# 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, 2020**

**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 3, 2020, 84,037,239 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, 2020**

**TABLE OF CONTENTS**

**PART I — FINANCIAL INFORMATION**

**Item 1. Financial Statements.**

**Corbus Pharmaceuticals Holdings, Inc.**
**Condensed Consolidated Balance Sheets**

| | September 30, 2020 (Unaudited) | December 31, 2019 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 81,870,651 | $ 31,748,686 |
| Restricted cash | 350,000 | — |
| Prepaid expenses and other current assets | 2,177,383 | 3,724,932 |
| Contract asset | 960,091 | 2,681,065 |
| Total current assets | 85,358,125 | 38,154,683 |
| Restricted cash | 669,900 | — |
| Property and equipment, net | 4,402,022 | 5,083,865 |
| Operating lease right of use assets | 5,396,248 | 5,818,983 |
| Other assets | 13,041 | 84,968 |
| Total assets | $ 95,839,336 | $ 49,142,499 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Notes payable | $ — | $ 752,659 |
| Accounts payable | 11,080,717 | 11,091,363 |
| Accrued expenses | 28,593,049 | 22,447,939 |
| Derivative liability | 757,000 | — |
| Operating lease liabilities, current | 972,464 | 595,745 |
| Total current liabilities | 41,403,230 | 34,887,706 |
| Long-term debt, net of debt discount | 17,856,589 | — |
| Operating lease liabilities, noncurrent | 7,353,765 | 8,097,228 |
| Total liabilities | $ 66,613,584 | $ 42,984,934 |
| Stockholders' equity | | |
| Preferred stock, $0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding at September 30, 2020 and December 31, 2019 | — | — |
| Common stock, $0.0001 par value; 150,000,000 shares authorized, 82,207,405 and 64,672,893 shares issued and outstanding at September 30, 2020 and December 31, 2019, respectively | 8,220 | 6,467 |
| Additional paid-in capital | 324,698,962 | 198,975,056 |
| Accumulated deficit | (295,481,430) | (192,823,958) |
| Total stockholders' equity | 29,225,752 | 6,157,565 |
| Total liabilities and stockholders' equity | $ 95,839,336 | $ 49,142,499 |

See notes to the unaudited condensed consolidated financial statements.

**Corbus Pharmaceuticals Holdings, Inc.**
**Condensed Consolidated Statements of Operations**
**(Unaudited)**

| | For the Three Months Ended September 30, | | For the Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2020** | **2019** | **2020** | **2019** |
| Revenue from awards and licenses | $ 1,230,621 | $ 2,589,783 | $ 3,279,026 | $ 33,570,048 |
| Operating expenses: | | | | |
| Research and development | 27,522,989 | 22,152,001 | 82,156,926 | 66,117,114 |
| General and administrative | 7,681,573 | 5,534,493 | 23,120,020 | 17,367,202 |
| Total operating expenses | 35,204,562 | 27,686,494 | 105,276,946 | 83,484,316 |
| Operating loss | (33,973,941) | (25,096,711) | (101,997,920) | (49,914,268) |
| Other income (expense), net: | | | | |
| Other income (expense), net | (4,972) | 4,109,338 | 4,005 | 4,109,338 |
| Interest income (expense), net | (454,319) | 292,854 | (348,654) | 1,076,166 |
| Change in fair value of derivative liability | (211,000) | — | (211,000) | — |
| Foreign currency exchange loss, net | (251,117) | (96,282) | (103,903) | (144,193) |
| Other income (expense), net | (921,408) | 4,305,910 | (659,552) | 5,041,311 |
| Net loss | $ (34,895,349) | $ (20,790,801) | $ (102,657,472) | $ (44,872,957) |
| Net loss per share, basic and diluted | $ (0.43) | $ (.32) | $ (1.37) | $ (0.71) |
| Weighted average number of common shares outstanding, basic and diluted | 81,879,119 | 64,660,017 | 75,037,418 | 63,638,447 |

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, 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 agreement | — | — | 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 |

**For the Three Months Ended September 30, 2019**

| | Common Stock | | Additional Paid-in | Accumulated | Total Stockholders' |
|---|---|---|---|---|---|
| | Shares | Amount | Capital | Deficit | Equity |
| Balance at June 30, 2019 | 64,644,093 | $ 6,465 | $ 192,819,731 | $ (145,452,396) | $ 47,373,800 |
| Stock-based compensation expense | — | — | 2,977,574 | — | 2,977,574 |
| Issuance of common stock upon exercise of stock options | 28,800 | 2 | 80,098 | — | 80,100 |
| Net loss | — | — | — | (20,790,801) | (20,790,801) |
| Balance at September 30, 2019 | 64,672,893 | $ 6,467 | $ 195,877,403 | $ (166,243,197) | $ 29,640,673 |

See notes to the unaudited condensed consolidated financial statements.

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

**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 (audited) | 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 agreement | — | — | 472,409 | — | 472,409 |
| Net loss | — | — | — | (102,657,472) | (102,657,472) |
| Balance at September 30, 2020 (Unaudited) | 82,207,405 | $ 8,220 | $ 324,698,962 | $ (295,481,430) | $ 29,225,752 |

**For the Nine Months Ended September 30, 2019**

| | Common Stock | | Additional Paid-in | Accumulated | Total Stockholders' |
|---|---|---|---|---|---|
| | Shares | Amount | Capital | Deficit | Equity |
| Balance at December 31, 2018 (audited) | 57,247,496 | $ 5,725 | $ 148,888,635 | $ (121,370,240) | $ 27,524,120 |
| Issuance of common stock, net of issuance costs of $2,571,552 | 6,198,500 | 620 | 37,718,078 | — | 37,718,698 |
| Stock-based compensation expense | — | — | 8,884,001 | — | 8,884,001 |
| Issuance of common stock upon exercise of warrants | 1,119,868 | 112 | (112) | — | — |
| Issuance of common stock upon exercise of stock options | 107,029 | 10 | 386,801 | — | 386,811 |
| Net loss | — | — | — | (44,872,957) | (44,872,957) |
| Balance at September 30, 2019 (Unaudited) | 64,672,893 | $ 6,467 | $ 195,877,403 | $ (166,243,197) | $ 29,640,673 |

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, | |
|---|---|---|
| | **2020** | **2019** |
| Cash flows from operating activities: | | |
| Net loss | $ (102,657,472) | $ (44,872,957) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Stock-based compensation expense | 10,116,775 | 8,884,001 |
| Depreciation and amortization | 841,755 | 466,104 |
| (Gain)/Loss on foreign exchange | (134,368) | 115,654 |
| Operating lease right of use asset amortization | 422,735 | 358,615 |
| Amortization of debt discount | 118,977 | — |
| Change in fair value of derivative liability | 211,000 | — |
| Changes in operating assets and liabilities: | | |
| Decrease in customer receivable | — | 5,000,000 |
| Decrease (increase) in prepaid expenses | 1,547,550 | (194,079) |
| Decrease in contract asset | 1,720,974 | 107,545 |
| Decrease (increase) in other assets | 71,927 | (90,211) |
| Increase (decrease) in accounts payable | 458,646 | (836,296) |
| Increase in accrued expenses | 6,186,850 | 13,486,408 |
| Decrease in deferred revenue | — | (6,570,048) |
| (Decrease) increase in operating lease liabilities | (366,744) | 986,401 |
| Net cash used in operating activities | (81,461,395) | (23,158,863) |
| Cash flows from investing activities: | | |
| Purchases of property and equipment | (536,577) | (1,451,069) |
| Net cash used in investing activities | (536,577) | (1,451,069) |
| Cash flows from financing activities: | | |
| Principal payments on notes payable | (752,659) | (394,305) |
| Proceeds from issuance of common stock | 120,501,589 | 40,677,061 |
| Issuance costs paid for common stock financings | (5,365,114) | (2,571,552) |
| Proceeds from issuance of debt, net | 18,756,021 | — |
| Principal payments on capital lease obligation | — | (375) |
| Net cash provided by financing activities | 133,139,837 | 37,710,829 |
| Net increase in cash, cash equivalents, and restricted cash | 51,141,865 | 13,100,897 |
| Cash, cash equivalents, and restricted cash at beginning of the period | 31,748,686 | 41,748,468 |
| Cash, cash equivalents, and restricted cash at end of the period | $ 82,890,551 | $ 54,849,365 |
| Supplemental disclosure of cash flow information and non-cash transactions: | | |
| Cash paid during the period for interest | 192,417 | 20,629 |
| Fair value of warrants issued with K2HV loan agreement | 472,409 | — |
| Write off of fully depreciated property and equipment | 156,645 | — |
| Purchases of property and equipment included in accounts payable or accrued expenses | — | 1,229,916 |
| Right of use assets obtained in exchange for lease obligation upon adoption of ASU 2016-02 | $ — | $ 2,399,524 |
| Right of use assets obtained in exchange for lease obligation upon entry into February 2019 Lease Agreement | $ — | $ 3,529,090 |

See notes to the unaudited condensed consolidated financial statements.

