended March 31, 2021. We recognized $0.9 million related to the AbbVie Agreement for the three months ended March 31, 2022 and no revenue was recognized under this agreement for the three months ended March 31, 2021. The remaining increase was primarily related to other license agreements with various other licensees.

The following table summarizes our revenue by licensee for the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,		
	2022	2021	Change
		(in thousands)	
AbbVie	$ 933	$ —	$ 933
Other licensing agreements	1,731	1,586	145
Total licensing revenue	$ 2,664	$ 1,586	$ 1,078

Research and Development Expenses

Research and development expenses increased by $3.8 million, or 37%, to $13.9 million for the three months ended March 31, 2022 from $10.2 million for the three months ended March 31, 2021. This increase was primarily related to increases of $3.2 million in personnel-related expenses (which includes an increase in stock-based compensation expense of $0.9 million), $1.1 million in external clinical trial-related activities and contract manufacturing for our product candidates, and $0.7 million in other facilities and allocated expenses, partially offset by decreases of $0.9 million in expenses related to licensing, sublicensing revenue, and milestones and $0.4 million in other research and development expenses.

General and Administrative Expenses

General and administrative expenses increased by $5.0 million, or 109%, to $9.6 million for the three months ended March 31, 2022 from $4.6 million for the three months ended March 31, 2021. This increase was primarily related to increases of $3.2 million in personnel-related expenses (which includes an increase in stock-based compensation expense of $1.8 million), $1.7 million in legal, accounting, insurance, and other expenses associated with being a public company, and $0.7 million in facilities and other allocated expenses, partially offset by a $0.6 million decrease in patent prosecution and maintenance costs.

Total Other Income (Expense)

We recognized other income related to the change in the fair value of the MSKCC success payments liability in the amount of $1.6 million for the three months ended March 31, 2022.

Interest income recognized during the three months ended March 31, 2022 increased to $0.3 million from less than $0.1 million during the three months ended March 31, 2021 due to the increase in holdings of marketable securities.

Income Tax

No income tax benefit or expense was recognized for the three months ended March 31, 2022 and 2021.

Liquidity, Capital Resources, and Capital Requirements

Sources of Liquidity

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from our operations. We have funded our operations through sales of our convertible preferred stock, which generated approximately $150.1 million in aggregate net proceeds, and from our IPO, which generated approximately $321.0 million in net proceeds. We have also received approximately $88.4 million in net proceeds from the sale of Intellia common stock that we received under the Intellia Agreement. Additionally, through March 31, 2022, we received approximately $78.0 million from licensing agreements, licensing and collaboration agreements, a service agreement, patent assignments, and government grants, including $30.2 million that was received from AbbVie under the AbbVie Agreement.

As of March 31, 2022, we had cash, cash equivalents, and marketable securities of $390.8 million. In March 2021, we received net proceeds of $108.8 million from our Series C convertible preferred stock financing and an upfront payment of $30.0 million from AbbVie under the AbbVie Agreement. In July and August 2021, we received aggregate net proceeds of approximately $321.0 million from our IPO. We will continue to be dependent upon equity financing, debt financing, collaborations and licensing arrangements, and/or other forms of capital raises at least until we are able to generate significant positive cash flows from our operations. We have no ongoing material financing commitments, such as lines of credit or guarantees, that are expected to affect our liquidity over the next five years, except for our lease commitments as described in Note 9 to our condensed consolidated financial statements included elsewhere in this Form 10-Q.

Based on our current operating plan, we expect that our existing cash and cash equivalents will enable us to fund our operating expenses and capital expenditure requirements for at least the next 12 months from the date of this Form 10-Q. We have based these estimates on our current assumptions, which may require future adjustments based on our ongoing business decisions.

Funding Requirements

Our primary use of cash is to fund operating expenses and research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses, and prepaid expenses.

Our future funding requirements will depend on many factors, including the following:

- the initiation, progress, timing, costs, and results of preclinical studies and clinical trials for our product candidates;
- the clinical development plans we establish for these product candidates;
- the number and characteristics of the product candidates that we develop;
- the increase in the number of our employees and expansion of our physical facilities to support growth initiatives;
- the outcome, timing, and cost of meeting regulatory requirements established by the FDA and other comparable foreign regulatory authorities;
- whether we enter into any additional collaboration agreements and the terms of any such agreements;
- the cost of filing and prosecuting our patent applications, and maintaining and enforcing our patents and other intellectual property rights;
- the extent to which we acquire or in-license other product candidates and technologies;
- the cost of defending intellectual property disputes, including patent infringement actions brought by third parties against our products after we receive regulatory approval;
- the effect of competing technological and market developments;
- the cost and timing of completion of commercial-scale outsourced manufacturing activities or the cost and timing of completion of clinical-scale and commercial-scale internal manufacturing activities;
- the cost of establishing sales, marketing, and distribution capabilities for any product candidates for which we may receive regulatory approval in regions where we choose to commercialize our products without a partner;
- the amount of revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval;
- the achievement of milestones or occurrence of other developments that trigger payments by or to third parties under any collaboration or licensing agreements;
- our implementation of various computerized informational systems and efforts to enhance operational systems;
- the impact of the COVID-19 pandemic or geopolitical events on our clinical development or operations; and
- the costs associated with being a public company.

