UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period September 30, 2018

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)

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 [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes [X] 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	[X]
Non-accelerated filer	[ ]	(Do not check if a smaller reporting company)	Smaller reporting company	[X]
			Emerging growth company	[X]

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. [X]

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

As of November 2, 2018, 57,237,496 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, 2018

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Balance Sheets

	September 30, 2018 (Unaudited)	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 55,659,346	$ 62,537,495
Restricted cash	—	158,991
Prepaid expenses and other current assets	2,800,023	2,808,244
Total current assets	58,459,369	65,504,730
Property and equipment, net	2,702,266	1,432,655
Other assets	19,939	40,776
Total assets	$ 61,181,574	$ 66,978,161
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable	$ —	$ 332,861
Accounts payable	6,153,041	3,130,295
Accrued expenses	7,385,596	4,741,519
Deferred revenue	3,389,809	—
Total current liabilities	16,928,446	8,204,675
Deferred rent, noncurrent	1,382,396	989,550
Other liabilities	—	375
Total liabilities	18,310,842	9,194,600
Commitments and Contingencies		
Stockholders' equity		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding at September 30, 2018 and December 31, 2017	—	—
Common stock, $0.0001 par value; 150,000,000 shares authorized, 57,237,496 and 55,603,427 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	5,724	5,560
Additional paid-in capital	146,929,056	123,476,102
Accumulated deficit	(104,064,048)	(65,698,101)
Total stockholders' equity	42,870,732	57,783,561
Total liabilities and stockholders' equity	$ 61,181,574	$ 66,978,161

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,	
	2018	**2017**	**2018**	**2017**
Revenue from awards	$ 1,090,878	$ 796,312	$ 2,894,966	$ 2,440,195
Operating expenses:				
Research and development	12,807,800	5,622,511	32,833,029	17,752,283
General and administrative	3,181,071	2,130,587	9,218,652	6,388,802
Total operating expenses	15,988,871	7,753,098	42,051,681	24,141,085
Operating loss	(14,897,993)	(6,956,786)	(39,156,715)	(21,700,890)
Other income (expense), net:				
Interest income, net	268,335	43,402	738,052	50,039
Foreign currency exchange gain (loss)	28,447	(52,212)	52,716	(77,071)
Other income (expense), net	296,782	(8,810)	790,768	(27,032)
Net loss	$ (14,601,211)	$ (6,965,596)	$ (38,365,947)	$ (21,727,922)
Net loss per share, basic and diluted	$ (0.26)	$ (0.14)	$ (0.67)	$ (0.44)
Weighted average number of common shares outstanding, basic and diluted	57,218,832	50,221,597	56,917,897	48,946,335

See notes to the unaudited condensed consolidated financial statements.

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

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2017 (audited)	55,603,427	$ 5,560	$123,476,102	$ (65,698,101)	$ 57,783,561
Issuance of common stock, net of issuance costs of $464,680	1,500,000	150	11,235,170	—	11,235,320
Stock-based compensation expense	—	—	5,659,928	—	5,659,928
Issuance of common stock upon exercise of stock options	129,069	13	337,632	—	337,645
Issuance of common stock upon exercise of warrants	5,000	1	4,999	—	5,000
Fair value of warrant issued in connection with Investment Agreement	—	—	6,215,225	—	6,215,225
Net loss	—	—	—	(38,365,947)	(38,365,947)
Balance at September 30, 2018	57,237,496	$ 5,724	$146,929,056	$(104,064,048)	$ 42,870,732

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,	
	2018	**2017**
Cash flows from operating activities:		
Net loss	$ (38,365,947)	$ (21,727,922)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	5,659,928	4,233,511
Depreciation and amortization	338,651	191,093
Loss on foreign exchange	36,164	39,492
Deferred rent	392,846	26,754
Changes in operating assets and liabilities:		
Decrease in customer receivable	12,500,000	500,000
(Increase) decrease in prepaid expenses	(26,554)	210,393
(Increase) decrease in other assets	20,837	(65,026)
Increase in accounts payable	3,654,483	517,677
Increase (decrease) in accrued expenses	2,646,852	(668,286)
Decrease in deferred revenue	(2,860,191)	(1,940,195)
Net cash used in operating activities	(16,002,931)	(18,682,689)
Cash flows from investing activities:		
Purchases of property and equipment	(2,050,662)	(127,246)
Net cash used in investing activities	(2,050,662)	(127,246)
Cash flows from financing activities:		
Principal payments on notes payable	(332,861)	(271,757)
Proceeds from issuance of common stock	12,042,645	41,378,762
Issuance costs paid for common stock financings	(690,181)	(689,023)
Principal payments on capital lease obligation	(3,150)	(2,835)
Net cash provided by financing activities	11,016,453	40,415,147
Net (decrease) increase in cash, cash equivalents, and restricted cash	(7,037,140)	21,605,212
Cash, cash equivalents, and restricted cash at beginning of the period	62,696,486	15,192,257
Cash, cash equivalents, and restricted cash at end of the period	$ 55,659,346	$ 36,797,469
Supplemental disclosure of cash flow information and non-cash transactions:		
Cash paid during the period for interest	$ 8,019	$ 10,691
Fair value of warrant issued in connection with Investment Agreement	$ 6,215,225	$ —
Purchases of property and equipment included in accounts payable	92,696	—
Write off of fully amortized leasehold improvements	$ 191,244	$ —

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. During 2018, the Company formed a subsidiary in each of the United Kingdom and Australia. 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, 2018, the results of its operations for the three months and nine months ended September 30, 2018 and 2017 and its cash flows for the nine months ended September 30, 2018 and 2017. The December 31, 2017 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, 2017, filed on March 12, 2018. The results of operations for such interim periods are not necessarily indicative of the operating results for the full fiscal year.

2. LIQUIDITYAND GOING CONCERN

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern, which contemplates continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The Company has incurred recurring losses since inception and as of September 30, 2018, had an accumulated deficit of $104,064,048. The Company anticipates operating losses to continue for the foreseeable future due to, among other things, costs related to research funding, development of its product candidates and its preclinical and clinical programs, strategic alliances and the development of its administrative organization. The Company expects the cash and cash equivalents of $55,659,346 at September 30, 2018 to be insufficient to meet its operating and capital requirements at least 12 months from the filing of this 10-Q.

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 CRB-4001 (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 create 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.

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), and the valuation of the CFF Warrant discussed in Note 12.

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. At September 30, 2018 and December 31, 2017, cash equivalents were comprised of money market funds. For purposes of preparing the statement of cash flows, the Company considers payments of amounts previously accrued for stock issuance costs or property, plant, and equipment as payments for those original purposes.

Restricted cash as of December 31, 2017 in the amount of $108,991 was classified in current assets and included a collateral account for the Company's corporate credit cards. This collateral account was closed in the first quarter of 2018 and accordingly the cash became unrestricted. Additionally, as of December 31, 2017, restricted cash included a stand-by letter of credit issued in favor of a landlord for $50,000 which was classified in current assets as of December 31, 2017. This stand-by letter of credit was terminated in the first quarter of 2018 in connection with the August 2017 Lease Agreement discussed in Note 6, and accordingly, the cash became unrestricted.

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

	September 30, 2018	December 31, 2017
Cash	$ 423,443	$ 206,510
Money market fund	55,235,903	62,330,985
Cash and cash equivalents	55,659,346	62,537,495
Restricted cash	—	158,991
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	$ 55,659,346	$ 62,696,486

As of September 30, 2018, all of the Company's cash was held in the United States, except for approximately $360,000 of cash which was held in our subsidiary in the United Kingdom. As of December 31, 2017, all of the Company's cash was held in the United States.

Financial Instruments

The carrying amounts reported in the consolidated balance sheet for cash and cash equivalents, receivables, accounts payable and accrued expenses approximate their fair value based on the short-term nature of these instruments. The carrying values of the notes payable approximate their fair value due to the fact that they are at market terms.