## 1. NATURE OF OPERATIONS

***Business***

Corbus Pharmaceuticals Holdings, Inc. (the "Company") is a clinical stage pharmaceutical company, focused on the development and commercialization of novel therapeutics to treat rare, chronic, and serious inflammatory and fibrotic diseases. 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, 2020, the results of its operations and changes in stockholders' equity for the three months and nine months ended September 30, 2020 and 2019 and its cash flows for the nine months ended September 30, 2020 and 2019. The December 31, 2019 condensed consolidated balance sheet was derived from audited financial statements. The Company prepared the condensed consolidated financial statements following the requirements of the SEC for interim reporting. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles 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, 2019, filed on March 16, 2020. The results of operations for such interim periods are not necessarily indicative of the operating results for the full fiscal year.

## 2. LIQUIDITY AND GOING CONCERN

The accompanying condensed 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, 2020, had an accumulated deficit of $295,481,430. 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.

Should the Company be unable to raise sufficient additional capital, the Company may be required to undertake cost-cutting measures including delaying or discontinuing certain clinical activities. The Company will need to raise significant additional capital to continue to fund the clinical trials for lenabasum and its preclinical drug candidates (see Note 4). The Company may seek to sell common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding, or seek other debt financing. The sale of equity and convertible debt securities may result in dilution to the Company's stockholders and certain of those securities may have rights senior to those of the Company's common shares. If the Company raises 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 the Company's operations. Any other third-party funding arrangement could require the Company 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 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, among other things, to delay, scale back or eliminate some or all of the Company's planned clinical trials. These factors among others cause management to conclude there is a substantial doubt about the Company's ability to continue as a going concern. There have been no adjustments made to these consolidated financial statements as a result of these uncertainties.

On February 11, 2020, the Company consummated an underwritten public offering of shares of its common stock ("February 2020 Offering") (See Note 10).

On April 7, 2020, the Company entered into an Open Market Sale Agreement℠ ("April 2020 Sale Agreement") with Jefferies LLC ("Jefferies") pursuant to which Jefferies is serving 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," (See Note 10).

In June 2020, the Company became entitled to receive $5,000,000 upon the Company's achievement of a milestone related to the progress of the Phase 2b Clinical Trial, as set forth in 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 the Company 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. The Company received the $5,000,000 payment from the CFF for this milestone achievement in July 2020. The Company expects the final $2.5 million remainder of the 2018 CFF Award will be paid to the Company upon the achievement of the last remaining milestone related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. (See Note 9).

On July 28, 2020, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with its subsidiary, Corbus Pharmaceuticals, Inc., as borrower, the Company, as guarantor, each lender party thereto (the "Lenders"), K2 HealthVentures LLC ("K2HV"), an unrelated third party, as administrative agent for the Lenders, and Ankura Trust Company, LLC, an unrelated third party, as collateral agent for the Lenders, pursuant to which K2HV may provide the Company with term loans in an aggregate principal amount of up to a $50,000,000. (See Note 13).

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 is 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, 2020, the Company did not make any sales of its common stock under the August 2020 Sales Agreement.

## 3. SIGNIFICANT ACCOUNTING POLICIES

A summary of the significant accounting policies followed by the Company in the preparation of the financial statements is as follows:

***Use of Estimates***

The process of preparing financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. 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 (See Note 9), the valuation of the CFF and K2HV warrants discussed in Note 12 and Note 7, and the derivative liability associated with the K2 Security and Loan agreement (see Note 7).

***Cash and Cash Equivalents***

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. Marketable investments are those with original maturities in excess of three months. At September 30, 2020 and December 31, 2019, cash equivalents were comprised of money market funds. The Company had no marketable investments at September 30, 2020 and December 31, 2019.

Restricted cash as of September 30, 2020 included a collateral account for the Company's corporate credit cards and is classified in current assets in the amount of $250,000. Additionally, as of September 30, 2020, restricted cash included a stand-by letter of credit issued in favor of a landlord for $769,900 of which $100,000 was classified in current assets and $669,900 was classified in noncurrent assets as of September 30, 2020.

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

| | September 30, 2020 | December 31, 2019 |
|---|---|---|
| Cash | $ 3,962,572 | $ 884,115 |
| Money market fund | 77,908,079 | 30,864,571 |
| Cash and cash equivalents | 81,870,651 | $ 31,748,686 |
| | | |
| Restricted cash, current | 350,000 | — |
| Restricted cash, noncurrent | 669,900 | — |
| Restricted cash | 1,019,900 | — |
| Total cash, cash equivalents, and restricted cash shown in the statement of cash flows | $ 82,890,551 | $ 31,748,686 |

As of September 30, 2020, all of the Company's cash and cash equivalents was held in the United States, except for approximately $1,595,000 of cash which was held in our subsidiaries in the United Kingdom and Australia. As of December 31, 2019, all of the Company's cash was held in the United States, except for approximately $ 466,000 of cash which was held in our subsidiaries in the United Kingdom and Australia.

***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***

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. As a basis for considering such assumptions, there exists a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

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

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 5 for details of property and equipment and Note 6 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 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, 2020 and 2019, 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.

***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 to treat rare life-threatening, inflammatory fibrotic diseases. As of September 30, 2020 all of the Company's assets were located in the United States, except for approximately $ 1,595,000 of cash, $1,207,000 of prepaid expenses, and $30,000 of property and equipment, net which were held outside of the United States, principally in our subsidiary in the United Kingdom. As of December 31, 2019, all of the Company's assets were located in the United States, except for approximately $466,000 of cash, $1,606,000 of prepaid expenses, $23,000 of other assets, and $52,000 of property and equipment, net which were held outside of the United States, principally in our 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, 2020 or December 31, 2019.

***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. No impairment charges were recorded during the three and nine months ended September 30, 2020 and 2019.

***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 | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Net loss | $ (34,895,349) | $ (20,790,801) | $ (102,657,472) | $ (44,872,957) |
| Weighted average number of common shares-diluted* | 81,879,119 | 64,660,017 | 75,037,418 | 63,638,447 |
| Net loss per share of common stock-basic and diluted* | $ (0.43) | $ (0.32) | $ (1.37) | $ (0.71) |

* 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

**Recent Accounting Pronouncements**

*Accounting for Income Taxes*

In December 2019, 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 standard will be adopted upon the effective date for the Company beginning January 1, 2021. The Company is currently evaluating the expected impact it could have on its financial statements and related disclosures.

*Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*

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 generally accepted accounting principles (GAAP) for certain financial instruments with characteristics of liabilities and equity. The standard is effective for public companies that meet definition of a Securities and Exchange Commission (SEC) filer, excluding entities to be 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 expected impact it could have on the Company's financial statements and related disclosures.

*Collaborative Arrangements*

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606* ("ASU 2018-18"). ASU 2018-18 clarifies the interaction between the accounting guidance for collaborative arrangements and revenue from contracts with customers.ASU 2018-18 is effective for public business entities for fiscal years beginning after December 15, 2019, including interim periods within that fiscal year. The Company's adoption of ASU 2018-18 as of January 1, 2019 had no impact on the Company's financial statements and related disclosures.

## 4. LICENSE AGREEMENT

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.

