UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2021

or

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

For the transition period from_____ to_____.

Commission File Number:
001-37348

Corbus Pharmaceuticals Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**46-4348039**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
500 River Ridge Drive **Norwood, MA**	**02062**
(Address of principal executive offices)	**(Zip code)**

(617) 963-0100
(Registrant's telephone number, including area code)

(Former Name, Former Address and Former Fiscal Year if Changed Since Last Report): **N/A**

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

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, par value $0.0001 per share	CRBP	Nasdaq Global 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 November 9, 2021, 125,230,881 shares of the registrant's common stock, $0.0001 par value, were issued and outstanding.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2021

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Balance Sheets

	September 30, 2021	December 31, 2020
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 37,118,654	$ 85,433,441
Marketable securities	69,744,151	—
Restricted cash	192,475	350,000
Stock subscriptions receivable	—	960,033
Prepaid expenses and other current assets	2,111,858	3,712,861
Contract asset	2,500,000	1,618,296
Total current assets	111,667,138	92,074,631
Restricted cash	477,425	669,900
Property and equipment, net	2,652,828	4,067,837
Operating lease right of use assets	4,776,571	5,248,525
Other assets	—	234,038
Total assets	$ 119,573,962	$ 102,294,931
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable	$ —	$ 710,158
Accounts payable	2,545,919	7,381,183
Accrued expenses	13,368,133	22,005,432
Derivative liability	126,857	797,000
Operating lease liabilities, current	1,102,727	1,004,063
Total current liabilities	17,143,636	31,897,836
Long-term debt, net of debt discount	18,550,502	18,029,005
Operating lease liabilities, noncurrent	6,251,038	7,093,165
Total liabilities	41,945,176	57,020,006
Stockholders' equity		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding at September 30, 2021 and December 31, 2020	—	—
Common stock, $0.0001 par value; 300,000,000 shares authorized, 125,230,881 shares issued and outstanding at September 30, 2021 and 150,000,000 shares authorized, and 98,852,696 shares issued and outstanding at December 31, 2020	12,523	9,885
Additional paid-in capital	417,098,261	349,358,378
Accumulated deficit	(339,473,031)	(304,093,338)
Accumulated other comprehensive loss	(8,967)	—
Total stockholders' equity	77,628,786	45,274,925
Total liabilities and stockholders' equity	$ 119,573,962	$ 102,294,931

See notes to the unaudited condensed consolidated financial statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Statement and Comprehensive Loss
(Unaudited)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue from awards and licenses	$ 97,323	$ 1,230,621	$ 881,705	$ 3,279,026
Operating expenses:				
Research and development	8,695,641	27,522,989	30,681,684	82,156,926
General and administrative	5,277,090	7,681,573	16,190,684	23,120,020
Total operating expenses	13,972,731	35,204,562	46,872,368	105,276,946
Operating loss	(13,875,408)	(33,973,941)	(45,990,663)	(101,997,920)
Other income (expense), net:				
Other income (expense), net	12,033,031	(4,972)	11,790,328	4,005
Interest income (expense), net	(391,867)	(454,319)	(1,439,587)	(348,654)
Change in fair value of derivative liability	472,143	(211,000)	670,143	(211,000)
Foreign currency exchange gain (loss), net	(414,048)	(251,117)	(409,914)	(103,903)
Other income (expense), net	11,699,259	(921,408)	10,610,970	(659,552)
Net loss	$ (2,176,149)	$ (34,895,349)	$ (35,379,693)	$ (102,657,472)
Net loss per share, basic and diluted	$ (0.02)	$ (0.43)	$ (0.29)	$ (1.37)
Weighted average number of common shares outstanding, basic and diluted	125,209,985	81,879,119	122,234,847	75,037,418
Comprehensive loss:				
Net loss	$ (2,176,149)	$ (34,895,349)	$ (35,379,693)	$ (102,657,472)
Other comprehensive income (loss):				
Unrealized gain (loss) on marketable debt securities	(3,513)	—	(8,967)	—
Total other comprehensive income (loss)	(3,513)	—	(8,967)	—
Total comprehensive loss	$ (2,179,662)	$ (34,895,349)	$ (35,388,660)	$ (102,657,472)

See notes to the unaudited condensed consolidated financial statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Statement of Stockholders' Equity
(Unaudited)

	For the Three Months Ended September 30, 2021					
	Common Stock		Additional Paid-in	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Capital	Deficit	Loss	Equity
Balance at June 30, 2021	125,083,006	$ 12,508	$ 414,249,029	$ (337,296,882)	$ (5,454)	$ 76,959,201
Issuance of common stock, net of issuance costs of $0	147,875	15	249,985	—	—	250,000
Stock-based compensation expense	—	—	2,599,247	—	—	2,599,247
Unrealized loss on marketable debt securities	—	—	—	—	(3,513)	(3,513)
Net loss	—	—	—	(2,176,149)	—	(2,176,149)
Balance at September 30, 2021	125,230,881	$ 12,523	$ 417,098,261	$ (339,473,031)	$ (8,967)	$ 77,628,786

	For the Three Months Ended September 30, 2020				
	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at June 30, 2020	80,655,848	$ 8,065	$ 308,991,895	$ (260,586,081)	$ 48,413,879
Stock-based compensation expense	—	—	3,630,996	—	3,630,996
Issuance of common stock, net of issuance costs of $350,471	1,504,473	150	11,331,739	—	11,331,889
Issuance of common stock upon exercise of stock options	47,084	5	271,923	—	271,928
Fair Value of warrant issued in connection with K2HV	—	—	472,409	—	472,409
Net loss	—	—	—	(34,895,349)	(34,895,349)
Balance at September 30, 2020	82,207,405	$ 8,220	$ 324,698,962	$ (295,481,430)	$ 29,225,752

See notes to the unaudited condensed consolidated financial statements.

	For the Nine Months Ended September 30, 2021					
	Common Stock		Additional Paid-in	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Capital	Deficit	Loss	Equity
Balance at December 31, 2020	98,852,696	$ 9,885	$ 349,358,378	$ (304,093,338)	$ —	$ 45,274,925
Issuance of common stock, net of issuance costs of $1,820,437	25,539,585	2,554	59,108,247	—	—	59,110,801
Stock-based compensation expense	—	—	7,686,921	—	—	7,686,921
Issuance of common stock upon exercise of stock options	838,600	84	944,715	—	—	944,799
Unrealized loss on marketable debt securities	—	—	—	—	(8,967)	(8,967)
Net loss	—	—	—	(35,379,693)	—	(35,379,693)
Balance at September 30, 2021	125,230,881	$ 12,523	$ 417,098,261	$ (339,473,031)	$ (8,967)	$ 77,628,786

	For the Nine Months Ended September 30, 2020				
	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2019	64,672,893	$ 6,467	$ 198,975,056	$ (192,823,958)	$ 6,157,565
Issuance of common stock, net of issuance costs of $5,365,114	17,284,934	1,728	114,560,514	—	114,562,242
Stock-based compensation expense	—	—	10,116,775	—	10,116,775
Issuance of common stock upon exercise of stock options	249,578	25	574,208	—	574,233
Fair Value of warrant issued in connection with K2HV	—	—	472,409	—	472,409
Net loss	—	—	—	(102,657,472)	(102,657,472)
Balance at September 30, 2020	82,207,405	$ 8,220	$ 324,698,962	$ (295,481,430)	$ 29,225,752

See notes to the unaudited condensed consolidated financial statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Nine Months Ended September 30,	
	2021	**2020**
Cash flows from operating activities:		
Net loss	$ (35,379,693)	$ (102,657,472)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	7,686,921	10,116,775
Depreciation and amortization	792,132	841,755
Loss on impairment of fixed assets	606,078	—
Net amortization on premium of marketable securities	493,722	—
(Gain) Loss on foreign exchange	361,327	(134,368)
Operating lease right of use asset amortization	471,954	422,735
Amortization of debt discount	521,497	118,977
Change in fair value of derivative liability	(670,143)	211,000
Loss on sale of property and equipment	9,099	—
Changes in operating assets and liabilities:		
Decrease in prepaid expenses	1,601,003	1,547,550
Decrease (increase) in contract asset	(881,704)	1,720,974
Decrease in other assets	234,037	71,927
Increase (decrease) in accounts payable	(5,196,591)	458,646
Increase (decrease) in accrued expenses	(8,387,299)	6,186,850
Decrease in operating lease liabilities	(743,462)	(366,744)
Net cash used in operating activities	(38,481,122)	(81,461,395)
Cash flows from investing activities:		
Purchases of marketable securities	(77,266,596)	—
Proceeds from sales and maturities of marketable securities	7,019,756	—
Purchases of property and equipment	—	(536,577)
Proceeds from sale of property and equipment	7,700	—
Net cash used in investing activities	(70,239,140)	(536,577)
Cash flows from financing activities:		
Repayment of short-term borrowings	(710,158)	(752,659)
Proceeds from issuance of common stock	62,586,070	120,501,589
Issuance costs paid for common stock financings	(1,820,437)	(5,365,114)
Proceeds from issuance of debt, net	—	18,756,021
Net cash provided by financing activities	60,055,475	133,139,837
Net increase (decrease) in cash, cash equivalents, and restricted cash	(48,664,787)	51,141,865
Cash, cash equivalents, and restricted cash at beginning of the period	86,453,341	31,748,686
Cash, cash equivalents, and restricted cash at end of the period	$ 37,788,554	$ 82,890,551
Supplemental disclosure of cash flow information and non-cash transactions:		
Cash paid during the period for interest	$ 1,305,512	$ 192,417
Fair value of warrants issued with K2HV loan agreement	—	472,409
Write off of fully depreciated property and equipment	—	156,645

See notes to the unaudited condensed consolidated financial statements.

1. NATURE OF OPERATIONS

Business

Corbus Pharmaceuticals Holdings, Inc. (the "Company" or "Corbus") is focused on developing new medicines that target inflammation, fibrosis, metabolism and immuno-oncology. Corbus' current pipeline includes small molecules that activate or inhibit the endocannabinoid system and anti-integrin monoclonal antibodies that block activation of TGFβ. The Company plans to expand its pipeline through internal efforts and business development. Since its inception, the Company has devoted substantially all of its efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. The Company's business is subject to significant risks and uncertainties and the Company will be dependent on raising substantial additional capital before it becomes profitable and it may never achieve profitability.

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions and accounts have been eliminated in consolidation. In the opinion of management of the Company, the accompanying unaudited condensed consolidated interim financial statements reflect all adjustments (which include only normal recurring adjustments) necessary to present fairly, in all material respects, the consolidated financial position of the Company as of September 30, 2021 and the results of its operations and changes in stockholders' equity for the three and nine months ended September 30, 2021 and 2020 and its cash flows for the nine months ended September 30, 2021 and 2020. The December 31, 2020 condensed consolidated balance sheet was derived from audited financial statements. The Company prepared the condensed consolidated financial statements following the requirements of the U.S. Securities and Exchange Commission (the "SEC") for interim reporting. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States ("GAAP) have been condensed or omitted. It is suggested that these condensed consolidated financial statements be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, filed on March 15, 2021 (the "2020 Annual Report"). The results of operations for such interim periods are not necessarily indicative of the operating results for the full fiscal year.