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 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, 2018 and 2017, there were no material adjustments to the Company's prior period estimates of accrued expenses for clinical trials.

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-threating, inflammatory fibrotic diseases. As of September 30, 2018 and December 31, 2017, all of the Company's assets were located in the United States, except for approximately $360,000 of cash which was held in our subsidiary in the United Kingdom as of September 30, 2018.

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, 2018 or December 31, 2017.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. In accordance with SAB 118, the Company has recorded a provisional estimate in these financial statements for the effect of the corporate tax rate change. There has been no change to the provisional amounts recorded by the Company since December 31, 2017.

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, 2018 and 2017.

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 to employees is estimated as of the date of grant using the Black-Scholes option-pricing model, net of estimated forfeitures. 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. Stock options granted to non-employee consultants are revalued at the end of each reporting period until vested using the Black-Scholes option-pricing model and the changes in their fair value are recorded as adjustments to expense over the related 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

Basic and diluted net loss per share of the Company's common stock has been computed by dividing net loss by the weighted average number of shares outstanding during the period. For periods in which there is a net loss, options and warrants are anti-dilutive and therefore are excluded from diluted loss per share calculations. The following table sets forth the computation of basic and diluted earnings per share for the three and nine months ended September 30, 2018 and 2017:

	Three Months Ended September 30		Nine Months Ended September 30	
	2018	**2017**	**2018**	**2017**
Basic and diluted net loss per share of common stock:				
Net loss	$ (14,601,211)	$ (6,965,596)	$ (38,365,947)	$ (21,727,922)
Weighted average shares of common stock outstanding	57,218,832	50,221,597	56,917,897	48,946,335
Net loss per share of common stock-basic and diluted	$ (0.26)	$ (0.14)	$ (0.67)	$ (0.44)

The impact of the following potentially dilutive securities outstanding as of September 30, 2018 and 2017 have been excluded from the computation of dilutive weighted average shares outstanding as the inclusion would be anti-dilutive.

	September 30,	
	2018	**2017**
Warrants	2,283,500	1,288,500
Stock options	9,434,241	7,724,779
Total	11,717,741	9,013,279

Recent Accounting Pronouncements

Revenue Recognition

In May 2014, the FASB issued guidance codified in *Accounting Standards Codification (ASC) 606, Revenue Recognition — Revenue from Contracts with Customers* ("ASC 606"), as amended, which amends the guidance in former *ASC 605, Revenue Recognition* ("ASC 605"), and is effective for public companies for annual and interim periods beginning after December 15, 2017. Specifically, the new standard differs from ASC 605 in many respects, such as in the accounting for variable consideration received, including milestone payments or contingent payments. Under the Company's accounting policy prior to the adoption of ASC 606 in the first quarter of 2018, milestone payments were initially recognized only in the period that the payment-triggering event occurred or was achieved (See Note 9). ASC 606, however, may require a company to recognize such payments before the payment-triggering event is completely achieved based on the Company's estimate of the amount of consideration to which it will be entitled in exchange for transferring the services, subject to management's assessment of whether it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The Company adopted ASC 606 in the first quarter of 2018 using the modified retrospective method according to which the cumulative effect of initially applying ASC 606 is recognized at the date of initial application, and elected to utilize a practical expedient and did not restate contracts that were completed as of the date of adoption. Since the Company has concluded its performance obligations and has completed recognizing revenue under the 2015 CFFT Award discussed in Note 9 in the third quarter of 2017, there was no cumulative effect to record at the date of the Company's adoption of ASC 606 and no revenue to recognize for the first quarter of 2018 related to the 2015 CFFT Award. Revenue for the three and nine months ended September 30, 2018 was $1,090,878 and $2,894,966, respectively, recognized in accordance with ASC 606 and pertains only to the 2018 CFF Award discussed in Note 9. The total impact to revenue for the three and nine months ended September 30, 2018 as a result of the adoption of ASC 606 was lower revenue of approximately $511,000 and $525,000, respectively.

The Company will assess any new agreements it enters 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 Company only applies the five-step model 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, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes 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 second 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 would be classified as deferred revenue, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

Accounting for Leases

In February 2016, the FASB issued ASU No**.** 2016-02, *Leases (Topic 842),* as amended ("ASU 2016-02")*.* Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for all leases with lease terms of more than 12 months. Consistent with current GAAP, the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. However, unlike current GAAP, which requires only capital leases to be recognized on the balance sheet, ASU 2016-02 will require both types of leases to be recognized on the balance sheet. ASU 2016-02 will take effect for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early application permitted. The adoption of ASU 2016-02 will have an impact on the Company's financial position as the Company has an operating lease commitment for office space as of September 30, 2018 with future non-cancelable lease payments amounting to $5,146,790 (see Note 6) for which ASU 2016-02 would apply. The Company anticipates that the adoption of ASU 2016-02 will result in the recognition of additional right of use assets and corresponding liabilities on its condensed consolidated balance sheets. The Company is in the process of quantifying the amount of financing and operating leases, corresponding liabilities and the cumulative effect adjustment to accumulated deficit that will be recorded upon adoption of the amended guidance. The Company also anticipates implementing changes to its controls to support the lease accounting and related disclosures under ASU 2016-02.

Nonemployee Share-Based Payment Accounting

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"). ASU 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. Under ASU 2018-07, consistent with the accounting requirement for employee share-based payment awards, nonemployee share-based payment awards within the scope of Topic 718 are to be measured at the grant-date fair value of the equity instruments that an entity is obligated to issue when the good has been delivered or the service has been rendered and any other conditions necessary to earn the right to benefit from the instruments have been satisfied. Equity-classified nonemployee share-based payment awards are to be measured at the grant date. The definition of the term grant date is amended to generally state the date at which a grantor and a grantee reach a mutual understanding of the key terms and conditions of a share-based payment award. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in its own operations by issuing share-based payment awards. ASU 2018-07 also clarifies that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under ASC 606. ASU 2018-07 is effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted, The Company expects to adopt ASU 2018-07 in the first quarter of fiscal 2019 and is evaluating the expected impact the adoption will have on the Company's financial statements.

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. The lead product candidate is CRB-4001, a peripherally-restricted CB-1 inverse agonist targeting fibrotic liver, lung, heart and kidney diseases. The Company plans to commence a Phase 1 clinical trial of CRB-4001 in 2019.

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 $18.4 million 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 $18.4 million 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, 2018	December 31, 2017
Computer hardware and software	$ 279,151	$ 136,522
Office furniture and equipment	907,916	287,048
Leasehold improvements	2,026,495	191,244
Construction in progress	—	1,181,730
Property and equipment, gross	3,213,562	1,796,544
Less: accumulated depreciation	(511,296)	(363,889)
Property and equipment, net	$ 2,702,266	$ 1,432,655

Depreciation expense was $132,337 and $126,641 for the three months ended September 30, 2018 and 2017, respectively and $338,651 and $191,093 for the nine months ended September 30, 2018 and 2017, respectively. In the first quarter of 2018, the Company wrote off $191,244 of fully amortized leasehold improvements related to the termination of the September 2016 Amendment in February 2018 as discussed in Note 6.

On December 30, 2015, the Company entered into a lease agreement for a copier machine. The cost of the machine was approximately $12,000 and is included in office furniture and equipment category in the table above. The lease payments commenced when the machine was placed in service in January 2016. The machine is being amortized over the life of the lease, which is for a three-year term and includes a bargain purchase option at the end of the term. See Note 6 for details of this capital lease commitment.

6. COMMITMENTS AND CONTINGENCIES

Operating Lease Commitment

In September 2016, the Company amended its commercial lease for office space to expand into an additional 4,088 square feet of office space within the existing building for an aggregate total of 10,414 square feet of leased office space ("September 2016 Amendment"). The Company began occupying this space in early November 2016 and the final lease payment was to be due in January 2021. Additionally, the September 2016 Amendment required an increase in the standby letter of credit to $50,000 (See Note 3). The September 2016 Amendment was terminated upon the commencement date of the August 2017 Lease Agreement discussed below.