Furthermore, our operating plans may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development expenditures.

If we need to raise additional capital to fund our operations, funding may not be available to us on acceptable terms, or at all. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of, or suspend one or more of our preclinical studies, clinical trials, research and development programs, and/or commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, collaborations, and licensing arrangements. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in dilution to our stockholders. If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams, or research programs or grant licenses on terms that may not be favorable to us.

Cash Flows

Comparison of the Three Months Ended March 31, 2022 and 2021

The following summarizes our cash flows for the periods indicated:

	Three Months Ended March 31,		
	2022	2021	Change
		(in thousands)	
Cash provided by (used in) operating activities	$ (21,673)	$ 20,313	$ (41,986)
Cash used in investing activities	(72,107)	(22)	(72,085)
Cash provided by financing activities	990	109,680	(108,690)
Net increase (decrease) in cash and cash equivalents	$ (92,790)	$ 129,971	$ (222,761)

Cash Provided by (Used in) Operating Activities

Net cash used in operating activities was $21.7 million for the three months ended March 31, 2022, and net cash provided by operating activities was $20.3 million for the three months ended March 31, 2021.

Cash used in operating activities for the three months ended March 31, 2022 was primarily due to our net loss of $19.1 million, adjusted by non-cash charges of $2.5 million and net changes in our operating assets and liabilities of $5.1 million. Our non-cash charges were primarily comprised of $3.0 million of stock-based compensation, non-cash lease expense of $0.5 million, amortization of investment premiums of $0.3 million, and $0.3 million of depreciation and amortization expense, which were partially offset by the change in the fair value of the MSKCC success payments liability of $1.6 million. The changes in our operating assets and liabilities were due to decreases of $0.8 million in accounts receivable and $1.3 million in other receivables, offset by increases in prepaid expenses and other current assets of $1.3 million, other assets of $0.5 million, and increases of $1.9 million in accounts payable, $2.8 million in accrued expenses and other current liabilities, $0.6 million in deferred revenue, and $0.1 million in operating lease liabilities.

Cash provided by operating activities in the three months ended March 31, 2021 was primarily due to a $30.0 million upfront payment received from AbbVie under the AbbVie Agreement and recorded as deferred revenues, partially offset by a net loss of $13.2 million for the three months ended March 31, 2021. Our non-cash charges were comprised of a change in the fair value of the MSKCC success payments liability of $0.7 million, $0.3 million of stock-based compensation, and $0.2 million of depreciation and amortization expense. The changes in our net operating assets and liabilities were primarily due to an increase of $3.9 million in accrued expenses and other current liabilities and a $0.4 million decrease in contract assets, partially offset by an increase of $1.1 million in other receivables, an increase of $0.6 million in prepaid expenses and other current assets, and an increase of $0.4 million in other assets.

Cash Used in Investing Activities

During the three months ended March 31, 2022, cash used in investing activities was $72.1 million. During the three months ended March 31, 2021 cash used in investing activities was less than $0.1 million.

Cash used in investing activities for the three months ended March 31, 2022, was primarily due to purchases of marketable securities of $110.7 million and property and equipment of $0.7 million, partially offset by the proceeds from maturities of marketable securities of $39.3 million.

Cash used in investing activities for the three months ended March 31, 2021 was primarily due to purchases of property and equipment in the amount of less than $0.1 million.

Cash Provided by Financing Activities

During the three months ended March 31, 2022 and 2021, cash provided by financing activities was $1.0 million and $109.7 million, respectively.

Cash provided by financing activities for the three months ended March 31, 2022 was primarily due to exercise of stock options and purchases of common stock under the 2021 ESPP plan of $1.0 million.

Cash provided by financing activities for the three months ended March 31, 2021 was primarily due to our receipt of net proceeds from the issuance of Series C preferred stock in the amount of $109.2 million and proceeds from common stock options exercised of $0.6 million, partially offset by the repayments of capital lease obligation in the amount of $0.1 million.

Critical Accounting Policies and Significant Judgments and Estimates

Our critical accounting policies are disclosed in our audited consolidated financial statements for the year ended December 31, 2021, and the related notes included in our Form 10-K. Since the date of such financial statements, there have been no material changes to our significant accounting policies other than those described in Note 2 to our condensed consolidated financial statements included elsewhere in this Form 10-Q.