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, CRB-4001, 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 asset. Thus, the Company recorded the $250,000 upfront payment to research and development expenses in the third quarter of 2018. The Company will account for the $18,400,000 of development and regulatory milestone payments in the period that the relevant milestones are achieved as either research and development expense or as an intangible asset as applicable.

## 5. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following:

| | September 30, 2020 | December 31, 2019 |
|---|---|---|
| Computer hardware and software | $ 714,380 | $ 711,442 |
| Office furniture and equipment | 1,614,853 | 1,627,896 |
| Leasehold improvements | 4,163,860 | 4,150,488 |
| Property and equipment, gross | 6,493,093 | 6,489,826 |
| Less: accumulated depreciation | (2,091,071) | (1,405,961) |
| Property and equipment, net | $ 4,402,022 | $ 5,083,865 |

Depreciation expense was $202,079 and $157,773 for the three months ended September 30, 2020 and 2019, respectively and $841,755 and $466,104 for the nine months ended September 30, 2020 and 2019, respectively. During the three and nine months ended September 30, 2020, the Company wrote off $156,645 of fully depreciated property and equipment.

## 6. COMMITMENTS AND CONTINGENCIES

**Operating Lease Commitment**

On August 21, 2017, the Company entered into a lease agreement ("August 2017 Lease Agreement") for commercial lease of office space, pursuant to which the Company agreed to lease 32,733 square feet of office space ("Leased Premises"). The initial term of the August 2017 Lease Agreement was for a period of seven years which began with the Company's occupancy of the Leased Premises in February 2018. The base rent for the Leased Premises ranged from approximately $470,000 for the first year to approximately $908,000 for the seventh year. Per the terms of the August 2017 Lease Agreement, the landlord agreed to reimburse the Company for $1,080,189 of leasehold improvements. The reimbursements had been deferred and were to be recognized as a reduction of rent expense over the term of the lease. Additionally, the August 2017 Lease Agreement required a standby irrevocable letter of credit of $400,000, which was to be reduced, if the Company is not in default under the August 2017 Lease Agreement, to $300,000 and $200,000 on the third and fourth anniversary of the commencement date, respectively, The Company entered into an unsecured letter of credit for $400,000 in connection with the August 2017 Lease Agreement.

The Company adopted ASU 2016-02, *Leases (Topic 842),* as amended ("ASU 2016-02") using the effective date method as of January 1, 2019 and recorded a lease liability of approximately $3,811,000, and a right-of-use asset of approximately $2,400,000, with no operations adjustment to the accumulated deficit related to the Leased Premises. Operating leases are included in operating lease right-of-use assets ("ROU"), operating lease liabilities, current and operating lease liabilities, noncurrent in the Company's condensed 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 the date of adoption 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, which was 9%. 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.

On February 26, 2019, the Company amended its lease ("February 2019 Lease Agreement") pursuant to which an additional30,023 square feet of office space ("New Premises") will be leased by the Company in the same building for an aggregate total of 62,756 square feet of leased office space ("Total Premises"). Per ASC 842, the February 2019 Lease Agreement constitutes a modification as it extends the original lease term and increases the scope of the lease (additional space provided under the amendment), which requires evaluation of the remeasurement of the lease liability and corresponding ROU asset. Accordingly, the Company reassessed the classification of the Leased Premises and remeasured the lease liability on the basis of the extended lease term using the 20 additional monthly rent payments and the incremental borrowing rate at the effective date of the modification of 9%. The remeasurement for the modification resulted in an increase to the lease liability and the ROU asset of approximately $855,000. The Company determined that the New Premises will be treated as a new standalone operating lease under ASC 842 and recorded a lease liability and a right-of-use asset of approximately $2,700,000 for this lease.

On October 25, 2019, the Company amended its lease ("October 2019 Lease Amendment") pursuant to which the term of the lease was extended through November 30, 2026 and the existing office space under lease was expanded by 500 square feet for an aggregate total of63,256 square feet of leased office space ("Amended Total Premises"). The October 2019 Lease Amendment constitutes a modification as it extends the original lease term and increases the scope of the lease (additional space provided under the amendment), which requires evaluation of the remeasurement of the lease liability and corresponding ROU asset. The additional space did not result in a separate contract as the rent increase was determined not to be commensurate with the standalone price for the additional right of use. Accordingly, the Company reassessed the classification of the Amended Total Premises, which resulted in operating classification, and remeasured the lease liability on the basis of the extended lease term using the additional monthly rent payments and the incremental borrowing rate at the effective date of the modification of 8%. The remeasurement for the modification resulted in an increase to the lease liability and the ROU asset of approximately $381,000 that was recorded in the fourth quarter of 2019.

The following table contains a summary of the lease costs recognized and other information pertaining to the Company's operating leases for the year ended December 31, 2019:

| | | |
|---|---|---|
| Lease cost | | |
| Operating lease cost | $ | 1,025,899 |
| Total lease cost | $ | 1,025,899 |
| | | |
| Other information | | |
| Operating cash flows received for operating leases | $ | 338,435 |
| Weighted average remaining lease term | | 6.9 years |
| Weighted average discount rate | | 8.00% |

Total lease expense for the three months ended September 30, 2020 and 2019 was $310,118 and $307,182, respectively. Total lease expense for the nine months ended September 30, 2020 and 2019 was $930,354 and $814,527, respectively.

Pursuant to the terms of our non-cancelable lease agreements in effect at September 30, 2020, the following table summarizes our maturities of operating lease liabilities as of September 30, 2020:

| | | |
|---|---|---|
| 2020 (Remainder of year) | $ | 391,396 |
| 2021 | | 1,605,121 |
| 2022 | | 1,652,563 |
| 2023 | | 1,700,005 |
| 2024 | | 1,747,447 |
| Thereafter | | 3,483,034 |
| Total lease payments | $ | 10,579,566 |
| | | |
| Less: imputed interest | | (2,253,337) |
| Total | $ | 8,326,229 |

For commitments under the Company's development award agreements see Note 9.

**COVID-19**

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.

As a result of the COVID-19 pandemic, the Company may experience disruptions that could adversely impact its business. The COVID-19 pandemic may negatively affect clinical site initiation, patient recruitment and enrollment, patient dosing, distribution of drug to clinical sites and clinical trial monitoring for the Company's clinical trials. The COVID-19 pandemic may also negatively affect the operations of the third-party contract research organizations that the Company relies upon to assist it in conducting its clinical trials and the contract manufacturers who manufacture the Company's drug candidates.

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

## 7. NOTES PAYABLE

*D&O Financing*

In November 2018, the Company entered into a loan agreement with a financing company for $491,629 to finance one of the Company's insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $49,857 over a ten-month period. Interest accrues on this loan at an annual rate of 3.07%. This loan was fully repaid in August 2019.

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 accrues on this loan at an annual rate of 5.25%. Prepaid expenses as of September 30, 2020 and December 31, 2019, included $0 and $923,292, respectively, related to this insurance policy. 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%.

*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 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" plus5.25%, 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, 2020 was8.5%. 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 the Lenders a warrant to purchase up to86,206 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 12 for more detail on assumptions used in the valuation of the K2 warrant and see Note 13 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, 2020, 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, 2020. 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, 2020 and December 31, 2019, the fair value of our outstanding debt, which is considered level 3 in the fair value hierarchy, is estimated to be approximately $17,857,000 and $0, respectively. Interest expense for the three and nine months ended September 30, 2020 was approximately $460,000. No interest expense or amortization of debt discount recorded in 2019 related to K2 Loan Agreement.