On August 21, 2017, the Company entered into a lease agreement ("August 2017 Lease Agreement") with the same landlord, 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 is 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 ranges 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 have been deferred and will 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 may 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 for which it incurred interest expense of $612 and $4,161 for the three and nine months ended September 30, 2018, respectively.

The Company records the total rent payable during the lease term on a straight-line basis over the term of the lease and records the difference between the rents paid and the straight-line rent as deferred rent, which is classified in deferred rent, noncurrent in the Company's balance sheet as of September 30, 2018 and December 31, 2017.

Pursuant to the terms of the Company's non-cancelable lease agreements in effect at September 30, 2018, the future minimum rent commitments are as follows:

2018 (remainder of year)	$	117,500
2019		623,958
2020		784,243
2021		830,600
2022		855,150
Thereafter		1,935,339
Total	$	5,146,790

Total rent expense for the three months ended September 30, 2018 and 2017 was $146,229 and $92,671, respectively. Total rent expense for the nine months ended September 30, 2018 and 2017 was $440,972 and $209,687, respectively.

Capital Lease Commitment

The lease payments under the capital lease agreement for the copier machine commenced when the machine was placed in service in January 2016. The lease is for a three-year term and includes a bargain purchase option at the end of the term. In the accompanying balance sheet as of September 30, 2018 and December 31, 2017, the current portion of this capital lease obligation is classified in accrued expenses and the long-term portion of the capital lease obligation is classified in other long-term liabilities. Pursuant to the terms of this capital lease agreement, the future minimum capital lease commitments are as follows as of September 30, 2018:

2018 (remainder of year)	$	1,135
2019		379
Total future minimum lease payments		1,514
Less: interest		(33)
Future capital lease obligations		1,481
Less: current portion		(1,481)
Long-term portion	$	—

7. NOTES PAYABLE

In October 2016, the Company entered into a loan agreement with a financing company for $348,750 to finance one of the Company's insurance policies. The terms of the loan stipulated equal monthly payments of principal and interest payments of $39,114 over a nine-month period. Interest accrued on this loan at an annual rate of 2.25%. This loan was fully repaid in July 2017.

In November 2017, the Company entered into a loan agreement with a financing company for $415,265 to finance one of the Company's insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $41,975 over a ten-month period. Interest accrues on this loan at an annual rate of 2.35%. This loan was fully repaid in August 2018.

Prepaid expenses as of September 30, 2018 and December 31, 2017 included $29,226 and $368,976, respectively, related to this insurance policy.

For the three months ended September 30, 2018 and 2017, interest expense for notes payable totaled $213 and $73, respectively. For the nine months ended September 30, 2018 and 2017, interest expense for notes payable totaled $2,777 and $2,042, respectively.

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%.

8. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	September 30, 2018	December 31, 2017
Accrued clinical operations and trials costs	$ 4,223,787	$ 2,003,799
Accrued product development costs	1,333,392	1,255,439
Accrued compensation	1,504,736	1,335,672
Accrued other	323,681	146,609
Total	$ 7,385,596	$ 4,741,519

9. DEVELOPMENT AWARDS AND DEFERRED REVENUE

2015 CFFT Award

On April 20, 2015, the Company entered into an award agreement (the "2015 CFFT Award Agreement ") with the Cystic Fibrosis Foundation Thereapeutics, Inc ("CFFT"), a non-profit drug discovery and development affiliate of the Cystic Fibrosis Foundation ("CFF") pursuant to which the Company received a development award (the "2015 CFFT Award") for up to $5 million in funding. The funding from the 2015 CFFT Award supported a first-in-patient Phase 2 clinical trial of the Company's oral anti-inflammatory drug lenabasum in adults with cystic fibrosis ("CF"). The Company has received $5.0 million in payments since the inception of the 2015 CFFT Award as outlined below. The payments received under the 2015 CFFT Award were recorded as deferred revenue when the triggering event to receive those amounts had occurred and were amortized on a straight-line basis over the expected duration of the remaining performance period under the 2015 CFFT Award which concluded in the third quarter of 2017.

Upon the execution of the 2015 CFFT Award Agreement, the Company received a payment of $1,250,000 in May 2015. In November 2015, the Company received a second payment of $1,250,000 upon the achievement of a milestone for dosing the first patient. In August 2016, the Company received a third payment from the CFFT in the amount of $1,000,000 for achieving a milestone in July 2016 related to dosing the median clinical trial patient. In January 2017, the Company received a fourth payment from the CFFT in the amount of $1,000,000 for achieving a milestone in December 2016 related to completing the final visit for the final patient, which was billed by the Company to CFFT in December 2016 and was classified in grants receivable as of December 31, 2016. The Company received the final payment from CFFT in the amount of $500,000 in November 2017 for achieving the final milestone in September 2017 related to the issuance to CFFT of the final integrated statistical report for to the Phase 2 CF clinical trial. At that time the Company had completed all its performance obligations under the contract and therefore the performance period had concluded.

In accordance with ASC 605, the Company recorded $796,312 and $2,440,195 of revenue during the three and nine months ended September 30, 2017, respectively, under the 2015 CFFT Award Agreement. No revenue was recorded under the 2015 CFFT Award Agreement during the three and nine months ended September 30, 2018 as the final performance period concluded in the third quarter of 2017. Under ASC 605, milestone payments were initially recognized only in the period that the payment-triggering event occurred or was achieved. Effective January 1, 2018, ASC 605 was superseded by ASC 606 (See Note 3). The Company adopted ASC 606 in the first quarter of 2018 using the modified retrospective method according to which the cumulative effect of initially applying ASC 606 is recognized at the date of initial application. Since the Company concluded its performance obligations and completed recognizing revenue under the 2015 CFFT Award Agreement in the third quarter of 2017, there was no cumulative effect to record at the date of the Company's adoption of ASC 606.

Pursuant to the terms of the 2015 CFFT Award Agreement, the Company is 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 the Company receives under the 2015 CFFT Award Agreement, up to $25 million, 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 the Company receives under the 2015 CFFT Award Agreement, up to $5 million, due in the first calendar year in which the aggregate cumulative net sales of lenabasum in the Field of Use exceed $500 million, and (iii) royalty payment(s) to CFFT of up to approximately $15 million if the Company transfers, sells or licenses lenabasum in the Field of Use other than for certain clinical or development purposes, or if the Company enters 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 2015 CFFT Award 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 the Company may terminate the agreement for cause, which includes the Company's material failure to achieve certain commercialization and development milestones. The Company's payment obligations, if any, would survive the termination of the 2015 CFFT Award Agreement.

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 million 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 $6.25 million in the first quarter of 2018 and an additional $6.25 million in the second quarter of 2018 upon the Company's achievement of milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement.

The Company expects that the remainder of the 2018 CFF Award will be paid incrementally upon the Company's achievement of the remaining milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement.

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. 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.

The Company recorded $1,090,878 and $2,894,966 of revenue during the three and nine months ended September 30, 2018, respectively, under the Investment Agreement. The Company assessed the 2018 CFF Award for accounting under ASC 606, which it adopted in the first quarter of 2018 (Note 3). 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 Company assessed this arrangement in accordance with ASC 606 and 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 million 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 billed and collected $12,500,000 in milestone payments during the nine months ended September 30, 2018 which was recorded as an increase to deferred revenue. A roll forward of deferred revenue for the nine months ended September 30, 2018 is presented below:

	September 30, 2018
Beginning balance	$ —
Billing to CFF upon achievement of milestones	12,500,000
Fair value of CFF Warrant	(6,215,225)
Recognition of revenue	(2,894,966)
Ending balance	$ 3,389,809

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 an approximately two and a half year period expected to be completed in the second 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 57,237,496 shares and 55,603,427 shares were issued and outstanding as of September 30, 2018 and December 31, 2017, respectively.