In response to the spread of COVID-19, the Company has taken temporary precautionary measures intended to help minimize the risk of the virus to its employees and community, including temporarily requiring employees to work remotely, implementing remote monitoring procedures for clinical data and suspending all non-essential travel worldwide for its employees.

The Company is continuing to monitor the impact of the COVID-19 pandemic on its business and operations.

2. LIQUIDITY

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern, which contemplates continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The Company has incurred recurring losses since inception and as of September 30, 2021, had an accumulated deficit of $339,473,031. The Company anticipates operating losses to continue for the foreseeable future due to, among other things, costs related to research funding, development of its product candidates and its preclinical and clinical programs, strategic alliances and the development of its administrative organization. The Company expects the cash, cash equivalents, and marketable securities of approximately $106,863,000 at September 30, 2021 and the remaining $2,500,000 of proceeds that the Company expects to receive under the 2018 CFF Award before the end of 2021 will be sufficient to meet its operating and capital requirements at least twelve months from the filing of this Quarterly Report on Form 10-Q.

The source, timing and availability of any future financing will depend principally upon market conditions, and, more specifically, on the progress of the Company's clinical development programs. Funding may not be available when needed, at all, or on terms acceptable to the Company. Lack of necessary funds may require the Company to, among other things, delay, scale back or eliminate some or all of the Company's planned clinical or preclinical trials.

On August 7, 2020, the Company entered into an Open Market Sale Agreement (the "August 2020 Sale Agreement") with Jefferies LLC ("Jefferies"), as sales agent, pursuant to which the Company may issue and sell, from time to time, through Jefferies, shares of its common stock, and pursuant to which Jefferies may sell its common stock by any method permitted by law deemed to be an "at the market offering" as defined by Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended. The Company will pay Jefferies a commission of 3.0% of the aggregate gross proceeds from each sale of common stock and have agreed to provide Jefferies with customary indemnification and contribution rights. The Company has also agreed to reimburse Jefferies for certain specified expenses. As of August 7, 2020, the Company was authorized to offer and sell up to $150 million of its common stock pursuant to the August 2020 Sale Agreement. During the quarter ended September 30, 2021, the Company did not make any sales of its common stock under the August 2020 Sale Agreement. The Company received gross proceeds of approximately $60,681,238, less issuance costs incurred of approximately $1,820,437 for the nine months ended September 30, 2021 for sales of its common stock under the August 2020 Sale Agreement (see Note 12).

3. SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The financial statements have been prepared in accordance with GAAP, except as described in Note 1 with respect to condensed information.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires 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 the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates and changes in estimates may occur. The most significant estimates are related to stock-based compensation, the accrual of research, product development and clinical obligations, the recognition of revenue under the Investment Agreement discussed in Note 11, the valuation of warrants discussed in Note 14, and the derivative liability associated with the K2 Security and Loan Agreement discussed in Notes 9 and 15.

Cash, Cash Equivalents, and Restricted Cash

The Company considers only those investments which are highly liquid, readily convertible to cash, and that mature within three months from date of purchase to be cash equivalents. At September 30, 2021 and December 31, 2020, cash equivalents were comprised of money market funds.

Restricted cash as of September 30, 2021 included security for a stand-by letter of credit issued in favor of a landlord for $669,900 of which $192,475 was classified in current assets and $477,425 was classified in noncurrent assets as of September 30, 2021.

Cash, cash equivalents, and restricted cash consisted of the following:

	September 30, 2021	December 31, 2020
Cash	$ 7,595,095	$ 1,238,611
Cash Equivalents	29,523,559	84,194,830
Cash and cash equivalents	$ 37,118,654	$ 85,433,441
Restricted cash, current	192,475	350,000
Restricted cash, noncurrent	477,425	669,900
Restricted cash	669,900	1,019,900
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	$ 37,788,554	$ 86,453,341

As of September 30, 2021, all of the Company's cash and cash equivalents was held in the United States, except for approximately $6,610,000 of cash which was held in its subsidiaries in the United Kingdom and Australia. As of December 31, 2020, all of the Company's cash was held in the United States, except for approximately $1,033,000 of cash which was held principally in its subsidiary in the United Kingdom.

Marketable Securities

Marketable securities consist of investments in debt securities and term deposits with maturities greater than 90 days at their acquisition date. The Company has classified its investments with maturities beyond one year as current, based on their highly liquid nature and because such marketable securities represent the investment of cash that is available for current operations.

The Company classifies all of its marketable securities as available-for-sale securities. The Company's marketable securities are measured and reported at fair value using quoted prices in active markets for similar securities. Unrealized gains and losses on available-for-sale debt securities are reported as accumulated other comprehensive gain or loss, which is a separate component of stockholders' equity. The cost of debt securities sold is determined on a specific identification basis, and realized gains and losses are included in other income (expense), net in the consolidated statements of operations and comprehensive loss.

The Company evaluates its marketable securities with unrealized losses for other-than-temporary impairment. When assessing marketable securities for other-than-temporary declines in value, the Company considers such factors as, among other things, how significant the decline in value is as a percentage of the original cost, how long the market value of the investment has been less than its original cost, the Company's ability and intent to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value and market conditions in general. If any adjustment to fair value reflects a decline in the value of the investment that the Company considers to be "other than temporary," the Company reduces the investment to fair value through a charge to the statement of operations and comprehensive loss. No such adjustments were necessary during the periods presented.

Financial Instruments

The carrying values of the notes payable and debt approximate their fair value due to the fact that they are at market terms.

Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access as of the measurement date.

Level 2 – Inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.

Level 3 – Unobservable inputs for the asset or liability only used when there is little, if any, market activity for the asset or liability at the measurement date.

The Company's investments, debt, and its derivative liabilities are carried at fair value determined according to the fair value hierarchy described above. The carrying values of the Company's prepaid expenses and other current assets, and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities.

The valuation of the Company's debt and embedded derivatives are determined primarily by an income approach that considers the present value of net cash flows of the debt with and without prepayment and default features. In accordance with ASC 815 "*Accounting for Derivative Instruments and Hedging Activities"*, these embedded debt features which are determined to be classified as derivative liabilities are marked-to-market each reporting period, with a corresponding non-cash gain or loss charged to the current period. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability.

To determine the fair value of our embedded derivatives, management evaluates assumptions regarding the probability of certain future events. Other factors used to determine fair value include the discount rate, risk free interest rate and derivative term. The fair value recorded for the derivative liability varies from period to period. This variability may result in the actual derivative liability for a period either above or below the estimates recorded on our consolidated financial statements, resulting in fluctuations in other income (expense) because of the corresponding non-cash gain or loss recorded.

Property and Equipment

The estimated life for the Company's property and equipment is as follows: three years for computer hardware and software and three to five years for office furniture and equipment. The Company's leasehold improvements and assets under capital lease are amortized over the shorter of their useful lives or the respective leases. See Note 7 for details of property and equipment and Note 8 for operating and capital lease commitments.

Research and Development Expenses

Costs incurred for research and development are expensed as incurred.

Nonrefundable advance payments for goods or services that have the characteristics that will be used or rendered for future research and development activities pursuant to executory contractual arrangements with third party research organizations are deferred and recognized as an expense as the related goods are delivered or the related services are performed.

Accruals for Research and Development Expenses and Clinical Trials

As part of the process of preparing its financial statements, the Company is required to estimate its expenses resulting from its obligations under contracts with vendors, clinical research organizations and consultants and under clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations, which vary from contract to contract and may result in payment terms that do not match the periods over which materials or services are provided under such contracts. The Company's objective is to reflect the appropriate expenses in its financial statements by matching those expenses with the period in which services are performed and efforts are expended. The Company accounts for these expenses according to the timing of various aspects of the expenses. The Company determines accrual estimates by taking into account discussion with applicable internal personnel and outside service providers as to the progress of clinical trials, or the services completed. During the course of a clinical trial, the Company adjusts its clinical expense recognition if actual results differ from its estimates. The Company makes estimates of its accrued expenses as of each balance sheet date based on the facts and circumstances known to it at that time. The Company's clinical trial accruals are dependent upon the timely and accurate reporting of contract research organizations ("CROs") and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in it reporting amounts that are too high or too low for any particular period. For the three and nine months ended September 30, 2021 and 2020, there were no material adjustments to the Company's prior period estimates of accrued expenses for clinical trials.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, other current liabilities and operating lease liabilities in the Company's consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. This is the rate the Company would have to pay if borrowing on a collateralized basis over a similar term to each lease. The ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Company has subleased a portion of its leased facility under an agreement considered to be an operating lease according to GAAP. The Company has not been legally released from its primary obligations under the original lease and therefore it continues to account for the original lease as it did before commencement of the sublease. The Company will record both fixed and variable payments received from the sublessee in its statement of operations on a straight-line basis as an offset to rent expense.

Concentrations of Credit Risk

The Company has no significant off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other hedging arrangements. The Company may from time to time have cash in banks in excess of Federal Deposit Insurance Corporation insurance limits. However, the Company believes the risk of loss is minimal as these banks are large financial institutions.

Segment Information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and manages its business as principally one operating segment, which is developing and commercializing therapeutics for autoimmunity, fibrosis, and cancer. As of September 30, 2021 all of the Company's assets were located in the United States, except for approximately $13,347,000 of cash, cash equivalents, and marketable securities, $1,729,000 of prepaid expenses and other assets, and $4,000 of property and equipment, net which were held outside of the United States, principally in its subsidiary in the United Kingdom. As of December 31, 2020, all of the Company's assets were located in the United States, except for approximately $1,033,000 of cash, $1,837,000 of prepaid expenses and other assets, and $23,000 of property and equipment, net which were held outside of the United States, principally in its subsidiary in the United Kingdom.

Income Taxes

For federal and state income taxes, deferred tax assets and liabilities are recognized based upon temporary differences between the financial statement and the tax basis of assets and liabilities. Deferred income taxes are based upon prescribed rates and enacted laws applicable to periods in which differences are expected to reverse. A valuation allowance is recorded to reduce a net deferred tax benefit when it is not more likely than not that the tax benefit from the deferred tax assets will be realized. Accordingly, given the cumulative losses since inception, the Company has provided a valuation allowance equal to 100% of the deferred tax assets in order to eliminate the deferred tax assets amounts.

Tax positions taken or expected to be taken in the course of preparing the Company's tax returns are required to be evaluated to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax positions not deemed to meet a more-likely-than-not threshold, as well as accrued interest and penalties, if any, would be recorded as a tax expense in the current year. There were no uncertain tax positions that require accrual or disclosure to the financial statements as of September 30, 2021 or December 31, 2020.

In the three months ended September 30, 2021, the Company received from a foreign taxing authority, an aggregate $12.3 million of cash payments for refundable research and development tax credits that were earned on certain research and development expenses incurred outside of the United States. The Company recorded the $12.3 million in other income in the accompanying statements of operations for the three and nine months ended September 30, 2021.