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

| | September 30, 2020 | December 31, 2019 |
|---|---|---|
| Principal | $ 20,000,000 | - |
| Less: debt discount | (2,262,000) | - |
| Accretion of Debt Discount | 118,977 | - |
| Net Carrying amount | $ 17,856,977 | - |

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

| | Principal Payments and final payment on Loan Agreement |
|---|---|
| Remaining 2020 | $ - |
| 2021 | - |
| 2022 | 3,093,344 |
| 2023 | 9,835,341 |
| 2024 | 8,261,315 |
| Total | $ 21,190,000 |

## 8. ACCRUED EXPENSES

Accrued expenses consisted of the following:

| | September 30, 2020 | December 31, 2019 |
|---|---|---|
| Accrued clinical operations and trials costs | $ 18,709,059 | $ 14,242,669 |
| Accrued product development costs | 3,589,136 | 3,573,231 |
| Accrued compensation | 4,676,027 | 3,673,111 |
| Accrued other | 1,618,827 | 958,928 |
| Total | $ 28,593,049 | $ 22,447,939 |

## 9. DEVELOPMENT AWARDS AND DEFERRED REVENUE

*Collaboration with Kaken*

On January 3, 2019, Corbus Pharmaceuticals Holdings, Inc. 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, and will use commercially reasonable efforts to commercialize Licensed Products and obtain 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 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 ASC 606 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 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 (as defined in the Agreement) 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 CFF within 60 days of receipt of the upfront cash payment from Kaken pursuant to the 2018 CFF Award. 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 with the CFF ("Investment Agreement"), 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. I. The Company expects that the final $2.5 million 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 fourth quarter of 2020.

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, and 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 $1,230,621 and $2,589,783 of revenue during the three months ended September 30, 2020 and 2019, respectively, and recorded $3,279,026 and $6,570,048 of revenue during the nine months ended September 30, 2020 and 2019, 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. A roll forward of deferred revenue related to the Investment Agreement for the nine months ended September 30, 2020 is presented below.

| | September 30, 2020 |
|---|---|
| Beginning balance, December 31, 2019 | $ — |
| Billing to CFF upon achievement of milestone | 5,000,000 |
| Recognition of revenue | (3,279,026) |
| Reverse to contract asset (unbilled revenue) | (1,720,974) |
| Ending balance | $ — |

The CFF Warrant is accounted for as a payment to the customer under ASC 606. See Note 12 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 2.75 years and is expected to be completed in the fourth quarter of 2020. The amounts received that have not yet been recognized as revenue are recorded in deferred revenue 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.

## 10. COMMON STOCK

The Company has authorized 150,000,000 shares of common stock, $0.0001 par value per share, of which 82,207,405 shares, and 64,672,893 shares were issued and outstanding as of September 30, 2020, and December 31, 2019, respectively.

On January 30, 2019, the Company consummated an underwritten public offering of shares of its common stock pursuant to which the Company sold an aggregate of 6,198,500 shares of its common stock, including 808,500 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a purchase price of $6.50 per share with gross proceeds to the Company totaling $40,290,250, less issuance costs incurred of approximately $2,572,000.

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 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, 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 through September 30, 2020. In October 2020, the Company sold an additional 921,107 shares of its common stock under the April 2020 Sale Agreement for net proceeds of approximately $1,032,744.

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, 2020, the Company did not sell any shares from the August 2020 Sale Agreement. In October 2020, the Company sold 908,727 shares of its common stock under the August 2020 Sale Agreement for net proceeds of approximately $953,590 pursuant to an effective registration statement.

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, 2019, the Company issued 28,800 and 107,029 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $80,100 and $386,811 from these exercises, respectively.

No warrants were exercised during the three and nine months ended September 30, 2020. During the nine months ended September 30, 2019, warrants to purchase 1,283,500 shares of common stock were exercised on a cashless basis resulting in the issuance of 1,119,868 shares of common stock. No warrants were exercised during the three months ended September 30, 2019.

## 11. 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 may grant incentive and nonqualified stock options and restricted stock to employees, officers, directors, consultants and advisors. Options issued under the 2014 Plan generally vest over 4 years from the date of grant in multiple tranches and are exercisable for up to 10 years from the date of issuance.

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 of Directors may determine that such increase will provide for a lesser number of shares.

In accordance with the terms of the 2014 Plan, effective as of January 1, 2019, the number of shares of common stock available for issuance under the 2014 Plan increased by 3,000,000 shares, which was less than seven percent (7%) of the outstanding shares of common stock on December 31, 2018. As of January 1, 2019, the 2014 Plan had a total reserve of 18,543,739 shares and there were 8,072,241 shares available for future grants. As of September 30, 2019, there were 4,728,315 shares available for future grants.

In accordance with the terms of 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, the 2014 Plan had a total reserve of 23,070,842 shares and there were 8,840,939 shares available for future grants. As of September 30, 2020 there were 5,228,870 shares available for future grants.

*Stock-based Compensation*

For stock options issued and outstanding for the three months ended September 30, 2020 and 2019, respectively, the Company recorded non-cash, stock-based compensation expense of $3,630,996 and $2,977,574, net of estimated forfeitures. For stock options issued and outstanding for the nine months ended September 30, 2020 and 2019, respectively, the Company recorded non-cash, stock-based compensation expense of $10,116,775 and $8,884,001, net of estimated forfeitures.

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. Due to its limited operating history, the Company estimates its volatility including the volatility of comparable public companies and its own common stock, taking into account the expected life of the option. 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, | |
|---|---|---|
| | **2020** | **2019** |
| Risk free interest rate | 0.59% | 2.41% |
| Expected dividend yield | 0% | 0% |
| Expected term in years | 6.25 | 6.25 |
| Estimated Forfeiture Rate | 5.92% | 4.63% |
| Expected volatility | 82.89% | 87.3% |

A summary of option activity for the nine months ended September 30, 2020 and is presented below:

| **Options** | **Shares** | **Weighted Average Exercise Price** | **Weighted Average Remaining Contractual Term in Years** | **Aggregate Intrinsic Value** |
|---|---|---|---|---|
| Outstanding at December 31, 2019 | 13,245,366 | $ 5.19 | | |
| Granted | 4,394,600 | 5.12 | | |
| Exercised | (249,578) | 2.30 | | |
| Forfeited | (782,531) | 5.83 | | |
| Outstanding at September 30, 2020 | 16,607,857 | $ 5.19 | 7.10 | $ 3,604,156 |
| Vested at September 30, 2020 | 9,671,446 | $ 4.68 | 5.79 | $ 3,604,156 |
| Vested and expected to vest at September 30, 2020 | 16,059,611 | $ 5.18 | 7.03 | $ 3,604,156 |

The weighted average grant-date fair value of options granted during the nine months ended September 30, 2020 and 2019 was $3.61 and $5.21 per share, respectively. The aggregate intrinsic value of options exercised during the nine months ended September 30, 2020 and 2019 was approximately $1,141,083 and $324,567, respectively. The total fair value of options that were vested as of September 30, 2020 and 2019 was $34,180,750 and $21,108,706, respectively. As of September 30, 2020, there was approximately $24,501,912 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 2.63 years as of September 30, 2020.

## 12. WARRANTS

No warrants were exercised during the three and nine months ended September 30, 2020. During the nine months ended September 30, 2019, warrants to purchase 1,283,500 shares of common stock were exercised on a cashless basis resulting in the issuance of 1,119,868 shares of common stock. No warrants were exercised during the three months ended September 30, 2019.

At September 30, 2020, there were warrants outstanding to purchase 1,086,206 shares of common stock with a weighted average exercise price of $12.70 and a weighted average remaining life of 4.76 years, related to the warrants issued to CFF pursuant to the terms of the Investment Agreement (Note 8) and the warrants issued pursuant to the K2 Loan and Security Agreement (Note 7).

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 | 0% |
| 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 | 0% |
| Expected term in years | 10.00 |
| Expected volatility | 80.0% |

## 13. 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 mark to market each reporting period after assessing the agreement under ASC 815.

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 increased from July 28, 2020 to September 30, 2020 as a result of SSc phase 3 trial results. 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 increased from July 28, 2020 to September 30, 2020. As the probability of both features increased the fair value of the derivative liability has increased at September 30, 2020. The value of these features was determined to be approximately $546,000 at July 28, 2020 and $757,000 at September 30, 2020 which resulted in $211,000 of other expense. The Company considers the fair value of the derivative liability to be Level 3 under the three-tier fair value hierarchy.

## 14. SUSBSEQUENT EVENTS

On September 8, 2020, the Company announced data from its Phase 3 study of lenabasum for treatment of systemic sclerosis and announced that the study showed no significant differences in the primary and secondary endpoints when comparing lenabasum to placebo. On October 6, 2020, the Company announced its Phase 2b Study of lenabasum for treatment of cystic fibrosis did not meet its primary end point. On October 8, 2020, the Company announced plans to reduce its workforce by approximately 54% and expects to incur a charge of approximately $3,000,000 related to severance, benefits and related costs, substantially all of which will be recorded in the fourth quarter of 2020.