During the three and nine months ended September 30, 2018, the Company issued 40,000 and 129,069 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $34,378 and $337,645 from these exercises, respectively. During the three and nine months ended September 30, 2017, the Company issued 2,500 and 239,817 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $8,250 and $109,053 from these exercises, respectively.

On January 5, 2018, the Company entered into a sales agreement with Cantor Fitzgerald under which the Company may direct Cantor Fitzgerald as its sales agent to sell common stock up to an aggregate offering of up to $50 million under an "At the Market Offering" ("January 2018 Sales Agreement"). Sales of common stock under the January 2018 Sales Agreement were made pursuant to an effective registration statement for an aggregate offering of up to $50 million. During the first quarter of 2018, the Company sold 1,500,000 shares of its common stock to an institutional investor under the January 2018 Sales Agreement for which the Company received net proceeds of approximately $11.2 million. The Company did not sell any shares under the January 2018 Sales Agreement in the second or third quarter of 2018. In the nine months ended September 30, 2017, the Company sold 1,413,633 shares of its common stock under a sales agreement that the Company entered into in November 2016 with Cantor Fitzgerald ("Sales Agreement") for net proceeds of $13,268,208. The Sales Agreement was terminated in October 2017.

On February 28, 2017, the Company entered into a securities purchase agreement providing for the issuance and sale by the Company of 3,887,815 shares of its common stock in a registered direct offering to institutional and accredited investors at a purchase price of $7.00 per share with gross proceeds to the Company totaling $27,214,705 less issuance costs of $36,291.

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. On January 1, 2017, pursuant to an annual evergreen provision contained in the 2014 Plan, the number of shares reserved for future grants was increased by 3,127,722 shares. As of December 31, 2017, there was a total of 13,043,739 shares reserved for issuance under the 2014 Plan and there were 4,460,334 shares available for future grants. 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, 2018, the number of shares of common stock available for issuance under the 2014 Plan increased by 2,500,000 shares, such amount being less than seven percent (7%) of the outstanding shares of common stock on December 31, 2017. As of January 1, 2018, the 2014 Plan had a total reserve of 15,543,739 shares and there were 6,960,334 shares available for future grants. As of September 30, 2018, there were 5,241,990 shares available for future grants.

Stock-based Compensation

For stock options issued and outstanding for the three months ended September 30, 2018 and 2017, the Company recorded non-cash, stock-based compensation expense of $1,958,917 ($1,943,865 for employees and $15,052 for non-employees) and $1,351,284 ($1,213,552 for employees and $137,732 for non-employees), respectively, net of estimated forfeitures. For stock options issued and outstanding for the nine months ended September 30, 2018 and 2017, the Company recorded non-cash, stock-based compensation expense of $5,659,928 ($5,584,313 for employees and $75,615 for non-employees) and $4,233,511 ($3,302,437 for employees and $931,073 for non-employees), respectively, net of estimated forfeitures.

The fair value of each option award for employees is estimated on the date of grant and for non-employees is estimated at the end of each reporting period until vested using the Black-Scholes option pricing model that uses the assumptions noted in the following table. 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,	
	2018	**2017**
Risk free interest rate	2.48%	2.13%
Expected dividend yield	0%	0%
Expected term in years	6.25	6.57
Expected volatility	87.6%	85.8%

A summary of option activity for the nine months ended September 30, 2018 and is presented below:

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2017	7,844,966	$ 3.75		
Granted	2,138,500	7.62		
Exercised	(129,069)	2.62		
Forfeited	(420,156)	7.85		
Outstanding at September 30, 2018	9,434,241	$ 4.46	7.45	$ 32,456,058
Vested at September 30, 2018	5,671,042	$ 2.73	6.61	$ 28,253,546

The weighted average grant-date fair value of options granted during the nine months ended September 30, 2018 and 2017 was $5.67 and $6.22 per share, respectively. The aggregate intrinsic value of options exercised during the nine months ended September 30, 2018 and 2017 was approximately $494,360 and $1,935,624, respectively. The total fair value of options that were vested as of September 30, 2018 and 2017 was $12,359,043 and $5,806,159, respectively. As of September 30, 2018, there was approximately $16,378,737 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 2.69 years as of September 30, 2018.

12. WARRANTS

During the three and nine months ended September 30, 2018, 5,000 warrants were exercised for proceeds of $5,000. No warrants were exercised during the three and nine months ended September 30, 2017.

At September 30, 2018, there were warrants outstanding to purchase 2,283,500 shares of common stock with a weighted average exercise price of $6.34 and a weighted average remaining life of 3.14 years, including the warrant issued to CFF pursuant to the terms of the Investment Agreement (Note 9). 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%

13. RELATED PARTY TRANSACTIONS

On September 20, 2016, the Company entered into a consulting agreement (the "2016 Consulting Agreement") with Orchestra Medical Ventures, LLC ("Orchestra"), of which a member of our Board of Directors, David Hochman, is Managing Partner. Under this agreement, Orchestra rendered a variety of consulting and advisory services relating principally to identifying and evaluating strategic relationships, licensing opportunities, and business strategies. The term of the 2016 Consulting Agreement commenced on September 20, 2016 and expired on March 20, 2017. Pursuant to the terms of the 2016 Consulting Agreement, the Company paid to Orchestra cash compensation in an aggregate amount of $100,000, of which $50,000 was expensed in the first quarter of 2017. In connection with this agreement, the Company granted an equity incentive award to Mr. Hochman consisting of options to purchase 50,000 shares ("Option Shares") of common stock (the "Option Award") pursuant to the Company's 2014 Equity Compensation Plan, of which fifty percent (50%) vested on the three (3) month anniversary of the date of grant of the Option Award and the remainder of the Option Shares vested on the six (6) month anniversary of the date of grant of the Option Award. The Option Shares were granted with an exercise price of $7.14 per share. The Company recorded stock-based compensation expense of approximately $222,000 during the year ended December 31, 2016 and $171,000 during the first quarter of 2017 in respect of the Option Award. No stock-based compensation expense was recorded after the first quarter of 2017 related to the Option Shares as they were fully vested in March 2017.

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;
- 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 rare, chronic and serious inflammatory and fibrotic diseases with clear unmet medical needs. Our lead product candidate, lenabasum, is a novel synthetic, oral, endocannabinoid drug designed to resolve chronic inflammation and fibrotic processes. We are currently developing lenabasum to treat four life-threatening diseases: systemic sclerosis (SSc), cystic fibrosis (CF), dermatomyositis (DM) and systemic lupus erythematosus (SLE).

Lenabasum is a synthetic, rationally-designed oral small-molecule drug that selectively binds to the cannabinoid receptor type 2, or CB2, found on activated immune cells, fibroblasts and other cell types including muscle and bone cells. Lenabasum stimulates the production of Specialized Pro-Resolving Lipid Mediators (SPMs) that act to resolve inflammation and halt fibrosis by activating endogenous pathways. These pathways are activated in healthy individuals during the course of normal immune responses but are dysfunctional in patients with chronic inflammatory and fibrotic diseases. By its binding to CB2, lenabasum drives innate immune responses from the activation phase into the resolution phase. CB2 plays a central role in modulating and resolving inflammation by, in effect, turning heightened inflammation “off” and restoring homeostasis. This has been demonstrated in animal models lacking CB2 as well as humans with genetic polymorphism in the CB2 gene, as these exhibit excessive inflammation and fibrosis in response to activators of the innate immune system.