Impairment of Long-lived Assets

The Company continually monitors events and changes in circumstances that could indicate that carrying amounts of long-lived assets may not be recoverable. An impairment loss is recognized when expected undiscounted cash flows of an asset are less than an asset's carrying value. Accordingly, when indicators of impairment are present, the Company evaluates the carrying value of such assets in relation to the operating performance and future undiscounted cash flows of the underlying assets. An impairment loss equal to the excess of the fair value of the asset over its carrying amount, is recorded when it is determined that the carrying value of the asset may not be recoverable. The Company recognized an impairment loss of approximately $606,000 in the third quarter of 2021 to write down the value of leasehold improvements as a result of entering into a sublease. The company notes no other impairment charges were taken in 2021. See Note 8 for more details on sublease agreement.

Stock-based Payments

The Company recognizes compensation costs resulting from the issuance of stock-based awards to employees, non-employees and directors as an expense in the statement of operations over the service period based on a measurement of fair value for each stock-based award. The fair value of each option grant is estimated as of the date of grant using the Black-Scholes option-pricing model, net of estimated forfeitures. The fair value of each option grant is amortized as compensation cost on a straight-line basis over the requisite service period of the awards, which is generally the vesting period.

Foreign Currency

Transaction gains and losses arising from currency exchange rate fluctuations on transactions denominated in a currency other than the U.S. Dollar functional currency are recorded in the Company's statement of operations. Such transaction gains and losses may be realized or unrealized depending upon whether the transaction settled during the period or remains outstanding at the balance sheet date.

Net Loss Per Common Share

Net loss per share was computed as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Net income (loss)	$ (2,176,149)	$ (34,895,349)	$ (35,379,693)	$ (102,657,472)
Weighted average number of common shares-basic	125,209,985	81,879,119	122,234,847	75,037,418
Net income (loss) per share of common stock-basic	$ (0.02)	$ (0.43)	$ (0.29)	$ (1.37)

* Warrants and options that have not been exercised have been excluded from the diluted calculation as all periods presented have a net loss and the impact of these securities would be anti-dilutive

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board (the "FASB") issued ASU 2019-12*, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* which is intended to simplify various aspects related to accounting for income taxes. The standard is effective for fiscal years, and interim periods within those years, beginning after December 15, 2020, with early adoption permitted. The Company's adoption of ASU 2019-12 as of January 1, 2021 had no impact on the Company's financial statements and related disclosures.

Recently Issued Accounting Pronouncements

In May 2021, the FSB issued ASU 2021-04, *Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging— Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* which is intended to clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options that remain equity classified after modification of exchange. This standard is effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the timing of the adoption of ASU 2021-04 and the potential impact that this standard may have on its consolidated financial statements and related disclosures.

In August 2020, the FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* which is intended to simplify various aspects of GAAP for certain financial instruments with characteristics of liabilities and equity. The standard is effective for public companies that meet the definition of an SEC filer, excluding entities that are smaller reporting companies as defined by the SEC, for fiscal years, and interim periods within those years, beginning after December 15, 2021. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company is currently evaluating the timing of the adoption of ASU 2020-06 and the potential impact that this standard may have on its consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13")*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes may result in earlier recognition of credit losses. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses*, which narrowed the scope and changed the effective date for non-public entities for ASU 2016-13. The FASB subsequently issued supplemental guidance within ASU No. 2019-05, *Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief ("ASU 2019-05")*. ASU 2019-05 provides an option to irrevocably elect the fair value option for certain financial assets previously measured at amortized cost basis. For public entities that are SEC filers, excluding entities that are eligible to be smaller reporting companies, ASU 2016-13 is effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. For all other entities, ASU 2016-13 is effective for annual periods beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted. This standard will be effective for the Company on January 1, 2023 or when it ceases being eligible to be a smaller reporting company. The Company is currently evaluating the potential impact that this standard may have on its consolidated financial statements and related disclosures.

4. MARKETABLE SECURITIES

The following table summarizes the Company's marketable securities as of September 30, 2021 (in thousands):

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Losses	Fair Value
Commercial paper	$ 19,184	$ —	$ —	$ 19,184
Corporate debt securities	33,077	5	(12)	33,070
Asset Backed Securities "ABS"	10,755	1	(3)	10,753
Term deposits	6,737	—	—	6,737
Total	$ 69,753	$ 6	$ (15)	$ 69,744

The following table summarizes the amortized cost and fair value of the Company's available-for-sale marketable securities by contractual maturity as of September 30, 2021 (in thousands):

	Amortized Cost	Fair Value
Maturing in one year or less	$ 58,633	$ 58,633
Maturing after one year but less than three years	11,120	11,111
	$ 69,753	$ 69,744

As of December 31, 2020, there were no available-for-sale marketable securities.

5. FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair values as of September 30, 2021 (in thousands):

	Level 1	Level 2	Level 3	Total
Assets:				
Cash Equivalents:				
Money market funds	$ 29,524	$ —	$ —	$ 29,524
Marketable Securities:				
Term deposits	6,737	—	—	6,737
Commercial paper	—	19,184	—	19,184
Corporate debt securities	—	33,070	—	33,070
ABS	—	10,753	—	10,753
	$ 36,261	$ 63,007	$ —	$ 99,268
Liabilities:				
Derivative liabilities	$ —	$ —	$ 127	$ 127

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair values as of December 31, 2020 (in thousands):

	Level 1	Level 2	Level 3	Total
Assets:				
Cash Equivalents:				
Money Market funds	$ 84,195	$ —	$ —	$ 84,195
	$ 84,195	$ —	$ —	$ 84,195
Liabilities				
Derivative Liabilities	$ —	$ —	$ 797	$ 797

6. LICENSE AGREEMENTS

The Company entered into a license agreement (the "Jenrin Agreement") with Jenrin Discovery, LLC, a privately-held Delaware limited liability company ("Jenrin"), effective September 20, 2018. Pursuant to the Jenrin Agreement, Jenrin granted the Company exclusive worldwide rights to develop and commercialize the Licensed Products (as defined in the Jenrin Agreement) which includes the Jenrin library of over 600 compounds and multiple issued and pending patent filings. The compounds are designed to treat inflammatory and fibrotic diseases by targeting the endocannabinoid system.

In consideration of the license and other rights granted by Jenrin, the Company paid Jenrin a $250,000 upfront cash payment and is obligated to pay potential milestone payments to Jenrin totaling up to $18,400,000 for each compound it elects to develop based upon the achievement of specified development and regulatory milestones. In addition, Corbus is obligated to pay Jenrin royalties in the mid, single digits based on net sales of any Licensed Products, subject to specified reductions.

The Company entered into a license agreement (the "Milky Way License Agreement") with Milky Way BioPharma, LLC ("Milky Way"), a subsidiary of Panorama Research Inc., effective May 25, 2021. Pursuant to the Milky Way License Agreement, the Company received an exclusive license, under certain patent rights and know-how owned or controlled by Milky Way, to develop, commercialize, and otherwise exploit products containing antibodies against integrin αvβ6 and/or integrin αvβ8 ("Licensed Products"), one of which the Company is referring to as CRB-602. Under the terms of the Milky Way License Agreement, the Company will have sole responsibility for research, development, and commercialization of any Licensed Products, and Company has agreed to use commercially reasonable efforts to perform these activities.

In consideration for the license and other rights granted to the Company under the Milky Way License Agreement, the Company paid Milky Way an upfront payment of $500,000 and issued to Milky Way 147,875 shares of its common stock. The Company is obligated to pay up to $53,000,000 in potential milestone payments for the achievement of certain development, regulatory, and sales milestones. At the Company's election, the Company may satisfy a portion of certain milestone payments by issuing shares of its common stock. In addition, the Company is obligated to pay royalties in the low, single digits on sales of Licensed Products during the life of the applicable licensed patents on a country-by-county and product-by-product basis, which is subject to a minimum annual royalty obligation, as well as a percentage share of certain payments received by Company from sublicensees

The Company entered into a license agreement (the "UCSF License Agreement") with the Regents of the University of California ("The Regents") effective May 26, 2021. Pursuant to the UCSF License Agreement, the Company received an exclusive license to certain patents relating to humanized antibodies against integrin αvβ8, one of which the Company is referring to as CRB-601, along with non-exclusive licenses to certain related know-how and materials.

In consideration for the license and other rights granted to the Company under the UCSF License Agreement, the Company paid The Regents a license issue fee of $1,500,000 and is obligated to pay an annual license maintenance fee, as well as up to $153,000,000 in potential milestone payments for the achievement of certain development, regulatory, and sales milestones. In addition, the Company is obligated to pay royalties in the low, single digits on sales of products falling within the scope of the licensed patents, which is subject to a minimum annual royalty obligation, and a percentage share of certain payments received by Company from sublicensees or in connection with the sale of the licensed program.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* ("ASU 2017-01") which clarifies the definition of a business and determines when an integrated set of assets and activities is not a business. ASU 2017-01 requires that if substantially all of the fair value of gross assets acquired or disposed of is concentrated in a single asset or group of similar identifiable assets, the assets would not represent a business. The Company determined that substantially all of the fair value of the Jenrin Agreement was attributable to a single in-process research and development asset which did not constitute a business. The Company determined that substantially all of the fair value of the Milky Way License Agreement and the UCSF License Agreement was attributable to separate groups of in-process research and development assets which did not constitute a business. The Company concluded that it did not have any alternative future use for the acquired in-process research and development assets. Thus, the Company recorded the various upfront payment to research and development expenses in the quarter the license deals became effective. The Company will account for the development, regulatory, and sales milestone payments in the period that the relevant milestones are achieved as either research and development expense or as an intangible asset as applicable.

7. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following:

	September 30, 2021	December 31, 2020
Computer hardware and software	$ 581,426	$ 626,328
Office furniture and equipment	1,626,491	1,626,491
Leasehold improvements	3,315,021	4,163,860
Property and equipment, gross	5,522,938	6,416,679
Less: accumulated depreciation	(2,870,110)	(2,348,842)
Property and equipment, net	$ 2,652,828	$ 4,067,837

Depreciation expense was $256,286 and $202,079 for the three months ended September 30, 2021 and 2020, respectively and $792,132 and $841,755 for the nine months ended September 30, 2021 and 2020, respectively.

8. COMMITMENTS AND CONTINGENCIES

Operating Lease Commitment

See Note 6 to the consolidated financial statements in the Company's 2020 Annual Report for additional information regarding leases.

Pursuant to the terms of our non-cancelable lease agreements in effect at September 30, 2021, the following table summarizes the Company's maturities of operating lease liabilities as of September 30, 2021:

2021 (Remainder of year)	$ 403,257
2022	1,652,563
2023	1,700,005
2024	1,747,447
2025	1,794,889
Thereafter	1,688,145
Total lease payments	$ 8,986,306
Less: imputed interest	(1,632,541)
Total	$ 7,353,765

Sublease Commitment

Effective August 26, 2021, the Company entered into a sublease agreement with a third party to sublease 12,112 square feet of the 30,023 square feet currently being leased under one of its two existing lease agreements. The sublease commences on October 1, 2021 and ends October 31, 2026. The Company notes no sublease income was recognized and offset against rent expense for the three and nine months ended September 30, 2021 and 2020.