**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 lack of operating history and 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;
- the potential impact of the recent COVID-19 pandemic on our operations, including on our clinical development plans and timelines;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executive members;
- our ability to internally develop new inventions and intellectual property;
- 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 anticipate 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 a Phase 3, clinical-stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat chronic and serious inflammatory and fibrotic diseases with clear unmet medical needs by targeting the human endocannabinoid system, or ECS. We are developing a pipeline of cannabinoid drug candidates which are rationally designed, synthetic, small molecule drugs which target the ECS to treat inflammatory and fibrotic diseases. Our lead investigational drug candidate, lenabasum, is a novel, synthetic, oral, cannabinoid type 2, or CB2, agonist designed to resolve chronic inflammation, limit fibrosis and support tissue repair. We are currently developing lenabasum to treat two life threatening diseases: dermatomyositis, or DM, and systemic lupus erythematosus, or SLE. We are continuing to evaluate potential opportunities for lenabasuam in cystic fibrosis and systemic sclerosis. In addition, we are developing a pipeline of experimental drug candidates from our library of novel compounds targeting the ECS.

In September 2020, we reported top-line results from our Phase 3 study evaluating lenabasum in 365 patients with SSc. In October 2020, we reported top-line results from our Phase 2b study evaluating lenabasum in 426 patients with CF. Both studies failed to meet their primary endpoints. In August 2020, we completed enrollment in of our Phase 3 study evaluating lenabasum in 176 patients with DM (the "DETERMINE trial"). Originally, the DETERMINE trial had a planned duration of 52 weeks, however, we have seen recent changes in the DM competitive landscape with studies that are shorter than one year. Accordingly, we will be submitting a protocol amendment to the FDA and other regulatory agencies to shorten the treatment duration of the DETERMINE trial to 28 weeks. The last subject visit through 28 weeks is expected in March 2021 with top line data to be reported shortly thereafter. In addition, we are conducting a Phase 2 SLE study funded by a grant through the National Institutes of Health, or NIH, that is expected to enroll 100 patients. Open-label extension studies are ongoing in DM for patients who completed the Phase 2 and Phase 3 studies.

The U.S. Food and Drug Administration, or FDA, has granted lenabasum Orphan Drug Designation as well as Fast Track Status for SSc and CF, and Orphan Drug Designation for DM. The European Medicines Authority, or EMA, has granted lenabasum Orphan Drug Designation for SSc, CF and DM. The Pharmaceuticals and Medical Devices Agency in Japan has granted Orphan Drug Designation for lenabasum in SSc.

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 preclinical studies, developing manufacturing methods and the manufacturing of our drug lenabasum for clinical trials and conducting clinical studies in patients. Two of the four clinical programs for lenabasum are being supported by non - dilutive awards and grants. The NIH has funded the majority of the clinical development costs for the DM Phase 2 clinical trial and is funding the SLE Phase 2 clinical trials. In cystic fibrosis, the Phase 2b clinical trial was supported by a 2018 award from the Cystic Fibrosis Foundation, or CFF, of up to $25 million, and the Phase 2 clinical trial was partially funded by a $5 million award from the Cystic Fibrosis Foundation Therapeutics, Inc., a non-profit drug discovery and development affiliate of the CFF.

In September 2018, we acquired an exclusive worldwide license to develop, manufacture and market drug candidates from more than 600 compounds, targeting the endocannabinoid system from Jenrin Discovery LLC, or Jenrin. The drug candidates included CB2 agonists and CB1 inverse agonists. We have also developed additional potential CB2 agonists and CB1 inverse agonists as drug candidates and have identified several compounds that we believe have more promising physicochemical and early pharmacokinetic properties than CRB-4001. As a result, we have decided to discontinue further development of CRB-4001.

On January 3, 2019, we entered into a strategic collaboration with Kaken Pharmaceutical Co., Ltd., or Kaken, for the development and commercialization in Japan of our investigational drug lenabasum for the treatment of SSc and DM, two rare and serious autoimmune diseases. Under the terms of the agreement, Kaken received an exclusive license to commercialize and market lenabasum in Japan for SSc and DM. In March 2019, Kaken made an upfront payment to us of $27,000,000. We will be eligible to receive up to an additional $173,000,000 upon achievement of certain regulatory, development and sales milestones as well as double-digit royalties.

On February 11, 2020, we consummated an underwritten public offering of shares of our common stock pursuant to which we sold an aggregate of 7,666,667 shares of our common stock at a purchase price of $6.00 per share with gross proceeds to us totaling approximately $46,000,000, less estimated issuance costs incurred of approximately $3,147,000.

On April 7, 2020, we entered into an Open Market Sale Agreement$^{SM}$ (the "April 2020 Sale Agreement") with Jefferies LLC ("Jefferies") pursuant to which Jefferies served as our sales agent to sell up to $75,000,000 of shares of our 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 nine months ended September 30, 2020, 9,618,267 shares of our common stock were sold under the April 2020 Sale Agreement for which we received net proceeds of approximately $71,710,000 through September 30, 2020. In October 2020, we sold an additional 921,107 shares of our common stock under the April 2020 Sale Agreement for net proceeds of approximately $1,033,000.

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, 2020, we did not sell any of our common stock under the August 2020 Sale Agreement. In October 2020, we sold 908,727 shares of our common stock under the August 2020 Sale Agreement for net proceeds of approximately $954,000.

On July 28, 2020, we entered into the Loan Agreement with K2HV pursuant to which K2HV may provide us with term loans in an aggregate principal amount of up to a $50,000,000 and we received the first tranche for $20,000,000 at closing. The second tranche for $20,000,000 and third tranche for $10,000,000 will be made available at our option subject to the achievement of certain clinical and regulatory milestones. The loan matures on August 1, 2024 and we are 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. K2HVmay elect to convert up to $5,000,000 of the outstanding loan into common stock at a conversion price of $9.40 per share. At closing, we issued a warrant to K2HVexercisable for 86,206 shares of our common stock at an exercise price of $6.96 per share. We granted registration rights to the lenders in connection with the Loan Agreement and the Warrant.

In response to the spread of COVID-19, we have taken temporary precautionary measures intended to help minimize the risk of the virus to our 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 our employees.

As a result of the COVID-19 pandemic, we may experience disruptions that could adversely impact our business. The COVID-19 pandemic may negatively affect clinical site initiation, patient recruitment and enrollment, patient dosing, distribution of drug to clinical sites and clinical trial monitoring for our clinical trials. The COVID-19 pandemic may also negatively affect the operations of the third-party contract research organizations that we rely upon to assist us in conducting our clinical trials and the contract manufacturers who manufacture our drug candidates.

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 a clinical stage pharmaceutical company and have not generated any revenues from the sale of products and at September 30, 2020, we had an accumulated deficit of approximately $295,481,000. We historically have incurred net losses. Our net losses for the three months ended September 30, 2020 and 2019 were approximately $34,895,000 and 20,791,000, respectively. For the nine months ended September 30, 2020 and 2019 our net losses were approximately $102,657,000 and $44,873,000, respectively. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. 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.

As a result of the completion of our Phase 3 RESOLVE-1 Study in SSc and our Phase 2b clinical study of lenabasum for the treatment of cystic fibrosis, we expect our expenses will decrease substantially starting in 2021, however, we expect to continue to incur operating losses for at least the next several years in connection with our ongoing activities, as we:

- conduct clinical trials for our product candidates in DM, systemic lupus erythematosus and other indications;
- continue our research and development efforts;
- manufacture clinical study materials;
- seek regulatory approval for our product candidates; and
- operate as a public company

**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 and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates and judgments for all assets and liabilities, including those related to stock-based compensation expense. 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.

**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 of directors.

We recognize compensation costs resulting from the issuance of stock-based awards to employees, members of our Board of directors 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.