Recently Issued Accounting Pronouncements

See Note 2 to our condensed consolidated financial statements included elsewhere in this Form 10-Q for more information regarding recently issued accounting pronouncements.

Indemnification Agreements

As permitted under Delaware General Corporation Law and in accordance with our amended and restated bylaws, we indemnify our executive officers and directors for certain events or occurrences while such officer or director is or was serving in such capacity. We are also party to indemnification agreements with our executive officers, directors, and controller. We believe the fair value of the indemnification rights and agreements is minimal. Accordingly, we have not recorded any liabilities for these indemnification rights and agreements as of March 31, 2022.

Emerging Growth Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (a) are no longer an emerging growth company or (b) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our condensed consolidated financial statements may not be comparable to those of companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We expect to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company. As described in Note 2 to our condensed consolidated financial statements included elsewhere in this Form 10-Q, we have early adopted multiple accounting standards, because the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies, to the extent early adoption is allowed by the accounting standard.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

There have been no material changes to the Company's market risk during the three months ended March 31, 2022. For a discussion of the Company's exposure to market risk, refer to the section titled "Quantitative and Qualitative Disclosures About Market Risk" in our Form 10-K.

Item 4. Controls and Procedures.

Management's Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934, as amended (the "Exchange Act") is (a) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (b) accumulated and

communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

As of March 31, 2022, our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded that, based upon the evaluation described above, as of March 31, 2022, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(f) or 15d-15(f) of the Exchange Act during the three months ended March 31, 2022 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may be subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Regardless of the outcome, litigation can have a material adverse effect on us due to defense and settlement costs, diversion of our management resources, and other factors. We are not currently subject to any material legal proceedings.

Item 1A. Risk Factors.

There have been no material changes to the Risk Factors previously disclosed in our Form 10-K. The risks described in our Form 10-K are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, and/or operating results.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Unregistered Sales of Equity Securities for the Three Months Ended March 31, 2022

There were no unregistered sales of equity securities during the three months ended March 31, 2022.

Use of Proceeds from our IPO

The net proceeds from our IPO, after deducting underwriting discounts and commissions and offering expenses of $28.6 million, were $321.0 million. We are holding a significant portion of the balance of the net proceeds from our IPO in money market mutual funds, U.S. Treasury bills, corporate debt securities and U.S. government agency bonds. There has been no material change in our planned use of the net proceeds from our IPO described in the final prospectus for our IPO filed on July 23, 2021 with the SEC pursuant to Rule 424(b)(4) of the Securities Act of 1933, as amended.

Item 6. Exhibits.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Caribou Biosciences, Inc. (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Registrant with the SEC on July 28, 2021)
3.2	Amended and Restated Bylaws of Caribou Biosciences, Inc. (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K filed by the Registrant with the SEC on July 28, 2021)
4.1	Description of Common Stock (incorporated by reference to Exhibit 4.1 to the Form 10-K filed by the Registrant on March 21, 2022)
10.1	Office/Laboratory Lease between the Registrant and 7th Street Property III General Partnership, having a commencement date of January 13, 2022 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Registrant with the SEC on January 19, 2022)
10.2	Rider 1 to Office/Laboratory Lease between the Registrant and 7th Street Property III General Partnership, effective as of the lease commencement date of January 13, 2022 (incorporated by reference to Exhibit 10.29 to the Form 10-K filed by the Registrant with the SEC on March 21, 2022)
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act, 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 Exchange Act, 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.
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
** Furnished herewith.

SIGNATURES

Pursuant to the requirements 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.

Caribou Biosciences, Inc.

Date: May 9, 2022

By: /s/ Rachel E. Haurwitz

Rachel E. Haurwitz
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 9, 2022

By: /s/ Jason V. O'Byrne

Jason V. O'Byrne
Chief Financial Officer
(Principal Financial Officer)

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, Rachel E. Haurwitz, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2022 of Caribou Biosciences, 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 registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) 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 registrant, 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) 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

   (c) 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 registrant's internal control over financial reporting.

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: May 9, 2022

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President and Chief 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, Jason V. O'Byrne, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2022 of Caribou Biosciences, 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 registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) 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 registrant, 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) 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

   (c) 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 registrant's internal control over financial reporting.

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: May 9, 2022

By: /s/ Jason V. O'Byrne

Jason V. O'Byrne
Chief Financial 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 Quarterly Report of Caribou Biosciences, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2022 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 result of operations of the Company.

Date: May 9, 2022

By: /s/ Rachel E. Haurwitz
Rachel E. Haurwitz
President and Chief 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 Quarterly Report of Caribou Biosciences, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2022 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 result of operations of the Company.

Date: May 9, 2022

By: /s/ Jason V. O'Byrne

Jason V. O'Byrne
Chief Financial Officer