Undiscounted sublease cash inflows have been summarized in the following table:

2021 (Remainder of year)	$ —
2022	104,971
2023	185,717
2024	278,576
2025	290,688
2026	252,333
Total sublease payments	$ 1,112,285

9. NOTES PAYABLE

D&O Financing

In November 2019, the Company entered into a loan agreement with a financing company for $963,514 to finance one of the Company's insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $109,413 over a nine-month period. Interest accrued on this loan at an annual rate of 5.25%. This loan was fully repaid in July 2020.

In November 2020, the Company entered into a loan agreement with a financing company for $909,375 to finance one of the Company's insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $103,112 over a nine-month period. Interest accrues on this loan at an annual rate of 4.89%. Prepaid expenses as of September 30, 2021 and December 31, 2020, included approximately $101,042 and $1,010,000, respectively, related to the underlying insurance policy being financed. This loan was fully repaid in July 2021.

Loan and Security Agreement with K2 HealthVentures LLC

On July 28, 2020, the Company, with its subsidiary, Corbus Pharmaceuticals, Inc., as borrower, entered into a $50,000,000 secured Loan and Security Agreement with K2 HealthVentures LLC ("K2HV"), an unrelated third party (the "Loan Agreement") and received the first $20,000,000 tranche upon signing. The second tranche of $20,000,000 and the third tranche of $10,000,000 will be made available at the Company's option subject to the achievement of certain clinical and regulatory milestones. The loan matures on August 1, 2024 and the Company is obligated to make interest only payments for the first 24 months and then interest and equal principal payments for the next 24 months. Interest accrues at a variable annual rate equal to the greater of (i) 8.5% and (ii) the rate of interest noted in The Wall Street Journal, Money Rates section, as the "Prime Rate" plus 5.25%, in each case, subject to a step-down of 25 basis points upon the funding of the second tranche. The interest rate used at September 30, 2021 was 8.5%.

K2HV may elect to convert up to $5,000,000 of the outstanding loan into common stock at a conversion price of $9.40 per share.

In connection with the Loan Agreement, on July 28, 2020, the Company issued to the Lenders (as defined in the Loan Agreement) a warrant to purchase up to 86,206 common shares (the "K2 Warrant") at an exercise price of $6.96 (the "Warrant Price"). The K2 Warrant may be exercised either for cash or on a cashless "net exercise" basis and expires on July 28, 2030. The total proceeds attributed to the K2 Warrant was approximately $472,000 based on the relative fair value of the K2 Warrant as compared to the sum of the fair values of the K2 Warrant, prepayment feature, default feature, and debt. Total proceeds attributed to the prepayment and default features was approximately $546,000. The Company also incurred approximately $1,244,000 of debt issuance costs and is required to make a final payment equal to approximately $1,190,000. See Note 14 for more detail on assumptions used in the valuation of the K2 Warrant and see Note 15 for more information on the assumptions used in valuation of the default and prepayment features.

The total principal amount of the loan under the Loan Agreement outstanding at September 30, 2021, including the $1,190,000 final payment discussed above, is $21,190,000.

Upon the occurrence of an Event of Default (as defined in the Loan Agreement), and during the continuance of an Event of Default, the applicable rate of interest, described above, will be increased by 5.00% per annum. The secured term loan maturity date is August 1, 2024, and the Loan Agreement includes both financial and non-financial covenants. The Company was in compliance with these covenants as of September 30, 2021. The obligations under the Loan Agreement are secured on a senior basis by a lien on substantially all of the assets of the Company and its subsidiaries. The subsidiaries of the Company are guarantors of the obligations of the Company under the Loan Agreement.

The total debt discount related to Lenders of approximately $2,262,000 is being charged to interest expense using the effective interest method over the term of the debt. At September 30, 2021 and December 31, 2020, the fair value of our outstanding debt, which is considered level 3 in the fair value hierarchy, is estimated to be approximately $18,551,000 and $18,029,000, respectively. Interest expense for the three months ended September 30, 2021 was approximately $686,000 and was $2,016,000 for the nine months ended September 30, 2021. Interest expense was approximately $460,000 for the three and nine months ended September 30, 2020.

The net carrying amounts of the liability components consists of the following:

	September 30, 2021	December 31, 2020
Principal	$ 20,000,000	$ 20,000,000
Less: debt discount	(2,262,388)	(2,262,388)
Accretion of Debt Discount	812,890	291,393
Net Carrying amount	$ 18,550,502	$ 18,029,005

The following table summarizes the future principal payments due under long-term debt;

	Principal Payments and final payment on Loan Agreement
Remaining 2021	$ —
2022	3,093,344
2023	9,835,341
2024	8,261,315
Total	$ 21,190,000

10. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	September 30, 2021	December 31, 2020
Accrued clinical operations and trials costs	$ 8,431,267	$ 14,132,842
Accrued product development costs	240,648	2,189,047
Accrued compensation	3,337,362	4,222,594
Accrued other	1,358,856	1,460,949
Total	$ 13,368,133	$ 22,005,432

11. DEVELOPMENT AWARDS

Collaboration with Kaken

On January 3, 2019, the Company entered into a Collaboration and License Agreement (the "Agreement") with Kaken Pharmaceutical Co., Ltd., a company organized under the laws of Japan ("Kaken"). Pursuant to the Agreement, Corbus granted Kaken an exclusive license to commercialize pharmaceutical preparations containing lenabasum (the "Licensed Products") for the prevention or treatment of dermatomyositis and systemic sclerosis (together, the "Initial Indications") in Japan (the "Territory").

Pursuant to the terms of the Agreement, Corbus will bear the cost of, and be responsible for, among other things, conducting the clinical studies and other developmental activities for the Licensed Products in the Initial Indications in the Territory, and Kaken will bear the cost of, and be responsible for, among other things, preparing and filing applications for regulatory approval in the Territory and for commercializing Licensed Products in the Territory, using commercially reasonable efforts to commercialize the Licensed Products and obtaining pricing approval for Licensed Products in the Territory.

In consideration of the license and other rights granted by Corbus, Kaken paid to Corbus in March 2019 a $27,000,000 upfront cash payment and is obligated to pay potential milestone payments to Corbus totaling up to approximately $173,000,000 for the achievement of certain development, sales and regulatory milestones, with part of the milestone payments being calculated in Japanese Yen, and therefore subject to change based on the conversion rate to U.S. Dollars in effect at the time of payment. In addition, during the Royalty Term (as defined below), Kaken is obligated to pay Corbus royalties on sales of Licensed Products in the Territory, under certain conditions, in the double digits, which royalty shall be reduced in certain circumstances. In particular, for so long as Corbus supplies Licensed Products to Kaken pursuant to a supply agreement to be entered into by the parties, royalty payments shall be payable for each unit of Licensed Product that Corbus supplies as a percentage of the Japanese National Health Insurance price of the Licensed Product. During any time in which a supply agreement is not in effect, royalty payments shall be changed to a rate to be agreed upon by the parties in good faith.

The Agreement will remain in effect on a Licensed Product-by-Licensed Product (as defined in the Agreement) basis and will expire upon the expiration of the Royalty Term for the final Licensed Product. The "Royalty Term" means the period beginning on the date of the first commercial sale of the Licensed Product in Japan and ends on the latest of (i) the expiration of the last valid claim of the royalty patents covering such Licensed Product in Japan, (ii) the expiration of regulatory exclusivity for such Licensed Product for such Initial Indication in Japan, or (iii) ten (10) years after the first commercial sale of such Licensed Product for such Initial Indication in Japan. The Agreement may be terminated by either party for material breach, upon a party's insolvency or bankruptcy or upon a challenge by one party of any patents of the other party, and Kaken may terminate in specified situations, including for a safety concern or clinical failure, or at its convenience following the second anniversary of the first commercial sale of a Licensed Product in either of the Initial Indications in the Territory, with 180 days' notice.

Pursuant to the Agreement, the parties agreed to develop a joint steering committee to provide strategic oversight of the parties' activities under the Agreement, as well as a joint development committee to coordinate the development of Licensed Products in Japan. Additionally, the parties will establish a joint commercialization committee to review and confirm commercialization activities with respect to Licensed Products in Japan upon regulatory approval of such Licensed Product.

The Agreement also contains customary representations, warranties and covenants by both parties, as well as customary provisions relating to indemnification, confidentiality and other matters.

The Company assessed this arrangement in accordance with GAAP and concluded that the contract counterparty, Kaken, is a customer. The Company identified the following material promises under the arrangement: (1) the exclusive license to commercialize lenabasum; (2) the product's initial know-how transfer; (3) election to use the product trademarks; (4) the sharing of data gathered through the execution of the Global Development Plan (as defined in the Agreement) for the Initial Indications; and (5) Japanese Pharmaceuticals and Medical Devices Agency ("PMDA")-required supplemental studies. The Company identified two performance obligations; (1) the combined performance obligation of the License, initial know-how transfer and license to the Company's product trademarks; and (2) the sharing of data gathered through the execution of the Global Development Plan for the Initial Indications. The Company determined that the license and initial know-how transfer were not distinct from another in the context of the contract, as initial know-how transfer is highly interrelated to the license and Kaken would incur significant costs to re-create the know-how of the Company. The Company determined that the election to use the product trademarks license contributes to the exclusivity of the license and, therefore, is combined with the license. The PMDA-required supplemental study is a contingent promise although not a performance obligation as the promise does not provide Kaken with a material right.

Under the Agreement, in order to evaluate the appropriate transaction price, the Company determined that the upfront amount of $27,000,000 constituted the entirety of the consideration to be included in the transaction price at the outset of the arrangement, which was allocated to the two performance obligations. The potential milestone payments that the Company is eligible to receive were excluded from the transaction price, as all milestone payments are fully constrained based on the probability of achievement. The Company will reevaluate the transaction price at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, and, if necessary, adjust its estimate of the transaction price.

The Company estimated the stand-alone selling price of each performance obligation using a market approach and allocated the transaction price on a relative basis. This allocation resulted in a de minimis value attributable the obligation to sharing of data gathered through the execution of the Global Development Plan for the Initial Indications and effectively all of the value to the combined license, initial know-how transfer and license to product trademarks. Therefore, the full upfront payment of $27,000,000 is allocated to the combined performance obligation of the license, initial technology transfer and license to the product trademarks.

The Company received the upfront payment of $27,000,000 in March 2019 and, as the performance obligations were not yet satisfied at that time, the payment was recorded in deferred revenue as of March 31, 2019. The Company satisfied the combined performance obligation by June 30, 2019, upon which the Company recognized the $27,000,000 upfront payment as revenue in the second quarter of 2019.