**Revenue Recognition**

Revenue from awards for the three months ended September 30, 2020 and 2019 was $1,230,621 and $2,589,783, respectively. Revenue from awards for the nine months ended September 30, 2020 and 2019 was $3,279,026 and $6,570,048, respectively. Revenue from awards was recognized in accordance with ASC 606 and pertains only to the 2018 CFF Award. Revenue for the three and nine months ended September 30, 2019 included the recognition of the $27,000,000 upfront payment received from Kaken in March 2019 for which we satisfied the combined performance obligation by June 30, 2019, upon which we recognized the $27,000,000 as revenue in the second quarter of 2019.

We will assess any new agreements we enter into under ASC 606, 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 ASC 606, 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 ASC 606, 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 ASC 606, 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 an approximately two and a half-year period expected to be completed in the fourth quarter of 2020. Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion. 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.

**Results of Operations**

***Comparison of Three Months Ended September 30, 2020 and 2019***

**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, which we expect will take a number of years and is subject to significant uncertainty.

We have recognized $1,230,621 and $2,589,783 of revenue in the three months ended September 30, 2020 and 2019, respectively.

Amounts recognized in revenue for the three months ended September 30, 2020 and 2019 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 2020.

**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. These costs are expected to decrease significantly in the future as CF and SSc trials are substantially completed. The reduction in workforce announced in October 2020 will also reduce future operating expenses.

Research and development expenses for the three months ended September 30, 2020 totaled approximately $27,523,000, an increase of approximately $5,371,000 over the $22,152,000 recorded for the three months ended September 30, 2019. The increase was primarily attributable to increases of $4,260,000 in clinical trial costs, $795,000 in compensation costs, and $316,000 in stock-based compensation expense.

During 2019, the Company formed a subsidiary in each of the United Kingdom and Australia and approximately 45% and 43% of research and development expenses recorded for the three months ended September 30, 2020 and 2019, respectively, was 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. We anticipate that our general and administrative expenses will decrease in the future as a result of the reduction in workforce announced in October 2020.

General and administrative expense for the three months ended September 30, 2020 totaled approximately $7,682,000, an increase of approximately $2,148,000 over the $5,534,000 recorded for the three months ended September 30, 2019. The increase includes approximately $429,000 in compensation costs, $386,000 in consulting, $459,000 in marketing and promotion activities, $357,000 in legal costs, and $337,000 in stock-based compensation expense, and an aggregate net increase of approximately $180,000 for other general and administrative expenses.

**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 expense, net for the three months ended September 30, 2020 totaled approximately $921,000, a decrease of approximately $5,227,000 over the $4,306,000 of other income, net recorded for the three months ended September 30, 2019. The decrease was primarily attributable to approximately $4,109,000 of cash paid to the Company in the third quarter of 2019 from a foreign taxing authority for refundable research and development tax credits received, and $460,000 of interest expense related to the K2 loan, and an increase in foreign currency exchange losses of approximately $155,000.

***Comparison of Nine Months Ended September 30, 2020 and 2019***

**Revenue**

We have recognized $3,279,026 and $33,570,048 of revenue in the nine months ended September 30, 2020 and 2019, respectively.

Amounts recognized in revenue for the nine months ended September 30, 2020 were in connection with the 2018 CFF Award 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 milestone 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 2020. We recorded $3,279,026 and $6,570,048 of revenue related to the 2018 CFF Award during the nine months ended September 30, 2020 and 2019, respectively.

Revenue for the nine months ended September 30, 2019 also included the recognition of the $27,000,000 upfront payment received from Kaken in March 2019 for which we satisfied the combined performance obligation by September 30, 2019, upon which we recognized the $27,000,000 as revenue in the second quarter of 2019.

**Research and Development Expenses**

Research and development expenses for the nine months ended September 30, 2020 totaled approximately $82,157,000, an increase of approximately $16,040,000 over the $66,117,000 recorded for the nine months ended September 30, 2019. The increase was primarily attributable to increases of $10,962,000 in clinical trial costs and $5,078,000 in compensation costs. Approximately 45% of research and development expenses recorded for each of the nine months ended September 30, 2020 and 2019, was recorded in our subsidiaries in the United Kingdom and Australia.

**General and Administrative Expenses**

General and administrative expense for the nine months ended September 30, 2020 totaled approximately $23,120,000, an increase of approximately $5,753,000 over the $17,367,000 recorded for the nine months ended September 30, 2019. The increases include approximately $2,655,000 in compensation costs, $1,094,000 in stock-based compensation expense, $1,648,000 in brand design and market research, $623,000 in consulting expense, $761,000 legal and audit fees, $665,000 in facilities and insurance expense, $439,000 in recruiting and relocation expense, and $334,000 in software as a service expense. These increases were partially offset by the $2,700,000 we recorded in the first quarter of 2019 related to the amount we owed to CFF as a royalty payment equal to 10% of any amounts we received as payment under the collaboration agreement with Kaken.

**Other Income (Expense), Net**

Other expense, net for the nine months ended September 30, 2020 totaled approximately $660,000, a decrease of approximately $5,701,000 over the $5,041,000 of other income, net recorded for the nine months ended September 30, 2019. The decrease was primarily attributable to approximately $4,109,000 of cash paid to the Company in the third quarter of 2019 from foreign taxing authority for refundable research and development tax credits received. Additional decreases included $460,000 of interest expense recorded during the third quarter of 2020 related to the K2 loan.

**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 the Phase 2 DM and SLE clinical trials have been or are expected to be funded by NIH grants, and our Phase 2 cystic fibrosis clinical trial was partially funded by the 2015 CFFT Award. Our Phase 2b cystic fibrosis trial is being supported by the 2018 CFF Award. In July 2020, the company also entered into a security and Loan agreement to provide additional capital to fund operations. At September 30, 2020, our accumulated deficit since inception was approximately $295,481,000.

At September 30, 2020, we had total current assets of approximately $85,358,000 and total current liabilities of approximately $41,403,000, resulting in working capital of approximately $43,955,000. Of our total cash, cash equivalents, and restricted cash of approximately $82,221,000 at September 30, 2020, approximately $80,626,000 was held within the United States.

Net cash used in operating activities for the nine months ended September 30, 2020 was approximately $81,461,000, which includes a net loss of approximately $102,657,000, adjusted for non-cash expenses of approximately $11,577,000 largely related to stock-based compensation expense, and approximately $9,619,000 of cash provided by net working capital items principally due to increases in accounts payable and accrued expenses and decreases in prepaid expenses.

Cash used in investing activities for the nine months ended September 30, 2020 totaled approximately $537,000, which was principally related to purchases of property and equipment for the build out our office space that we occupied in the latter part of 2019.

Cash provided by financing activities for the nine months ended September 30, 2020 totaled approximately $133,140,000. On February 11, 2020, we consummated an underwritten public offering of shares of our common stock pursuant to which we sold an aggregate of 7,666,667 shares of our common stock at a purchase price of $6.00 per share with gross proceeds to us totaling $46,000,000, less estimated issuance costs incurred of approximately $3,147,000. During the nine months ended September 30, 2020, we sold 9,618,267 shares of our common stock under the April 2020 Sale Agreement for net proceeds of approximately $71,710,000. In October 2020. we sold an additional 1,829,834 shares of our common stock under the April 2020 Sale Agreement and August 2020 Sale Agreement for net proceeds of approximately $1,986,334.

On July 28, 2020, we entered into a Loan and Security Agreement (the "Loan Agreement") with K2 HealthVentures LLC ("K2HV") pursuant to which K2HV may provide us with term loans in an aggregate principal amount of up to a $50,000,000 and we received the first tranche for $20,000,000 at closing. The second tranche for $20,000,000 and the third tranche for $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. 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. At closing, the Company issued a Warrant to K2HV exercisable for 86,206 shares of the Company's common stock at an exercise price of $6.96 per share. We granted registration rights to the lenders in connection with the Loan Agreement and the Warrant.

During the nine months ended September 30, 2020, the Company issued 249,578 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $574,233 from these exercises. Cash provided by financing activities for the nine months ended September 30, 2020 included principal payments on notes payable of approximately $753,000 in connection with our loan agreement with a financing company. The terms of the loan that we entered into in November 2019 stipulated 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%.

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%.