Lenabasum has generated positive clinical data in three consecutive Phase 2 studies in diffuse cutaneous SSc, CF and skin-predominant DM. Lenabasum is currently being evaluated in a Phase 3 SSc study that is expected to enroll 354 patients, a Phase 2b CF study that is expected to enroll 415 patients (that is being supported by a development award for up to $25 million (the “2018 CFF Award”) from the Cystic Fibrosis Foundation (“CFF”)), and a Phase 2 SLE study that is expected to enroll 100 patients and is being funded by a grant through the National Institutes of Health (“NIH”). In DM, we received guidance from the FDA on the protocol design for the next clinical study, which we expect to commence before the end of 2018. The international Phase 3 trial will be a 1-year, double-blind, randomized, placebo-controlled study testing efficacy and safety of lenabasum in approximately 150 adults with DM. Subjects will be randomized to receive lenabasum 20 mg twice per day, lenabasum 5 mg twice per day, or placebo twice per day in a 2:1:2 ratio. The primary efficacy outcome will be American College of Rheumatology/European League Against Rheumatism 2016 Total Improvement Score (“TIS”) in adult dermatomyositis and polymyositis, a composite measure of improvement from baseline in six endpoints: Physician Global Activity, Patient Global Activity, Health Assessment Questionnaire, Manual Muscle Testing, muscle enzymes, and extra-muscular activity. Change in the Cutaneous Dermatomyositis Activity and Severity Index (“CDASI”) activity score will be a secondary efficacy outcome. Open-label extension studies are ongoing in SSc, CF and DM following the completion of the Phase 2 studies in these indications.

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

Since our inception, we have devoted substantially all of our efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Our research and development activities have included conducting pre-clinical studies, developing manufacturing methods and the manufacturing of our drug lenabasum for clinical trials and conducting clinical studies in patients. Two of the four clinical programs for lenabasum are being supported by non-dilutive awards and grants. The National Institutes of Health, or 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 is being supported by the 2018 CFF Award and the Phase 2 clinical trial was partially funded by a $5 million award (the "2015 CFFT Award Agreement") from the Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a non-profit drug discovery and development affiliate of the Cystic Fibrosis Foundation.

In September 2018, we acquired an exclusive worldwide license (the "Jenrin Agreement") to develop, manufacture and market drug candidates from more than 600 compounds targeting the endocannabinoid system from Jenrin Discovery LLC ("Jenrin"). The pipeline includes CRB-4001, Jenrin's 2nd generation, peripherally-restricted, CB1 inverse agonist targeting liver, lung, heart and kidney fibrotic diseases. The current portfolio for CRB-4001 includes multiple issued and pending patent applications. CRB-4001 was developed in collaboration with and with financial support from the NIH. CRB-4001 was specifically designed to eliminate blood-brain barrier penetration and brain CB1 receptor occupancy that mediate the neuropsychiatric issues associated with first-generation CB1 inverse agonists such as rimonabant. Potential indications for CRB-4001 include NASH, primary biliary cholangitis, idiopathic pulmonary fibrosis, radiation-induced pulmonary fibrosis, myocardial fibrosis after myocardial infarction, and acute interstitial nephritis, among others.

Financial Operations Overview

We are a clinical stage pharmaceutical company and have not generated any revenues from the sale of products. We have never been profitable and at September 30, 2018, we had an accumulated deficit of approximately $104,064,000. Our net losses for the three months ended September 30, 2018 and 2017 were approximately $14,601,000 and $6,966,000, respectively and for the nine months ended September 30, 2018 and 2017 our net losses were approximately $38,366,000 and $21,728,000, respectively. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We expect our expenses to increase significantly in connection with our ongoing activities to develop, seek regulatory approval of and commercialize lenabasum. Accordingly, we will need additional financing to support our continuing operations. We will seek to fund our operations through public or private equity or debt financings or other sources, which may include government grants and collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenues to achieve profitability, and we may never do so.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. We expect our expenses will increase substantially in the remainder of 2018 and in the future in connection with our ongoing activities, as we:

- conduct clinical trials for lenabasum in scleroderma, cystic fibrosis, systemic lupus erythematosus and other indications;
- continue our research and development efforts;
- manufacture clinical study materials and develop commercial scale manufacturing capabilities;
- seek regulatory approval for our product candidates;
- add personnel to support development of 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.

Revenue Recognition

In May 2014, the FASB issued guidance codified in *Accounting Standards Codification (ASC) 606, Revenue Recognition — Revenue from Contracts with Customers* ("ASC 606") which amends the guidance in former *ASC 605, Revenue Recognition* ("ASC 605"), and is effective for public companies for annual and interim periods beginning after December 15, 2017. Specifically, the new standard differs from ASC 605 in many respects, such as in the accounting for variable consideration received, including milestone payments or contingent payments. Under our accounting policy prior to the adoption of ASC 606 in the first quarter of 2018, milestone payments were initially recognized only in the period that the payment-triggering event occurred or was achieved. ASC 606, however, may require a company to recognize such payments before the payment-triggering event is completely achieved based on the company's estimate of the amount of consideration to which it will be entitled in exchange for transferring the services, subject to management's assessment of whether it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

We adopted ASC 606 in the first quarter of 2018 using the modified retrospective method according to which the cumulative effect of initially applying ASC 606 is recognized at the date of initial application, and elected to utilize a practical expedient and did not restate contracts that were completed as of the date of adoption. Since we have concluded our performance obligations and have completed recognizing revenue under the 2015 CFFT Award discussed in the third quarter of 2017, there was no cumulative effect to record at the date of the our adoption of ASC 606 and no revenue to recognize for the first quarter of 2018 related to the 2015 CFFT Award. Revenue for the three and nine months ended September 30, 2018 was $1,090,878 and $2,894,966, respectively, recognized in accordance with ASC 606 and pertains only to the 2018 CFF Award.

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 second 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, 2018 and 2017

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 $1,090,878 and $796,312 of revenue in the three months ended September 30, 2018 and 2017, respectively. Amounts recognized in revenue in 2017 were related to an award agreement (the "2015 CFFT Award Agreement) we entered into in fiscal 2015 with the CFFT, pursuant to which we received a development award (the "2015 CFFT Award") for up to $5 million in funding. We received a total of $5 million in payments under the 2015 CFFT Award. The payments received under the 2015 CFFT Award were recorded as deferred revenue when the triggering event to receive those amounts occurred and were amortized on a straight-line basis over the expected duration of the remaining performance period under the 2015 CFFT Award, which concluded in the third quarter of 2017.

Amounts recognized in revenue for the three months ended September 30, 2018 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 million 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 an aggregate $12.5 million in nine months ended September 30, 2018 upon our achievement of a milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The 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.

We assessed the 2018 CFF Award for accounting under ASC 606, which we adopted in the first quarter of 2018. 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.

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 increase significantly in the future as lenabasum is continued to be evaluated in additional later stage clinical trials.

Research and development expenses for the three months ended September 30, 2018 totaled approximately $12,808,000, an increase of approximately $7,185,000 over the $5,623,000 recorded for the three months ended September 30, 2017. The increase was primarily attributable to increases of $5,940,000 in clinical trial costs, $1,041,000 in compensation costs, and $204,000 in stock-based compensation expense. During 2018, the Company formed a subsidiary in each of the United Kingdom and Australia and approximately 41% of research and development expenses recorded for the three months ended September 30, 2018 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 increase significantly during the remainder of 2018 and in the future as we increase our headcount to support our continued research and development and the potential commercialization of our product candidates. We also anticipate increased expenses related to audit, legal, and tax-related services associated with maintaining compliance with NASDAQ exchange listing and SEC requirements, director and officer insurance, and investor relations costs associated with being a public company.

General and administrative expense for the three months ended September 30, 2018 totaled approximately $3,181,000, an increase of approximately $1,050,000 over the $2,131,000 recorded for the three months ended September 30, 2017. The increase was primarily attributable to increases of approximately $403,000 in stock-based compensation expense, $359,000 in compensation costs, $249,000 in legal costs, and an aggregate net increase of approximately $39,000 for other general and administrative expenses.