The Company was required to make a $2,700,000 royalty payment to the Cystic Fibrosis Foundation (the "CFF") within 60 days of receipt of the upfront cash payment from Kaken pursuant to the 2018 CFF Award (as defined below). This obligation was paid by the Company to CFF in May 2019.

2018 CFF Award

On January 26, 2018, the Company entered into the Cystic Fibrosis Program Related Investment Agreement (the "Investment Agreement") with the CFF, a non-profit drug discovery and development corporation, pursuant to which the Company received an award for up to $25,000,000 in funding (the "2018 CFF Award") to support a Phase 2b Clinical Trial (the "Phase 2b Clinical Trial") of lenabasum in patients with cystic fibrosis, of which the Company has received $22,500,000 in the aggregate through September 30, 2020 upon the Company's achievement of milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The Company expects that the final $2,500,000 of the 2018 CFF Award will be paid upon the Company's achievement of the last remaining milestone related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement, and the Company expects to receive the remainder before the end of the second half of 2021.

Pursuant to the terms of the Investment Agreement, the Company is obligated to make certain royalty payments to CFF, including a royalty payment of one and one-half times the amount of the 2018 CFF Award, payable in cash within sixty days upon the first receipt of approval of lenabasum in the United States and a second royalty payment of one and one-half times the amount of the 2018 CFF Award upon approval in another major market, as set forth in the Investment Agreement (the "Approval Royalty"). At the Company's election, the Company may satisfy the first of the two Approval Royalties in registered shares of the Company's common stock.

Additionally, the Company is obligated to make (i) royalty payments to CFF of two and one-half percent of net sales from lenabasum due within sixty days after any quarter in which such net sales occur in the Field (as defined in the Investment Agreement), (ii) royalty payments to CFF of one percent of net sales of Non-Field Products (as defined in the Investment Agreement) due within sixty days after any quarter in which such net sales occur, and (iii) royalty payments to CFF of ten percent of any amount the Company and its stockholders receive in connection with the license, sale, or other transfer to a third party of lenabasum, if indicated for the treatment or prevention of CF, or a change of control transaction, except that such payment shall not exceed five times the amount of the 2018 CFF Award, with such payments to be credited against any other net sales royalty payments due. Accordingly, the Company will owe to CFF a royalty payment equal to 10% of any amounts the Company receives as payment under the collaboration agreement with Kaken, provided that the total royalties that the Company will be required to pay under the Investment Agreement resulting from income from licenses or sales subject to the Investment Agreement are capped at five times the total amount of the 2018 CFF Award. The Company may credit such royalties against any royalties on net sales otherwise owed to CFF under the Investment Agreement. Accordingly, the Company was required to pay CFF $2,700,000 in May 2019 as a result of its receipt of the $27,000,000 upfront cash payment from Kaken.

Either CFF or the Company may terminate the Investment Agreement for cause, which includes the Company's material failure to achieve certain commercialization and development milestones. The Company's payment obligations survive the termination of the Investment Agreement.

Pursuant to the terms of the Investment Agreement, the Company issued a warrant to CFF to purchase an aggregate of 1,000,000 shares of the Company's common stock (the "CFF Warrant"). The CFF Warrant is exercisable at a price equal to $13.20 per share and is immediately exercisable for 500,000 shares of the Company's common stock. Upon completion of the final milestone set forth in the Investment Agreement and receipt of the final payment from CFF to the Company pursuant to the Investment Agreement, the CFF Warrant will be exercisable for the remaining 500,000 shares of the Company's common stock. The CFF Warrant expires on January 26, 2025. Any shares of the Company's common stock issued upon exercise of the CFF Warrant will be unregistered and subject to a one-year lock-up.

Under the Investment Agreement, the Company recorded $97,323 and $1,230,621 of revenue during the three months ended September 30, 2021 and 2020, respectively, and recorded $881,705 and $3,279,026 of revenue during the nine months ended September 30, 2021 and 2020, respectively. The Company concluded that the contract counterparty, CFF, is a customer. The Company identified the following material promise under the arrangement: research and development activities and related services under the Phase 2b Clinical Trial. Based on these assessments, the Company identified one performance obligation at the outset of the Investment Agreement, which consists of: Phase 2b Clinical Trial research and development activities and related services.

To determine the transaction price, the Company included the total aggregate payments under the Investment Agreement which amount to $25,000,000 and reduced the revenue to be recognized by the payment to the customer of $6,215,225 in the form of the CFF Warrant representing its fair value, leaving the remaining $18,784,775 as the transaction price as of the outset of the arrangement, which will be recognized as revenue over the performance period as discussed below. The $6,215,225 fair value of the warrant was also recorded as an increase to additional paid in capital.

The Company has billed and received $22,500,000 so far in milestone payments including $12,500,000 in 2018, $5,000,000 in 2019 and $5,000,000 in 2020. No milestone payments were billed or received in the first three quarters of 2021. The Company did bill the final $2,500,000 milestone invoice in October 2021. The corresponding contract asset increased from $1,618,000 at December 31, 2020 to $2,500,000 at September 30, 2021 as a result of the additional revenue recognized during the first three quarters of 2021.

The CFF Warrant is accounted for as a payment to the customer under GAAP. See Note 14 for further information related to the CFF Warrant. The Company notes that the Investment Agreement contains an initial payment that was received upon contract execution and subsequent milestone payments, which are a form of variable consideration that require evaluation for constraint considerations. The Company concluded that the related performance milestones are generally within the Company's control and as result are considered probable. Revenue associated with the performance obligation is being recognized as revenue as the research and development services are provided using an input method, according to the costs incurred as related to the research and development activities on each program and the costs expected to be incurred in the future to satisfy the performance obligation. The transfer of control occurs over this time period and, in management's judgment, is the best measure of progress towards satisfying the performance obligation. The research and development services related to this performance obligation are expected to be performed over approximately three years and will be completed in the fourth quarter of 2021. The amounts received that have not yet been recognized as revenue are recorded as contract liabilities and the amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets on the Company's condensed consolidated balance sheet.

12. COMMON STOCK

The Company has authorized 300,000,000 shares of common stock, $0.0001 par value per share, of which 125,230,881 shares were issued and outstanding as of September 30, 2021. The Company had 150,000,000 shares authorized, and 98,852,696 shares issued and outstanding as of December 31, 2020.

On February 11, 2020, the Company consummated an underwritten public offering of shares of its common stock pursuant to which the Company sold an aggregate of 7,666,667 shares of its common stock, including 1,000,000 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a purchase price of $6.00 per share with gross proceeds to the Company totaling $46,000,000, less estimated issuance costs incurred of approximately $3,147,000.

On April 7, 2020, the Company entered into an Open Market Sale Agreement (the "April 2020 Sale Agreement") with Jefferies pursuant to which Jefferies served as the Company's sales agent to sell up to $75,000,000 of shares of the Company's common stock through an "at the market offering". Sales of common stock under the April 2020 Sale Agreement were made pursuant to an effective registration statement for an aggregate offering of up to $75,000,000. During the three and nine months ended September 30, 2021, the Company did not sell any shares of its common stock under the April 2020 Sale Agreement. During the three and nine months ended September 30, 2020, the Company sold 1,504,473 and 9,618,267, respectively, shares of its common stock under the April 2020 Sale Agreement for which the Company received net proceeds of approximately $11,331,889 and $71,709,534, respectively. The Company completed sales of the $75,000,000 of shares of the Company's common stock under the April 2020 Sale Agreement prior to beginning to sell shares under the August 2020 Sale Agreement.

On August 7, 2020, the Company entered into the August 2020 Sale Agreement with Jefferies pursuant to which Jefferies is serving as the Company's sales agent to sell shares of the Company's common stock through an "at the market offering." As of August 7, 2020, the Company was authorized to sell up to $150,000,000 of shares of the Company's common stock pursuant to the August 2020 Sale Agreement. During the three and nine months ended September 30, 2021, the Company sold zero shares and 25,391,710 shares, respectively, of its common stock under the August 2020 Sale Agreement. The Company received gross proceeds of approximately $60,681,238, less issuance costs incurred of approximately $1,820,437 for the nine months ended September 30, 2021. During the three and nine months ended September 30, 2020, the Company did not sell any shares of its common stock and received no gross proceeds under the August 2020 Sale Agreement.

During the three and nine months ended September 30, 2021, the Company issued zero and 838,600 shares of common stock upon the exercise of stock options to purchase common stock, respectively. During the three and nine months ended September 30, 2021, the Company received proceeds of $0 and $944,799 from these exercises, respectively. During the three and nine months ended September 30, 2020, the Company issued 47,084 and 249,578 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $271,928 and $574,233 from these exercises, respectively.

During the three and nine months ended September 30, 2021, the Company issued 147,875 shares of restricted common stock pursuant to the Milky Way License Agreement. No restricted common shares were issued during the three and nine months ended September 30, 2020.

No warrants were exercised during the three and nine months ended September 30, 2021 and 2020.

13. STOCK OPTIONS

In April 2014, the Company adopted the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Incentive Plan (the "2014 Plan"). Pursuant to the 2014 Plan, the Company's Board of Directors (the "Board") may grant incentive and nonqualified stock options and restricted stock to employees, officers, directors, consultants and advisors.

Pursuant to the terms of an annual evergreen provision in the 2014 Plan, the number of shares of common stock available for issuance under the 2014 Plan shall automatically increase on January 1 of each year by at least seven percent (7%) of the total number of shares of common stock outstanding on December 31st of the preceding calendar year, or, pursuant to the terms of the 2014 Plan, in any year, the Board may determine that such increase will provide for a lesser number of shares.

In accordance with the terms of the 2014 Plan, and pursuant to the annual evergreen provision contained in the 2014 plan, effective as of January 1, 2020, the number of shares of common stock available for issuance under the 2014 Plan increased by 4,527,103 shares, which was seven percent (7%) of the outstanding shares of common stock on December 31, 2019. As of January 1, 2020, there was a total of 23,070,842 shares reserved for issuance under the 2014 plan and there were 8,840,939 shares available for future grants. As of September 30, 2020 there were 5,228,780 shares available for future grants.

In accordance with the terms of the 2014 Plan, and pursuant to the annual evergreen provision contained in the 2014 Plan, effective as of January 1, 2021, the number of shares of common stock available for issuance under the 2014 Plan increased by 2,500,000 shares, which was less than seven percent (7%) of the outstanding shares of common stock on December 31, 2020. As of January 1, 2021, there was a total of 25,570,842 shares reserved for issuance under the 2014 Plan and there were 9,869,051 shares available for future grants. As of September 30, 2021 there were 6,071,775 shares available for future grants.

Stock-based Compensation

For stock options issued and outstanding for the three months ended September 30, 2021 and 2020, respectively, the Company recorded non-cash, stock-based compensation expense of $2,599,247 and $3,630,996, net of estimated forfeitures. For stock options issued and outstanding for the nine months ended September 30, 2021 and 2020, respectively, the Company recorded non-cash, stock-based compensation expense of $7,686,921 and $10,116,775, respectively, net of estimated forfeitures.