We expect our cash and cash equivalents of approximately $81,871,000 at September 30, 2020 together with the expected final $2.5 milestone payment from the CFF award will be sufficient to meet our operating and capital requirements into the fourth quarter of 2021, based on current planned expenditures. The $2,500,000 remainder of the up to $25,000,000 2018 CFF Award is payable to us upon the achievement of the final milestone related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. We expect to achieve this milestone by the end of the fourth quarter of 2020.

We will need to raise significant additional capital to continue to fund operations and the clinical trials for lenabasum. 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. COVID-19 has also caused volatility in the global financial markets and threatened a slowdown in the global economy, which may negatively affect our ability to raise additional capital on attractive terms or at all.

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 trials.

**Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors, other than future royalty payments under development award agreements discussed as follows:

*Collaboration Agreement with Kaken*

Pursuant to the terms of the Kaken Agreement, we 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, and will use commercially reasonable efforts to commercialize Licensed Products and obtain pricing approval for Licensed Products in the Territory.

In consideration of the license and other rights granted by us, Kaken paid us a $27,000,000 upfront cash payment in March 2019 and is obligated to pay potential milestone payments to us totaling up to approximately $173,000,000 for the achievement of certain development, sales and regulatory milestones. In addition, during the Royalty Term (as defined below), Kaken is obligated to pay us 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 we supply 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 we supply 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 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.

*License Agreement with Jenrin*

Pursuant to the terms of the Jenrin Agreement, we are obligated to pay potential milestone payments to Jenrin totaling up to $18,400,000 for each compound we elect to develop based upon the achievement of specified development and regulatory milestones. In addition, we are obligated to pay Jenrin royalties in the mid, single digits based on net sales of any Licensed Products, as defined in the Jenrin Agreement, subject to specified reductions.

The Jenrin Agreement terminates on a country-by-country basis and product-by-product basis upon the expiration of the royalty term for such product in such country. Each royalty term begins on the date of the first commercial sale of the licensed product in the applicable country and ends on the later of seven years from such first commercial sale or the expiration of the last to expire of the applicable patents in that country. The Jenrin Agreement may be terminated earlier in specified situations, including termination for uncured material breach of the Jenrin Agreement by either party, termination by Jenrin in specified circumstances, termination by Corbus with advance notice and termination upon a party's insolvency or bankruptcy.

*2018 CFF Award*

Pursuant to the terms of the Investment Agreement, we are 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 our election, we may satisfy the first of the two Approval Royalties in registered shares of our common stock. Additionally, we will owe to CFF a royalty payment equal to 10% of any amounts we receive as payment under the collaboration agreement with Kaken, provided that the total royalties that we 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, and we may credit such royalties against any royalties on net sales otherwise owed to CFF under the Investment Agreement. Accordingly, we were required to pay CFF $2,700,000 in May 2019, which is within 60 days of our receipt of the $27,000,000 upfront cash payment from Kaken described below.

Additionally, we are 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 that we and our 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. Either CFF or we may terminate the Investment Agreement for cause, which includes our material failure to achieve certain commercialization and development milestones. Our payment obligations survive the termination of the Investment Agreement.

*2015 CFFT Award*

Pursuant to the terms of the 2015 CFFT Award agreement, we are obligated to make royalty payments to CFFT contingent upon commercialization of lenabasum in the Field of Use (as defined in the 2015 CFFT Award Agreement) as follows: (i) a royalty payment equal to five times the amount we receive under the 2015 CFFT Award Agreement, up to $25,000,000, payable in three equal annual installments following the first commercial sale of lenabasum, the first of which is due within 90 days following the first commercial sale of lenabasum, (ii) a royalty payment to CFFT equal to the amount we receive under the 2015 CFFT Award Agreement, up to $5,000,000, due in the first calendar year in which the aggregate cumulative net sales of lenabasum in the Field of Use exceed $500,000,000, and (iii) royalty payment(s) to CFFT of up to approximately $15,000,000 if we transfer, sell or license lenabasum in the Field of Use other than for certain clinical or development purposes, or if we enter into a change of control transaction, with such payment(s) to be credited against the royalty payments due upon commercialization. The Field of Use is defined in the CFFT Award Agreement as the treatment in humans of CF, asbestosis, bronchiectasis, byssinosis, chronic bronchitis/COPD hypersensitivity pneumonitis, pneumoconiosis, primary ciliary dyskinesis, sarcoidosis and silicosis. Either CFFT or we may terminate the 2015 CFFT Award Agreement for cause, which includes our material failure to achieve certain commercialization and development milestones. Our payment obligations, if any, would survive the termination of the 2015 CFFT Award Agreement.

**Item 3. Quantitative and Qualitative Disclosures About Market Risk.**

Our exposure to market risk is limited to our cash and cash equivalents, all of which have maturities of three months or less. The primary objectives of our investment activities are to preserve principal, provide liquidity and maximize income without significantly increasing risk. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on our financial condition and/or results of operation.

*Foreign Exchange Risk*

The majority of our operations are based in the United States and, accordingly our transactions are denominated in U.S. Dollars. However, we have foreign currency exposures related to our cash valued in the United Kingdom in British Pounds and Euros and our cash valued in Australia in Australian Dollars because our functional currency is the U.S. Dollar in our foreign-based subsidiaries. Our foreign denominated assets and liabilities are remeasured each reporting period with any exchange gains and losses recorded in our consolidated statements of operations.

**Item 4. Controls and Procedures.**

**Disclosure 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. We carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13(a)-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer concluded that, as of September 30, 2020, our disclosure controls and procedures were not effective due to material weaknesses in our internal controls over financial reporting described in Item 9A of our annual report on Form 10-K for the fiscal year ended December 31, 2019.

*Changes in Internal Control over Financial Reporting*

There were no changes in our internal control over financial reporting identified in connection with the above evaluation that occurred during the third quarter of 2020 that have 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, 2019, other than as set forth below.

**Risks Related to Our Financial Position and Need for Capital**

***Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.***

We have incurred recurring losses since inception and as of September 30, 2020 had an accumulated deficit of approximately $295,481,430. We anticipate operating losses to continue for the foreseeable future due to, among other things, costs related to research funding, development of our product candidates and preclinical and clinical programs, strategic alliances and the development of our administrative organization. We expect the cash and cash equivalents of approximately $81,871,000 at September 30, 2020 and the remaining $2.5 million of proceeds that we expect to receive under the 2018 CFF Award before the end of the fourth quarter of 2020 to be sufficient to meet our operating and capital requirements into the fourth quarter of 2021, based on planned expenditures. Our forecast of the period of time through which our current financial resources will be adequate to support our operations and the costs to support our general and administrative, sales and marketing and research and development activities are forward-looking statements and involve risks and uncertainties. The consolidated financial statements do not include any adjustments that might be necessary should we be unable to continue as a going concern.

Our ability to continue as a going concern is dependent on our ability to raise additional equity or debt capital or spin-off non-core assets to raise additional cash. Should we be unable to raise sufficient additional capital, we may be required to undertake cost-cutting measures including delaying or discontinuing certain clinical activities. We will need to raise significant additional capital to continue to fund the clinical trials for lenabasum and our other preclinical and research and development activities. We may seek to sell common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding, or seek other debt financing. 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 stock. 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 some or all of our planned clinical trials. These factors among others create a substantial doubt about our ability to continue as a going concern.

***Our Loan and Security Agreement contains restrictive and financial covenants that may limit our operating flexibility.***

Our Loan Agreement with K2HV for up to $50,000,000 is secured by a lien covering substantially all of our personal property, excluding intellectual property.

The Loan Agreement contains customary representations, warranties and covenants. including restrictive covenants by the Company and Borrower limiting additional indebtedness, liens, mergers and acquisitions, dispositions, investments, distributions, subordinated debt, transactions with affiliates and fundamental changes. We therefore may not be able to engage in any of the foregoing types of transactions unless we obtain the consent of K2 Health Ventures or prepay the outstanding amount under the Loan Agreement. The Loan Agreement also contains certain financial covenants, including requirements to maintain unrestricted cash in the amount of $10,000,000 or the amount of all principal loans outstanding if certain regulatory and developmental milestones do not occur.