Other Income, Net

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

Other income, net for the three months ended September 30, 2018 totaled approximately $297,000, as compared to other expense, net for the three months ended September 30, 2017 of approximately $9,000, and was primarily attributable to an increase in net interest income of approximately $225,000 due to increased cash balances in the third quarter of 2018 as compared to the third quarter of 2017, plus increases in foreign currency exchange transaction gains of approximately $81,000.

Comparison of Nine Months Ended September 30, 2018 and 2017

Revenue

We have recognized $2,894,966 and $2,440,195 of revenue in the nine months ended September 30, 2018 and 2017, respectively. Amounts recognized in revenue in 2017 were related to the 2015 CFFT Award. We received a total of $5 million in payments under the 2015 CFFT Award. The payments received under the 2015 CFFT Award were recorded as deferred revenue when the triggering event to receive those amounts occurred and were amortized on a straight-line basis over the expected duration of the remaining performance period under the 2015 CFFT Award, which concluded in the third quarter of 2017.

Amounts recognized in revenue for the nine months ended September 30, 2018 were in connection with the 2018 CFF Award. We received an aggregate of $12.5 million in the nine months ended September 30, 2018 upon our achievement of a milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The 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. We assessed the 2018 CFF Award for accounting under ASC 606, which we adopted in the first quarter of 2018. 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.

Research and Development Expenses

Research and development expenses for the nine months ended September 30, 2018 totaled approximately $32,833,000, an increase of approximately $15,081,000 over the $17,752,000 recorded for the nine months ended September 30, 2017. The increase was primarily attributable to increases of $11,441,000 in clinical trial costs, $2,838,000 in compensation costs, and $802,000 in stock-based compensation expense.

During 2018, the Company formed a subsidiary in each of the United Kingdom and Australia and approximately 26% of research and development expenses recorded for the nine months ended September 30, 2018 was recorded in these entities.

General and Administrative Expenses

General and administrative expense for the nine months ended September 30, 2018 totaled approximately $9,219,000, an increase of approximately $2,830,000 over the $6,389,000 recorded for the nine months ended September 30, 2017. The increase was primarily attributable to increases of approximately $1,208,000 in compensation costs, $624,000 in stock-based compensation expense, $474,000 in legal costs, $364,000 in consulting expense, and an aggregate net increase of approximately $160,000 for other general and administrative expenses.

Other Income, Net

Other income, net for the nine months ended September 30, 2018 totaled approximately $791,000, as compared to other expense, net for the nine months ended September 30, 2017 of approximately $27,000, and was primarily attributable to an increase in net interest income of approximately $688,000 due to increased cash balances in the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017, plus increases in foreign currency exchange transaction gains of approximately $129,000.

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. At September 30, 2018, our accumulated deficit since inception was approximately $104,064,000.

At September 30, 2018, we had total current assets of approximately $58,459,000 and total current liabilities of approximately $16,928,000, resulting in working capital of approximately $41,531,000. Of our total cash and cash equivalents of $55.7 million at September 30, 2018, $55.3 million was held within the United States.

Net cash used in operating activities for the nine months ended September 30, 2018 was approximately $16,003,000, which includes a net loss of approximately $38,366,000, adjusted for non-cash expenses of approximately $6,428,000 largely related to stock-based compensation expense, and approximately $15,935,000 of cash provided by net working capital items principally related to the receipt of $12,500,000 under the 2018 CFF Award during the nine months ended September 30, 2018 and increases in accounts payable and accrued expenses.

Cash used in investing activities for the nine months ended September 30, 2018 totaled approximately $2,051,000, which was largely related to the construction costs and purchases of furniture and fixtures for our office space that we began occupying in February 2018.

Cash provided by financing activities for the nine months ended September 30, 2018 totaled approximately $11,016,000. On January 5, 2018, we entered into a Controlled Equity Offering^{SM} Sales Agreement ("January 2018 Sales Agreement") with Cantor Fitzgerald pursuant to which Cantor Fitzgerald is serving as our sales agent to sell up to $50 million of shares of our common stock through an "at the market offering," of which we sold 1,500,000 shares for net proceeds of approximately $11.2 million in the first quarter of 2018. We did not sell any shares under the January 2018 Sales Agreement in the second or third quarter of 2018.

During the nine months ended September 30, 2018, we issued 129,069 shares of common stock upon the exercise of stock options to purchase common stock and we received proceeds of $337,645 from these exercises, and issued 5,000 shares of common stock upon the exercise of stock warrants and we received proceeds of $5,000. Cash provided by financing activities for the nine months ended September 30, 2018 included principal payments on notes payable of approximately $333,000 in connection with our loan agreement with a financing company. The terms of the loan that we entered into in November 2017 stipulate equal monthly payments of principal and interest payments of $41,975 over a ten-month period. Interest accrued on this loan at an annual rate of 2.35%. This loan was paid in full in August 2018. In November 2018, we entered into a loan agreement with a financing company for $501,629 to finance one of our insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $50,871 over a ten-month period. Interest accrues on this loan at an annual rate of 3.07%.

We expect our cash and cash equivalents of approximately $55.7 million at September 30, 2018 and the remainder of the up to $25 million of proceeds that we expect to receive under the 2018 CFF Award, of which we have received $12.5 million to date through September 30, 2018 related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement, to be sufficient to meet our operating and capital requirements into the fourth quarter of 2019, based on current planned expenditures. The remainder of the up to $25 million 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.

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, including sales under our January 2018 Sales Agreement, preferred stock or convertible debt securities, enter into a credit facility or another form of third-party funding or seek other debt financing. In addition, we may seek to raise cash through collaborative agreements or from government grants. The sale of equity and convertible debt securities may result in dilution to our stockholders and certain of those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of preferred stock, convertible debt securities or other debt financing, these securities or other debt could contain covenants that would restrict our operations. Any other third-party funding arrangement could require us to relinquish valuable rights.

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

Contractual Obligations and Commitments

The following table presents information about our known contractual obligations as of September30, 2018. It does not reflect contractual obligations that may have arisen or may arise after that date. Except for historical facts, the information in this section is forward-looking information.

	Payments due by period				
Contractual Obligations	**Total**	**Remainder of Fiscal 2018**	**Fiscal 2019-2020**	**Fiscal 2021-2022**	**After Fiscal 2022**
Operating lease obligations (1)	$ 5,146,790	$ 117,500	$ 1,408,201	$ 1,685,750	$ 1,935,339
Capital lease obligations (2)	1,514	1,135	379	—	—
Total	$ 5,148,304	$ 118,635	$ 1,408,580	$ 1,685,750	$ 1,935,339

(1) On August 21, 2017, we entered into a lease agreement ("the August 2017 Lease Agreement") with the initial term of a period of seven years which commenced in February 2018. The base rent pursuant to the August 2017 Lease Agreement ranges from approximately $470,000 for the first year to approximately $908,000 for the seventh year. The September 2016 Amendment was terminated upon the commencement date of the August 2017 Lease Agreement. Additionally, the August 2017 Lease Agreement required us to provide a standby irrevocable letter of credit of $400,000, which may be reduced, if we are 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, We entered into an unsecured letter of credit with a commercial bank for $400,000 in connection with the August 2017 Lease Agreement.

(2) On December 30, 2015, we entered into a lease agreement for a copier machine. The machine was placed in service in January 2016. The lease is for a three-year term and includes a bargain purchase option at the end of the term.

We may enter into contracts in the normal course of business with clinical research organizations for clinical trials and clinical supply manufacturing and with vendors for pre-clinical research studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore, we believe that our non-cancelable obligations under these agreements are not material. As of September 30, 2018, other than the items in the table above, we had no material contractual obligations or commitments that will affect our future liquidity.

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 payments under development award agreements discussed as follows:

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 million, 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 million, due in the first calendar year in which the aggregate cumulative net sales of lenabasum in the Field of Use exceed $500 million, and (iii) royalty payment(s) to CFFT of up to approximately $15 million 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.

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 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.

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 $18.4 million 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.