Stock-based compensation expense was classified in the consolidated statements of operations and comprehensive loss as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Research and development expenses	$ 986,406	$ 1,667,986	$ 2,786,486	$ 4,555,447
General and administrative expenses	1,612,841	1,963,010	4,900,435	5,561,328
Total stock-based compensation	$ 2,599,247	$ 3,630,996	$ 7,686,921	$ 10,116,775

The fair value of each option award for employees is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. Our expected stock price volatility assumptions are based on the historical volatility of our stock over periods that are similar to the expected terms of the grants. The Company uses historical data, as well as subsequent events occurring prior to the issuance of the financial statements, to estimate option exercises and employee terminations in order to estimate its forfeiture rate. The expected term of options granted under the 2014 Plan, all of which qualify as “plain vanilla” per SEC Staff Accounting Bulletin 107, is determined based on the simplified method due to the Company’s limited operating history and is 6.25 years based on the average between the vesting period and the contractual life of the option. For non-employee options, the expected term is the contractual term. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option.

The weighted average assumptions used principally in determining the fair value of options granted to employees were as follows:

	Nine Months Ended September 30,	
	2021	2020
Risk free interest rate	0.71 %	0.59 %
Expected dividend yield	0 %	0 %
Expected term in years	6.23	6.25
Expected volatility	103.43 %	82.89 %
Estimated forfeiture rate	8.78 %	5.92 %

A summary of option activity for the nine months ended September 30, 2021 and is presented below:

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2020	14,289,643	$ 5.15		
Granted	6,788,800	2.50		
Exercised	(838,600)	1.13		
Forfeited	(2,987,752)	4.62		
Expired	(3,772)	0.11		
Outstanding at September 30, 2021	17,248,319	$ 4.39	6.94	$ 2,922,393
Vested at September 30, 2021	9,928,222	$ 5.19	5.42	$ 2,714,243
Vested and expected to vest at September 30, 2021	16,474,538	$ 4.46	6.84	$ 2,891,015

The weighted average grant-date fair value of options granted during the nine months ended September 30, 2021 and 2020 was $2.02 and $3.61 per share, respectively. The aggregate intrinsic value of options exercised during the nine months ended September 30, 2021 and 2020 was approximately $1,769,714 and $1,141,083, respectively. The total fair value of options that were vested as of September 30, 2021 and 2020 was $38,806,156 and $34,180,750, respectively. As of September 30, 2021, there was approximately $14,798,875 of total unrecognized compensation expense, related to non-vested share-based option compensation arrangements. The unrecognized compensation expense is estimated to be recognized over a period of 2.55 years as of September 30, 2021.

14. WARRANTS

No warrants were exercised during the three and nine months ended September 30, 2021 and 2020.

At September 30, 2021, there were warrants outstanding to purchase 1,506,206 shares of common stock with a weighted average exercise price of $9.46 and a weighted average remaining life of 3.86 years.

The Company issued a warrant to CFF to purchase an aggregate of 1,000,000 shares of the Company's common stock (the "CFF Warrant"). The CFF Warrant is exercisable at a price equal to $13.20 per share and is immediately exercisable for 500,000 shares of the Company's common stock. Upon completion of the final milestone set forth in the Investment Agreement and receipt of the final payment from CFF to the Company pursuant to the Investment Agreement, the CFF Warrant will be exercisable for the remaining 500,000 shares of the Company's common stock. The CFF Warrant expires on January 26, 2025. Any shares of the Company's common stock issued upon exercise of the CFF Warrant will be unregistered and subject to a one-year lock-up. The CFF Warrant is classified as equity as it meets all the conditions under GAAP for equity classification. In accordance with GAAP, the Company has calculated the fair value of the warrant for initial measurement and will reassess whether equity classification for the warrant is appropriate upon any changes to the warrants or capital structure, at each balance sheet date. The weighted average assumptions used in determining the $6,215,225 fair value of the CFF Warrant were as follows:

Risk free interest rate	2.60 %
Expected dividend yield	— %
Expected term in years	7.00
Expected volatility	83.5 %

On July 28, 2020, the Company entered into the Loan Agreement with K2HV pursuant to which K2HV may provide the Company with term loans in an aggregate principal amount of up to $50,000,000. On July 28, 2020, in connection with the funding of the first $20,000,000 tranche, the Company issued a warrant exercisable for 86,206 shares of the Company's common stock (the "K2 Warrant") at an exercise price of $6.96 per share. The K2 Warrant is immediately exercisable for 86,206 shares and expires on July 28, 2030. Any shares of the Company's common stock issued upon exercise of the K2 Warrant are permitted to be settled in unregistered shares. The K2 Warrant is classified as equity as it meets all the conditions under GAAP for equity classification. In accordance with GAAP, the Company has calculated the fair value of the warrant for initial measurement and will reassess whether equity classification for the warrant is appropriate upon any changes to the warrants or capital structure, at each balance sheet date. The weighted average assumptions used in determining the $472,409 fair value of the K2 Warrant were as follows:

Risk free interest rate	0.60 %
Expected dividend yield	— %
Expected term in years	10.00
Expected volatility	80.0 %

On October 16, 2020, the Company entered into a professional services agreement with an investor relations service provider. Pursuant to the agreement, the Company issued warrants exercisable for a total of 420,000 shares of the Company's common stock (the "Warrants") at an exercise price of $1.07 per share. The Warrants will be fully vested on October 19, 2021. Any shares of the Company's common stock issued upon exercise of the Warrants are permitted to be settled in unregistered shares. The Warrants are classified as equity as they meet all the conditions under GAAP for equity classification. In accordance with GAAP, the Company has calculated the fair value of the warrants for initial measurement and will reassess whether classification for the warrant is appropriate upon any changes to the warrants or capital structure, at each balance sheet date. The weighted average assumptions used in determining the $334,740 fair value of the Warrants were as follows:

Risk free interest rate	0.90 %
Expected dividend yield	— %
Expected term in years	5.00
Expected volatility	100.6 %

15. DERIVATIVE LIABILITY

On July 28, 2020, the Company, with its subsidiary, Corbus Pharmaceuticals, Inc., as borrower, entered into a $50,000,000 secured Loan and Security Agreement with K2HV, an unrelated third party (the "Loan Agreement") and received the first $20,000,000 tranche upon signing. The Company has determined that a prepayment feature and default feature needed to be separately valued and marked to market each reporting period after assessing the agreement under GAAP.

The value of these features are determined each reporting period by taking the present value of net cash flows with and without the prepayment features. The significant assumption used to determine the fair value of the debt without any features is the discount rate which has been estimated by using published market rates of triple CCC rated public companies. All other inputs are taken from the Loan Agreement. The additional significant assumptions used when valuing the prepayment feature is the probability of a change of control event. The Company has determined the probability from December 31, 2020 to September 30, 2021 has stayed consistent. The additional significant assumption used when valuing the default feature is the probability of defaulting on the repayment of loan. The Company has determined the probability from December 31, 2020 to September 30, 2021 has remained consistent. The value of these features was determined to be approximately $797,000 at December 31, 2020 and $126,857 at September 30, 2021 which resulted in $670,143 of other expense in the first nine months of 2021. The Company considers the fair value of the derivative liability to be Level 3 under the three-tier fair value hierarchy.

A roll forward of the fair value of the derivative liabilities for the nine months ended September 30, 2021 is presented below.

	September 30, 2021
Beginning balance, December 31, 2020	$ 797,000
Change in fair value of derivative liabilities	(670,143)
Ending balance, September 30, 2021	$ 126,857

16. SUBSEQUENT EVENTS

The Company billed the remaining $2,500,000 milestone payment to CFF in October 2021 after submitting the final clinical study report. CFF's acceptance of this report will then trigger payment.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and the related notes and the other financial information included elsewhere in this Quarterly Report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Quarterly Report, particularly those under "Risk Factors."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, assumptions, estimates, intentions and future performance, and involve known and unknown risks, uncertainties and other factors, which may be beyond our control, and which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be forward-looking statements. You can identify these forward-looking statements through our use of words such as "may," "can," "anticipate," "assume," "should," "indicate," "would," "believe," "contemplate," "expect," "seek," "estimate," "continue," "plan," "point to," "project," "predict," "could," "intend," "target," "potential" and other similar words and expressions of the future.

There are a number of important factors that could cause the actual results to differ materially from those expressed in any forward-looking statement made by us. These factors include, but are not limited to:

- our history of operating losses;
- our current and future capital requirements and our ability to satisfy our capital needs;
- our ability to complete required clinical trials of our product and obtain approval from the FDA or other regulatory agents in different jurisdictions;
- our ability to internally develop new product candidates, intellectual property, and other product candidates we may acquire and/or license;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executive members;
- the potential impact of the COVID-19 pandemic on our operations, including on our clinical development plans and timelines;
- interpretations of current laws and the passages of future laws;
- acceptance of our business model by investors;
- the accuracy of our estimates regarding expenses and capital requirements; and
- our ability to adequately support growth.

The foregoing does not represent an exhaustive list of matters that may be covered by the forward-looking statements contained herein or risk factors that we are faced with that may cause our actual results to differ from those anticipated in our forward-looking statements. Please see "Risk Factors" for additional risks which could adversely impact our business and financial performance.

All forward-looking statements are expressly qualified in their entirety by this cautionary notice. You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this report or the date of the document incorporated by reference into this report. We have no obligation, and expressly disclaim any obligation, to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise. We have expressed our expectations, beliefs and projections in good faith and we believe they have a reasonable basis. However, we cannot assure you that our expectations, beliefs or projections will result or be achieved or accomplished.

Overview

We are an immunology company focused on developing new medicines that target inflammation, fibrosis, metabolism and immuno-oncology. We are developing a diverse pipeline of drug candidates across several distinct programs as well as evaluating potential external candidates complementary to our existing programs. Our pipeline includes small molecules that activate or inhibit the endocannabinoid system and anti-integrin monoclonal antibodies that block activation of TGFβ.

Our pipeline includes the following programs:

- Anti-integrin monoclonal antibodies (mAbs) that inhibit the activation of TGFβ, a multifunctional cytokine which mediates immune evasion and plays a key role in promoting cancer growth and metastasis via its immunosuppressive effects in the tumor microenvironment. We are developing CRB-601, an anti-αvβ8 mAb for the treatment of solid tumors in combination with existing therapies, including checkpoint inhibitors. The solid tumors program continues to advance toward the clinic with first patient dosed anticipated in first half of 2023 following filing of an IND. CRB-602 is an anti-αvβ6/αvβ8 mAb for the treatment of fibrosis. Both αvβ6 and αvβ8 have been implicated in fibrotic diseases. The Company is continuing to explore development pathways for its anti-integrin mAb program targeting fibrosis.

- Lenabasum, a novel, synthetic, oral molecule that selectively activates cannabinoid receptor type 2 (CB2). Biologic activities of lenabasum have been shown in animal models and humans, and include activation of the resolution of inflammation, reducing inflammatory mediators, and limiting fibrosis. Lenabasum is in clinical development for treatment of autoimmune diseases. We completed a Phase 3 study in dermatomyositis in June 2021 which did not meet its primary or secondary endpoints. We are working on gaining clarity from the FDA on the potential path forward in the dermatomyositis program. We continue to expect topline data from the National Institutes of Health-sponsored Phase 2 study of lenabasum in systemic lupus erythematosus by the end of 2021.