The restrictions and covenants in the Loan Agreement, as well as those contained in any future debt financing agreements that we may enter into, may restrict our ability to finance our operations and engage in, expand or otherwise pursue our business activities and strategies. Our ability to comply with these covenants and restrictions may be affected by events beyond our control, and breaches of these covenants and restrictions could result in a default under the loan agreement and any future financing agreements that we may enter into.

**Risks Related to COVID-19**

***The coronavirus COVID-19 pandemic or the widespread outbreak of any other communicable disease could materially and adversely affect our business, financial condition and results of operations.***

We face risks related to health epidemics or outbreaks of communicable diseases, for example, the recent outbreak around the world of the highly transmissible and pathogenic coronavirus COVID-19. The outbreak of such communicable diseases could result in a widespread health crisis that could adversely affect general commercial activity and the economies and financial markets of many countries.

In December 2019, a novel strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China and on March 11, 2020 was declared a pandemic by the World Health Organization. The extent to which COVID-19 may impact our preclinical and clinical trial operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration and geographic reach of the outbreak, the severity of COVID-19, and the effectiveness of actions to contain and treat COVID-19.

To limit the spread of COVID-19, governments have taken various actions from time to time including the issuance of travel restrictions, complete or partial prohibitions of non-essential activities, restrictions or shutdowns of non-essential businesses, stay-at-home orders and social distancing guidelines. Some of these actions have varied from initial responses, pivoting between full or complete to partial or limited restrictions depending upon local or regional conditions. As local jurisdictions continue to put restrictions in place, our ability to continue to operate our business may also be limited. Such events may result in a period of business, supply and drug product manufacturing disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations.

Some of our business partners and manufacturing operations are in China and Italy, each of which have reported large numbers of patient cases and deaths. We have significant manufacturing operations in these countries, including production of our commercial and clinical active pharmaceutical ingredient. Although we have not experienced any material disruptions to these manufacturing operations or any material delays in shipping our commercial and clinical active pharmaceutical ingredient to our clinical trial sites to date, the continued impact resulting from the COVID-19 outbreak in these areas or in other areas where we have operations, or if the COVID-19 outbreak in these areas were to increase in severity, and the measures taken by the governments of countries affected could adversely affect our business, financial condition or results of operations by limiting our ability to manufacture or ship materials within or outside China or Italy or forcing temporary closure of facilities that we rely upon.

The global spread of COVID-19 has created significant volatility and uncertainty in global financial markets and may materially affect us economically and such conditions continue to persist. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, a widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common shares.

We are currently conducting our clinical trials in multiple countries where there has been a COVID-19 outbreak, and where our Phase 3 "DETERMINE" study in DM is ongoing. The continued spread of COVID-19 globally, and the resulting travel restrictions in place by governments to help stop the spread of COVID-19, could adversely impact our clinical trial operations, including the ability of our patients, principal investigators and site staff to travel to our clinical trial sites, and our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19 if an outbreak occurs in their geography. We cannot predict whether clinical testing sites will withdraw from participation in any of our studies temporarily or permanently. In addition, if the patients enrolled in our clinical trials become infected with COVID-19, we may have more adverse events and deaths in our clinical trials as a result. We may also face difficulties enrolling patients in our clinical trials if the patient populations that are eligible for our clinical trials are impacted by the coronavirus disease. The National Institutes of Health temporarily stopped enrolling the Phase 2 study testing safety and efficacy of lenabasum in patients with SLE because of COVID-19. While enrollment has resumed at some sites, delay in completing enrollment in this trial is expected. Vulnerable patients, including patients with autoimmune disorders like the patients enrolled in our clinical trials, may be at a higher risk of contracting COVID-19 and may experience more severe symptoms from the disease, adversely affecting our chances for regulatory approval or requiring further clinical studies.

The COVID-19 outbreak may also affect the ability of our staff and the parties we work with to carry out our non-clinical, clinical, and drug development and manufacturing activities. We rely on clinical sites, investigators and other study staff, consultants, independent contractors, contract research organizations and other third-party service providers to assist us in managing, monitoring and otherwise carrying out our nonclinical studies and clinical trials. We also rely on consultants, independent contractors, contract development and manufacturing organizations, and other third-party service providers to assist us in managing, monitoring and otherwise carrying out our API production, formulation, and drug manufacturing activities. COVID-19 may affect the ability of any of these external people, organizations, or companies to devote sufficient time and resources to our programs or to travel to perform work for us.

Potential negative impacts of the COVID-19 outbreak on the conduct of current or future clinical studies include delays in gaining feedback from regulatory agencies, starting new clinical studies, and recruiting subjects to studies that are enrolling. Although we have implemented remote data monitoring procedures for our clinical trials, the potential negative impacts also include inability to have study visits at study sites, incomplete collection of safety and efficacy data, and higher rates of drop-out of subjects from ongoing studies, delays in site entry of study data into the data base, delays in monitoring of study data because of restricted physical access to study sites, delays in site responses to queries, delays in data-base lock, delays in data analyses, delays in time to top-line data, and delays in completing study reports. New or worsening COVID-19 disruptions or restrictions could have the potential to further negatively impact our non-clinical studies, clinical trials, and drug manufacturing activities.

As a result of the factors described above, the expected timeline for data readouts of our drug manufacturing activities, non-clinical studies, clinical trials, and certain regulatory filings may be negatively impacted, which would adversely affect our ability to obtain regulatory approval for and to commercialize our product candidates, increase our operating expenses and have a material adverse effect on our financial results.

**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.**

Our DETERMINE trial originally had a planned duration of 52 weeks, however, we have seen recent changes in the DM competitive landscape with studies for the treatment of DM that are shorter than one year. Accordingly, we will be submitting a protocol amendment to the FDA and other regulatory agencies to shorten the treatment duration of the DETERMINE trial to 28 weeks. The last subject visit through 28 weeks is expected in March 2021 with top line data to be reported shortly thereafter.

**Item 6. Exhibits.**

| Exhibit No. | Description |
|---|---|
| 4.1 | Form of Warrant to Purchase Common Stock (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K file with the SEC on July 29, 2020). |
| 10.1 | Loan and Security Agreement, dated as of July 28, 2020, by and between Corbus Pharmaceuticals Holdings, Inc., Corbus Pharmaceuticals, Inc., K2 Healthventures LLC and Ankura Trust Company, LLC (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K file with the SEC on July 29, 2020).# |
| 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, 2020 is formatted in iXBRL* |

* Filed herewith.

** Furnished, not filed.

\# Confidential portions of this exhibit were redacted pursuant to Item 601(b)(10) of Regulation S-K and Corbus Pharmaceuticals Holdings, Inc. agrees to furnish supplementally to the U.S. Securities and Exchange Commission a copy of any omitted schedule and/or exhibit upon request. The confidential portions of this exhibit were omitted by means of marking such portions with asterisks because the identified confidential portions (i) are not material and (ii) would be competitively harmful if publicly disclosed.

**EXHIBIT INDEX**

| Exhibit No. | Description |
|---|---|
| 4.1 | Form of Warrant to Purchase Common Stock (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K file with the SEC on July 29, 2020). |
| 10.1 | Loan and Security Agreement, dated as of July 28, 2020, by and between Corbus Pharmaceuticals Holdings, Inc., Corbus Pharmaceuticals, Inc., K2 Healthventures LLC and Ankura Trust Company, LLC (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K file with the SEC on July 29, 2020).# |
| 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, 2020 is formatted in iXBRL* |

* Filed herewith.

** Furnished, not filed.

\# Confidential portions of this exhibit were redacted pursuant to Item 601(b)(10) of Regulation S-K and Corbus Pharmaceuticals Holdings, Inc. agrees to furnish supplementally to the U.S. Securities and Exchange Commission a copy of any omitted schedule and/or exhibit upon request. The confidential portions of this exhibit were omitted by means of marking such portions with asterisks because the identified confidential portions (i) are not material and (ii) would be competitively harmful if publicly disclosed.

**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 9, 2020*

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

*Date: November 9, 2020*

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, 2020 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 financing 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 9, 2020

*/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, 2020 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 financing 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 9, 2020

*/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, 2020 (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 9, 2020

**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, 2020, (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 9, 2020

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