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. We do not have other derivative financial instruments.

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 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

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

Evaluation of Changes in Internal Control over Financial Reporting

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

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

Except as set forth below, there have been no material changes in risk factors from what was reported in our Quarterly Report on Form 10-Q filed for the quarter ended March 31, 2018.

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, 2018, had an accumulated deficit of $104,064,048. 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 $55.7 million at September 30, 2018 to be insufficient to meet our operating and capital requirements at least 12 months from the filing of this 10-Q. 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 CRB-4001. 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.

We have in-licensed a portion of our intellectual property, and, if we fail to comply with our obligations under these arrangements, we could lose such intellectual property rights or owe damages to the licensor of such intellectual property.

We are a party to a license agreement with Jenrin Discovery, LLC that is important to our business, and we may enter into additional license agreements in the future. Certain of our in-licensed intellectual property covers, or may cover, CRB-4001 and other potential developmental candidates. Our existing license agreement imposes, and we expect that future license agreements will impose, various diligence, milestone payment, royalty and other obligations on the Company. If there is any conflict, dispute, disagreement or issue of non-performance between the Company and our licensing partners regarding our rights or obligations under the license agreements, including any such conflict, dispute or disagreement arising from our failure to satisfy payment obligations under any such agreement, we may owe damages, our licensor may have a right to terminate the affected license, and our ability to utilize the affected intellectual property in our product discovery and development efforts and our ability to enter into collaboration or marketing agreements for an affected product candidate may be adversely affected.

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.

On October 3, 2018, the Company announced that the U.S. Patent and Trademark Office ("USPTO") issued U.S. Patent No. 10,085,964 to the Company with claims covering the use of pharmaceutical compositions comprising lenabasum for the treatment of all fibrotic diseases, including Corbus' lead indications, systemic sclerosis, dermatomyositis and cystic fibrosis, and others. The patent provides exclusivity to the Company in the United States for the use of lenabasum through February 12, 2034.

Item 6. Exhibits.

Exhibit No.	Description
10.1	License Agreement, dated as of September 20, 2018, between Corbus Pharmaceuticals, Inc. and Jenrin Discovery, LLC.#*.
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.*
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.*

* Filed herewith.
** Furnished, not filed.
# Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been submitted separately to the SEC.

EXHIBIT INDEX

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101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.*

* Filed herewith.
** Furnished, not filed.
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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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 8, 2018

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

Date: November 8, 2018

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

CONFIDENTIAL TREATMENT

CONFIDENTIAL TREATMENT HAS BEEN REQUESTED AS TO CERTAIN PORTIONS OF THIS DOCUMENT. EACH SUCH PORTION, WHICH HAS BEEN OMITTED HEREIN AND REPLACED WITH AN ASTERISK [*], HAS BEEN FILED SEPERATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the "**Agreement**") is made effective as of September 20th, 2018 (the "**Effective Date**") by and between Corbus Pharmaceuticals, Inc., a Delaware corporation having a place of business at 500 River Ridge Drive, Second Floor, Norwood, MA 02062 ("**Corbus**") and Jenrin Discovery, LLC, a Delaware limited liability company having a place of business at 285 Wilmington-West Chester Pike, Chadds Ford, PA 19317 ("**Jenrin**").

RECITALS

WHEREAS, Jenrin is the owner of, or otherwise has rights in, certain patents and related know- how concerning certain Compounds (as that term is defined in Section 1.7);

WHEREAS, Corbus is a company engaged in, among other things, the research, development and commercialization of pharmaceutical products; and

WHEREAS, Corbus desires to obtain certain exclusive rights to research, develop and commercialize products using Compounds and through the use of Jenrin's technology, and Jenrin desires to grant Corbus such rights, all as set forth below.

NOW THEREFORE, based on the foregoing premises and the mutual covenants and obligations set forth below, the Parties agree as follows:

Article 1
DEFINITIONS

Unless this Agreement expressly provides to the contrary, the following terms, whether used in the singular or plural, have the respective meanings set forth below. The words "include," "includes" and "including" when used in this Agreement are deemed to be followed by the phrase "but not limited to".

1.1 "**Affiliate**" means with respect to a Party, an entity that, directly or indirectly through one (1) or more intermediaries, controls, is controlled by or is under common control with such Party. In this definition, "control" means: (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors; and (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such entities.

1.2 "**Agreement**" has the meaning set forth in the preamble.

1.3 "**Backup Product**" has the meaning set forth in Section 3.2(b).

1.4 "**Bankruptcy Code**" has the meaning set forth in Section 9.4(b).

1.5 "**Commercially Reasonable Efforts**" means the carrying out of obligations using such effort and employing such resources that are substantially similar to the effort and resources Corbus would devote to a product of similar market potential, profit potential and strategic value at a similar stage of its product life, taking into consideration all relevant factors, including the nature of the product, the clinical setting in which it is expected to be used, stage of development, efficacy and safety relative to competitive products in or expected to be introduced into the marketplace in the foreseeable future, the cost of manufacturing, process development, scale-up, the nature and extent of market exclusivity (including Patent coverage and regulatory exclusivity), cost and likelihood of obtaining Regulatory Approval, and projected economic return. Commercially Reasonable Efforts will be determined on a market-by-market and indication-by-indication basis for a particular product, and it is anticipated that the level of effort will be different for different markets, and may change over time, reflecting changes in the status of the product and the market(s) involved.

1.6 "**Completion**" has the meaning set forth in Section 3.2(a).

1.7 "**Compound**" means (a) the compound designated as JD-5037, (b) all other compounds or chemical entities discovered, synthesized, developed, owned or Controlled by or on behalf of Jenrin or its Affiliates as of, on or after the Effective Date the research, development, use, making, having made, offer for sale, sale or importation of which would infringe a Valid Claim of a Licensed Patent or involve the use of Licensed Know-How, (c) any other compound created or discovered by or on behalf of Corbus or any of its Related Parties after the Effective Date the research, development, use, making, having made, offer for sale, sale or importation of which would, but for the license rights granted Corbus under this Agreement, infringe a Valid Claim of a Licensed Patent or constitute an unauthorized use of Licensed Know-How, and (d) any prodrug, metabolite, salt form or other modification of any of the foregoing.

1.8 "**Confidential Information**" means any non-public scientific, technical, trade or business information that is (a) given by one Party to the other and treated by the disclosing Party as confidential or proprietary, or (b) developed by or on behalf of a Party under the terms of this Agreement. The disclosing Party will, to the extent practical, use reasonable efforts to label or identify as confidential, at the time of disclosure, all Confidential Information that is disclosed by the disclosing Party in writing or other tangible form. Notwithstanding anything to the contrary in the foregoing, all non-public information regarding Corbus' business, including all Corbus business and product plans, customer lists and all agreements between Corbus and any Third Party, will be considered Confidential Information, whether or not labeled as confidential.

1.9 "**Control**" or "**Controlled**" means, with respect to an item or right, the possession, whether by ownership or license (in each case other than pursuant to this Agreement), by a Party of the right to grant to the other Party access to or a license to or under each such item or right as provided in this Agreement without violating any agreement or other arrangement with any Third Party.

1.10 "**Corbus Indemnitees**" has the meaning set forth in Section 7.1.

1.11 "**Corbus IP**" has the meaning set forth in Section 9.5(b)

1.12 "**Cover**", "**Covers**" or "**Covered**" means, with respect to a Licensed Product, that in the absence of a license granted under a Valid Claim of a Licensed Patent, the making, using, selling, importation, or exportation of such Licensed Product would infringe such Valid Claim.