- Cannabinoid receptor type 1 (CB1) inverse agonists designed to treat obesity and related metabolic diseases. In animal models of diet-induced obesity, our compounds induce weight loss both as a monotherapy and in combination with a GLP-1 agonist. The program is progressing through preclinical studies and regulatory pathway evaluation.

- Novel CB2 agonists that are designed to treat cancer. Our compounds have demonstrated activity against tumor cells *in vitro*, and several show activity as monotherapy in animal models of solid tumors. We are currently exploring development pathways for this program.

Since our inception, we have devoted substantially all of our efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Our research and development activities have included conducting pre-clinical studies, developing manufacturing methods and the manufacturing of our drug lenabasum for clinical trials and conducting clinical studies in patients.

On May 25, 2021, we entered into a License Agreement ("the Milky Way License Agreement") with Milky Way BioPharma, LLC ('Milky Way"), a subsidiary of Panorama Research Inc., pursuant to which we received an exclusive license, under certain patent rights and know-how owned or controlled by Milky Way, to develop, commercialize, and otherwise exploit products containing antibodies against integrin αvβ6 and/or integrin αvβ8 ("Licensed Products"), one of which we are referring to as CRB-602. Under the terms of the Milky Way License Agreement, we will have sole responsibility for research, development, and commercialization of any Licensed Products, and hawse have agreed to use commercially reasonable efforts to perform these activities. In consideration for the license and other rights granted to us under the Milky Way License Agreement, we paid Milky Way an upfront payment of $500,000 and issued to Milky Way 147,875 shares of our common stock, par value $0.0001 per share (the "Common Stock"). We are obligated to pay up to $53,000,000 in potential milestone payments for the achievement of certain development, regulatory, and sales milestones. At our election, we may satisfy a portion of certain milestone payments by issuing shares of Common Stock. In addition, we are obligated to pay royalties in the low, single digits on sales of Licensed Products during the life of the applicable licensed patents on a country-by-county and product-by-product basis, which is subject to a minimum annual royalty obligation, as well as a percentage share of certain payments received us from sublicensees.

On May 26, 2021, we entered into a License Agreement (the "UCSF License Agreement") with The Regents of the University of California ("The Regents"), pursuant to which we received an exclusive license to certain patents relating to humanized antibodies against integrin αvβ8, one of which we are referring to as CRB-601, along with non-exclusive licenses to certain related know-how and materials. In consideration for the license and other rights granted to us under the UCSF License Agreement, we paid The Regents a license issue fee of $1,500,000 and are obligated to pay an annual license maintenance fee, as well as up to $153,000,000 in potential milestone payments for the achievement of certain development, regulatory, and sales milestones. In addition, we are obligated to pay royalties in the low, single digits on sales of products falling within the scope of the licensed patents, which is subject to a minimum annual royalty obligation, and a percentage share of certain payments received by us from sublicensees or in connection with the sale of the licensed program.

We are continuing to assess the potential impact of the COVID-19 pandemic on our business and operations. For additional information on the various risks posed by the COVID-19 pandemic, refer to Part II, Item 1A. *Risk Factors* of this Quarterly Report on Form 10-Q.

Financial Operations Overview

We are an immunology company and have not generated any revenues from the sale of products and at September 30, 2021, we had an accumulated deficit of approximately $339,473,000. We historically have incurred net losses. Our net losses for the three months ended September 30, 2021 and 2020, were approximately $2,176,000 and $34,895,000, respectively. For the nine months ended September 30, 2021 and 2020, our net losses were approximately $35,380,000 and $102,657,000, respectively.

We expect to continue to incur significant expenses for the foreseeable future. We expect our expenses to continue to decline for the remainder of 2021 due to the completion of our clinical studies in systemic sclerosis and cystic fibrosis in 2020 and dermatomyositis in 2021. While we expect expenses to decline in 2021, we will still incur significant operating losses and accordingly we will need additional financing to support our continuing operations. We will seek to fund our operations through public or private equity or debt financings or other sources, which may include government grants and collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenues to achieve profitability, and we may never do so.

We expect to continue to incur operating losses for at least the next several years in connection with our ongoing activities, as we:

- conduct preclinical and clinical trials for our product candidates in SLE and other indications;
- continue our research and development efforts; and
- manufacture clinical study materials.

Results of Operations

Comparison of Three Months Ended September 30, 2021 and 2020

Revenue

To date, we have not generated any revenues from the sales of products. We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain regulatory approval for the marketing of lenabasum, or other of our product candidates, which we expect will take a number of years and is subject to significant uncertainty.

We have recognized approximately $97,000 and $1,231,000 of revenue in the three months ended September 30, 2021 and 2020, respectively.

Amounts recognized in revenue for the three months ended September 30, 2021 and 2020 were in connection with our entry on January 26, 2018 into the Cystic Fibrosis Program Related Investment Agreement (“Investment Agreement") with the Cystic Fibrosis Foundation (“CFF”), a non-profit drug discovery and development corporation, pursuant to which we received a development award for up to $25,000,000 in funding (the “2018 CFF Award”) to support a Phase 2b Clinical Trial (the “Phase 2b Clinical Trial”) of lenabasum in patients with cystic fibrosis of which we received $6,250,000 in the first quarter of 2018, $6,250,000 in the second quarter of 2018, $5,000,000 in the second quarter of 2019, and $5,000,000 in the third quarter of 2020 upon our achievement of a milestone related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The $2,500,000 remainder of the 2018 CFF Award is payable to us incrementally upon the achievement of the remaining milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement and we expect to receive the remainder before the end of the fourth quarter of 2021.

Research and Development Expenses

Research and development expenses are incurred for the development of lenabasum and consist primarily of payroll and payments to contract research and development companies. To date, these costs are related to generating pre-clinical data and the cost of manufacturing lenabasum for clinical trials and conducting clinical trials. We anticipate that our research and development expenses will continue to decrease in the future as our cystic fibrosis, systemic sclerosis, and dermatomyositis trials are substantially completed.

Research and development expenses were approximately $8,696,000 for the three months ended September 30, 2021 and $27,523,000 for the three months ended September 30, 2020. The $18,827,000 decrease in research and development expenses is primarily due to lower clinical trial expenses of $8,342,000, associated with the end of lenabasum clinical studies. There was also a decrease of $4,020,000 in manufacturing and drug manufacturing costs, $3,188,000 in compensation costs, $1,547,000 in consulting, $740,000 in data analysis costs, $723,000 in toxicology costs, and $499,000 in analytical testing costs compared to the three months ended September 30, 2020. These decreases were offset by a $380,000 increase to impairment loss due to entering into a sublease agreement in the third quarter of 2021.

During 2019, we formed a subsidiary in each of the United Kingdom and Australia and approximately 23% and 45% of research and development expenses recorded for the three months ended September 30, 2021 and 2020, respectively, were recorded in these entities.

General and Administrative Expenses

General and administrative expenses consist primarily of payroll, rent and professional services such as accounting and legal services.

General and administrative expenses were $5,277,000 for the three months ended September 30, 2021 and $7,682,000 for the three months ended September 30, 2020. The $2,405,000 decrease in general and administrative expense is primarily due to lower compensation expenses of $1,417,000, consulting expenses of $447,000, and commercial marketing expenses of $386,000.

Other Income (Expense), Net

Other income (expense), net consists primarily of interest expense incurred on our outstanding debt, interest income we earn on our interest-bearing accounts, changes in derivative liabilities, and realized and unrealized foreign currency exchange gains and losses.

Other income, net for the three months ended September 30, 2021 totaled approximately $11,699,000, an increase of approximately $12,620,000 over the $921,000 of other expense, net recorded for the three months ended September 30, 2020. The increase was primarily attributable to the receipt of approximately $12,300,000 from a foreign tax authority for refundable research and development credits.

Comparison of Nine Months Ended September 30, 2021 and 2020

Revenue

We have recognized $882,000 and $3,279,000 of revenue in the nine months ended September 30, 2021 and 2020, respectively.

Research and Development Expenses

Research and development expenses were approximately $30,682,000 for the nine months ended September 30, 2021 and $82,157,000 for the nine months ended September 30, 2020. The $51,475,000 decrease in research and development expenses is primarily due to lower clinical expenses of $24,351,000, associated with the end of lenabasum clinical studies. There was also a decrease of $10,318,000 in manufacturing and drug manufacturing costs, $8,848,000 in compensation costs, $3,672,000 in consulting costs, $2,595,000 in toxicology costs, $1,604,000 in analytical testing, and $1,356,000 in data analysis costs, compared to the nine months ended September 30, 2020. These decreases were offset by a $2,231,000 increase in license expense from licensing agreements entered into during the second quarter of 2021 and a $380,000 increase to impairment loss due to entering into a sublease agreement in the third quarter of 2021.

Approximately 25% and 45% of research and development expenses recorded for the nine months ended September 30, 2021 and 2020, were recorded in our subsidiaries in the United Kingdom and Australia.

General and Administrative Expenses

General and administrative expenses were $16,191,000 for the nine months ended September 30, 2021 and $23,120,000 for the nine months ended September 30, 2020. The $6,929,000 decrease in general and administrative expense is primarily due to decreases of $3,148,000 of compensation costs, $1,497,000 of commercial marketing costs, and $1,216,000 of consulting costs.

Other Income (Expense), Net

Other income, net for the nine months ended September 30, 2021 totaled approximately $10,611,000, an increase of approximately $11,271,000 over the $660,000 of other expense, net recorded for the nine months ended September 30, 2020. The increase was primarily attributable to the receipt of approximately $12,300,000 from a foreign tax authority for refundable research and development credits, offset by an increase $1,550,000 of interest expense related to the K2HV security and loan agreement.

Liquidity and Capital Resources

Since inception, we have experienced negative cash flows from operations. We have financed our operations primarily through sales of equity-related securities. In addition, the majority of the costs of our phase 2 SLE clinical trial has been or is expected to be funded by grants from the National Institutes of Health, and our phase 2b clinical trial in cystic fibrosis was supported by the 2018 CFF Award. At September 30, 2021, our accumulated deficit since inception was approximately $339,473,000.

At September 30, 2021, we had total current assets of approximately $111,667,000 and total current liabilities of approximately $17,144,000, resulting in working capital of approximately $94,523,000. Of our total cash, cash equivalents, marketable securities, and restricted cash approximately $107,533,000 at September 30, 2021, approximately $94,186,000 was held within the United States.

Net cash used in operating activities for the nine months ended September 30, 2021 was approximately $38,481,000, which includes a net loss of approximately $35,380,000, adjusted for non-cash expenses of approximately $10,273,000 largely related to stock-based compensation expense, and approximately $13,374,000 of cash used by net working capital items principally due to paying down accounts payable and accrued expenses.

Cash used in investing activities for the nine months ended September 30, 2021 totaled approximately $70,239,000, which was principally related to purchases of marketable securities.

Cash provided by financing activities for the nine months ended September 30, 2021 totaled approximately $60,055,000. On August 7, 2020, we entered into an Open Market Sale Agreement (the “August 2020 Sale Agreement”) with Jefferies LLC, as sales agent, pursuant to which we may issue and sell, from time to time, through Jefferies, shares of our common stock. As of August 7, 2020, we were authorized to offer and sell up to $150 million of our common stock pursuant to the August 2020 Sale Agreement. As of September 30, 2021 we have sold 40,937,861 shares of our common stock under the August 2020 Sale Agreement for approximate gross proceeds totaling $82,086,000, less issuance costs incurred of approximately $2,463,000.

During the nine months ended September 30, 2021, we issued 838,600 shares of common stock upon the exercise of stock options to purchase common stock and we received proceeds of approximately $945,000 from these exercises.

We expect our cash, cash equivalents, marketable securities, and restricted cash of approximately $107,533,000 at September 30, 2021 together with the final $2,500,000 milestone payment from the 2018 CFF Award to be sufficient to meet our operating and capital requirements into the first quarter of 2024, based on current planned expenditures. The $2,500,000 remainder of the up to $25,000,000 2018 CFF Award has been billed in October of 2021 and we expect to receive payment before the end of 2021.

We will need to raise significant additional capital to continue to fund operations and the clinical trials for lenabasum. If we are unable to raise sufficient capital in the future, we may be required to undertake cost-cutting measures, including delaying or discontinuing certain clinical or preclinical activities. We may seek to sell common stock, preferred stock or convertible debt securities, enter into a credit facility or another form of third-party funding or seek other debt financing. In addition, we may seek to raise cash through collaborative agreements or from government grants. The sale of equity and convertible debt securities may result in dilution to our stockholders and certain of those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of preferred stock, convertible debt securities or other debt financing, these securities or other debt could contain covenants that would restrict our operations. Any other third-party funding arrangement could require us to relinquish valuable rights.

The source, timing and availability of any future financing will depend principally upon market conditions, and, more specifically, on the progress of our clinical development programs.

Funding may not be available when needed, at all, or on terms acceptable to us. Lack of necessary funds may require us, among other things, to delay, scale back or eliminate expenses including some or all of our planned clinical and preclinical trials.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates, assumptions, and judgements that affect the reported amounts of assets, liabilities, revenue, costs of expenses and related disclosures in the condensed consolidated financial statements. On an ongoing basis, we evaluate our estimates and judgments. We base our estimates and judgments on historical experience, current economic and industry conditions and on various other factors that are believed to be reasonable under the circumstances. This forms 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 from these estimates under different assumptions or conditions. We believe our critical accounting policies that involve the most judgement and complexity are those relating to:

- stock based compensation;
- accrued research and development expenses;
- right of use assets and lease liabilities;
- revenue recognition; and
- derivate liabilities associated with the K2HV Loan Agreement

Stock-Based Compensation

Stock options are granted with an exercise price at no less than fair market value at the date of the grant. The stock options normally expire ten years from the date of grant. Stock option awards vest upon terms determined by our Board.

We recognize compensation costs resulting from the issuance of stock-based awards to employees, members of our Board and consultants. The fair value of each option grant was estimated as of the date of grant using the Black-Scholes option-pricing model. The fair value is amortized as compensation cost on a straight-line basis over the requisite service period of the awards, which is generally the vesting period. Due to our limited operating history, we estimated our volatility in consideration of a number of factors, including the volatility of comparable public companies and, commencing in 2015, we also included the volatility of our own common stock. We use historical data, as well as subsequent events occurring prior to the issuance of the consolidated financial statements, to estimate option exercise and employee forfeitures within the valuation model. The expected term of options granted to employees under our stock plans is based on the average of the contractual term (generally 10 years) and the vesting period (generally 48 months). The expected term of options granted under the 2014 Plan, all of which qualify as "plain vanilla" per SEC Staff Accounting Bulletin 107, is based on the average of the 6.25 years. For non-employee options, the expected term is the contractual term. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option. We estimate the forfeiture rate at the time of grant and revise it, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on management's expectation through industry knowledge and historical data. We have never paid dividends on our common stock and do not anticipate paying dividends on our common stock in the foreseeable future. Accordingly, we have assumed no dividend yield for purposes of estimating the fair value of our share-based compensation.

Accrued Research and Development Expenses

As part of the process of preparing financial statements, we are required to estimate and accrue expenses, the largest of which are research and development expenses. This process involves: communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost; estimating and accruing expenses in our financial statements as of each balance sheet date based on facts and circumstances known to us at the time; and periodically confirming the accuracy of our estimates with selected service providers and making adjustments, if necessary.

Examples of estimated research and development expenses that we accrue include:

- fees paid to CROs in connection with nonclinical studies;
- fees paid to contract manufacturers in connection with the production of lenabasum for clinical trials;
- fees paid to CRO and research institutions in connection with conducting of clinical studies; and
- professional service fees for consulting and related services.

We base our expense accruals related to clinical studies on our estimates of the services performed pursuant to contracts with multiple research institutions and clinical research organizations that conduct and manage clinical studies on our behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors, such as the successful enrollment of patients and the completion of clinical study milestones. Our service providers invoice us monthly in arrears for services performed. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates.

To date, we have not experienced significant changes in our estimates of accrued research and development expenses following each applicable reporting period. However, due to the nature of estimates, we cannot assure you that we will not make changes to our estimates in the future as we become aware of additional information regarding the status or conduct of our clinical studies and other research activities.

Leases

We lease our office space. We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, other current liabilities and operating lease liabilities in our consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As our leases do not provide an implicit rate, we use an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. This is the rate we would have to pay if borrowing on a collateralized basis over a similar term to each lease. The ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Company has subleased a portion of its leased facility under an agreement considered to be an operating lease according to GAAP. The Company has not been legally released from its primary obligations under the original lease and therefore it continues to account for the original lease as it did before commencement of the sublease. The Company will record both fixed and variable payments received from the sublessee in its statement of operations on a straight-line basis as an offset to rent expense.

Revenue Recognition

Revenue from awards was recognized in accordance with GAAP and pertains only to the 2018 CFF Award.

We will assess any new agreements we enter into in accordance with GAAP, including whether such agreements fall under the scope of such standard. This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under GAAP, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of GAAP, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The five-step model is applied to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of GAAP, we assess the goods or services promised within each contract and determine those that are performance obligations and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Revenue associated with the performance obligation is being recognized as revenue as the research and development services are provided using an input method, according to the costs incurred as related to the research and development activities and the costs expected to be incurred in the future to satisfy the performance obligation. The transfer of control occurs over this time period and, in management's judgment, is the best measure of progress towards satisfying the performance obligation. The research and development services related to this performance obligation are expected to be performed over approximately three years and will be completed in the fourth quarter of 2021. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

We believe that full consideration has been given to all relevant circumstances that we may be subject to, and the consolidated financial statements accurately reflect our best estimate of the results of operations, financial position and cash flows for the periods presented.

Derivative Liabilities

The Loan Agreement entered into in 2020 contains certain features that meet the definition of being embedded derivatives requiring bifurcation from the accounting for the K2HV loan. The derivative liabilities are initially measured at fair value on issuance and is subject to remeasurement at each reporting period with the changes in fair value recognized in other income (expense), net.

We estimate the fair value of the derivative liabilities at each reporting period by taking the present value of future net cash flows with and without the prepayment and default features. The difference between the entire instrument with the embedded features compared to the instrument without the embedded features equals the fair value of the derivative liabilities at each reporting period. The estimated timing and probability of a change in control event is the most significant assumption when valuing the prepayment feature. The estimated probability of default is most significant assumption used when valuing the default feature.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Not Applicable.

Item 4. Controls and Procedures.

Evaluation of Our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that material information required to be disclosed in our periodic reports filed under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, our principal executive officer and our principal financial officer, to allow timely decisions regarding required disclosure. Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act, as amended) as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective in ensuring that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that the information required to be disclosed by us in such reports is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the period to which this report relates that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently subject to any material legal proceedings. However, we may from time to time become a party to various legal proceedings arising in the ordinary course of our business.

Item 1A. Risk Factors.

There have been no material changes in or additions to the risk factors included in or Annual Report on Form 10-K for the year ended December 31, 2020.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibits listed below are filed or furnished as part of this Quarterly Report on Form 10-Q.

EXHIBIT INDEX

Exhibit No.	Description
10.1	Separation and General Release Agreement between the Company and Barbara White, dated September 17, 2021 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the SEC on September 22, 2021).
10.2	Amendment to Employment Agreement between the Company and Craig Millian, effective as of September 27, 2021 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the SEC on September 28, 2021).
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a).*
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a).*
32.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b).**
32.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b).**
101.INS	XBRL Instance Document.* - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document.*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.*
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.*
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2021 is formatted in iXBRL*

* Filed herewith.

** Furnished, not filed.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Corbus Pharmaceuticals Holdings, Inc.

Date: November 12, 2021

By: */s/ Yuval Cohen*
Name: Yuval Cohen
Title: *Chief Executive Officer*
(Principal Executive Officer)

Date: November 12, 2021

By: */s/ Sean Moran*
Name: Sean Moran
Title: *Chief Financial Officer*
(Principal Financial Officer and Chief Accounting Officer)

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT

TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Yuval Cohen, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the period ended September 30, 2021 of Corbus Pharmaceuticals Holdings, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: November 12, 2021

/s/ Yuval Cohen

Yuval Cohen

Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT

TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sean M. Moran, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the period ended September 30, 2021 of Corbus Pharmaceuticals Holdings, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: November 12, 2021

/s/ Sean Moran

Sean Moran
Chief Financial Officer
(Principal Financial Officer and Chief Accounting Officer)

Exhibit 32.1

Certification of Chief Executive Officer Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

This Certification is being filed pursuant to 18 U.S.C. Section 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002. This Certification is included solely for the purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act and is not intended to be used for any other purpose. In connection with the accompanying Quarterly Report on Form 10-Q for the quarter ended September 30, 2021 (the "Quarterly Report") of Corbus Pharmaceuticals Holdings, Inc. (the "Company"), the undersigned hereby certifies in his capacity as an officer of the Company that to such officer's knowledge:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

By: */s/ Yuval Cohen*
Yuval Cohen
Chief Executive Officer
(Principal Executive Officer)

Dated: November 12, 2021

Exhibit 32.2

Certification of Chief Financial Officer Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

This Certification is being filed pursuant to 18 U.S.C. Section 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002. This Certification is included solely for the purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act and is not intended to be used for any other purpose. In connection with the accompanying Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, (the "Quarterly Report") of Corbus Pharmaceuticals Holdings, Inc. (the "Company"), the undersigned hereby certifies in his capacity as an officer of the Company that to such officer's knowledge:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

By: */s/ Sean Moran*

Dated: November 12, 2021

Sean Moran
Chief Financial Officer
(Principal Financial Officer and Chief Accounting Officer)