1.13 "**Debar**", "**Debarred**" or "**Debarment**" means (a) being debarred, or being subject to a pending debarment, pursuant to section 306 of the FDCA, 21 U.S.C. § 335a, (b) being listed by any federal and/or state agencies, excluded, debarred, suspended or otherwise made ineligible to participate in federal or state healthcare programs or federal procurement or non-procurement programs (as that term is defined in 42 U.S.C. § 1320a-7b(f)), or being subject to any pending process by which any such listing, exclusion, debarment, suspension or other ineligibility could occur, (c) being disqualified by any government or regulatory agency from performing specific services, or being subject to a pending disqualification proceeding, or (d) being convicted of a criminal offense related to the provision of healthcare items or services or being subject to any pending criminal action related to the provision of healthcare items or services.

1.14 "**Effective Date**" has the meaning set forth in the preamble.

1.15 "**FDA**" means the United States Food and Drug Administration, or any successor agency with similar responsibilities.

1.16 "**Field**" means the diagnosis, prophylaxis and treatment of all diseases or conditions in humans and/or animals.

1.17 "**First Commercial Sale**" means with respect to a Licensed Product, the first commercial sale in a country in the Territory of such Licensed Product; *provided*, that First Commercial Sale does not include (a) any sale to or between Related Parties of Corbus, (b) any use of such Licensed Product in clinical trials, pre-clinical studies or other development activities, or (c) the disposal or transfer of such Licensed Product without monetary consideration for a bona fide charitable purpose, including expanded access, compassionate use or named patient use.

1.18 "**GAAP**" means generally accepted accounting principles in the United States, or internationally, as appropriate, consistently applied; and will mean the international financial reporting standards ("**IFRS**") at such time as IFRS (a) becomes the generally accepted accounting standard and applicable laws require that the applicable Party use IFRS or (b) is adopted as the applicable accounting standard of such Party.

1.19 "**IND**" means (a) an Investigational New Drug Application as defined in the United States Food, Drug and Cosmetic Act and applicable regulations promulgated by the FDA, or (b) an equivalent application to the equivalent agency in any other country or group of countries, the filing of which is necessary to commence clinical testing of a pharmaceutical product in humans in a particular jurisdiction.

1.20 "**Indemnify**" has the meaning set forth in Section 7.1.

1.21 "**Infringement**" has the meaning set forth in Section 5.3(a).

1.22 "**Jenrin Indemnitees**" has the meaning set forth in Section 7.2.

1.23 "**Joint Inventions**" has the meaning set forth in Section 5.1.

1.24 "**Joint Patent**" has the meaning set forth in Section 5.1.

1.25 "**Licensed Intellectual Property**" means all Licensed Patents and Licensed Know-How.

1.26 "**Licensed Know-How**" means all materials, inventions, practices, methods, protocols, formulas, knowledge, know-how, Regulatory Filings, trade secrets, processes, assays, skills, experience, techniques and results of experimentation and testing and other scientific, technical or regulatory information, patentable or otherwise, that (a) are reasonably necessary or useful for the research, development, manufacture, use or sale of Licensed Products, and (b) are Controlled by Jenrin as of the Effective Date or during the Term of this Agreement, including the items transferred to Corbus pursuant to Section 4.1.

1.27 "**Licensed Patents**" means (a) the Patents listed on Exhibit A to this Agreement; (b) any and all Patents that claim Licensed Know-How and are Controlled by Jenrin on the Effective Date or during the Term, including Jenrin's interest in any Joint Patent that claims Licensed Know-How; (c) all divisionals, continuations (in whole or in part, including conversions of provisional applications into utility Patent applications), and substitutions of any of the Patents listed in clauses (a) or (b) of this Section 1.27, and any letters patent and/or registrations (including all reissues, renewals, extensions, confirmations, re- examinations, supplementary protection certificates) that may be granted on any of the foregoing; and (d) any and all United States and foreign counterparts of any of the foregoing

1.28 "**Licensed Product**" means any product comprised of or containing a Compound.

1.29 "**Losses**" has the meaning set forth in Section 7.1.

1.30 "**Net Sales**" means, with respect to any Licensed Product, the gross invoiced sales of such Licensed Product less good faith estimates of the following deductions to the extent specifically relating to sales of such Licensed Product, which estimates will be adjusted to reflect actual deductions on a periodic basis (no less frequently than every (6) months):

(a) discounts (including trade, quantity and cash discounts) actually allowed, cash and non-cash coupons, retroactive price reductions, and charge-back payments and rebates granted to any non- Sublicensee Third Party (including to governmental entities or agencies, purchasers, reimbursers, customers, distributors, wholesalers, and group purchasing and managed care organizations or entities (and other similar entities and institutions));

(b) credits or allowances, if any, on account of price adjustments, recalls, claims, damaged goods, rejections or returns of items previously sold (including Licensed Product returned in connection with recalls or withdrawals) and amounts written off by reason of uncollectible debt; *provided*, that if the debt is later paid, the corresponding amount will be added to the Net Sales of the period during which it is paid;

(c) rebates (or their equivalent), administrative fees and any other similar allowances granted by Corbus or its Related Parties (including to governmental authorities, purchasers, reimbursers, customers, distributors, wholesalers, and managed care organizations and entities (and other similar entities and institutions)) that effectively reduce the selling price or gross sales of the Licensed Product;

(d) insurance, customs charges, freight, postage, shipping, handling, and other transportation costs incurred by Corbus or any of its Related Parties in shipping Licensed Product to a non- Sublicensee Third Party to the extent included in the invoice price and not separately itemized;

(e) import taxes, export taxes, excise taxes, sales taxes, value-added taxes, consumption taxes, duties or other taxes levied on, absorbed, determined and/or imposed with respect to such sales, including pharmaceutical excise taxes (such as those imposed by the United States Patient Protection and Affordable Care Act of 2010 (Pub. L. No. 111-48) and other comparable laws), but excluding income or net profit taxes or franchise taxes of any kind;

(f) other similar or customary deductions taken in the ordinary course of business or in accordance with GAAP.

Net Sales will be determined in accordance with GAAP. Net Sales will not be imputed to transfers of Licensed Products for use in clinical trials, non-clinical development activities or other development activities with respect to Licensed Products, for bona fide charitable purposes, for compassionate use, for indigent patient programs or as free samples.

If Corbus or its Related Parties sells any Licensed Product in the form of a Combination Product (as defined in this Section 1.30), Net Sales of such Combination Product for the purpose of determining the royalty due to Jenrin pursuant to Section 3.3 will be calculated by multiplying actual Net Sales of such Combination Product by the fraction A/(A+B) where A is the invoice price of such Licensed Product if sold separately, and B is the total invoice price of the other active ingredient(s) and/or the delivery device and/or the services performed in the combination if sold separately. If, on a country-by-country basis, such other active ingredient or ingredients or delivery device or services in the Combination Product are not sold separately in such country, but the Licensed Product component of the Combination Product is sold separately in such country, Net Sales for the purpose of determining royalties due to Jenrin pursuant to Section 3.3 for the Combination Product will be calculated by multiplying actual Net Sales of such Combination Product by the fraction A/C where A is the invoice price of such Licensed Product component if sold separately, and C is the invoice price of the Combination Product. If, on a country-by-country basis, such Licensed Product component is not sold separately in such country, Net Sales for the purposes of determining royalties due to Jenrin pursuant to Section 3.3 for the Combination Product will be D/(D+E) where D is the fair market value of the portion of the Combination Products that contains the Product and E is the fair market value of the portion of the Combination Products containing the other active ingredient(s) or delivery device or services included in such Combination Product, as such fair market values are determined in good faith by Corbus, based upon commercially reasonable standards and available market information.

For purposes of this definition, "**Combination Product**" means (x) any single product in finished form containing both (A) a Licensed Product and (B) one or more other active ingredients or a delivery device; or (y) any sale of such Licensed Product with another product(s) or with the performance of a service for a single invoice price.

1.31 "**Non-Breaching Party**" has the meaning set forth in Section 9.3.

1.32 "**Notified Party**" has the meaning set forth in Section 9.3.

1.33 "**Original Product**" has the meaning set forth in Section 3.2(b).

1.34 "**Party**" means Corbus or Jenrin; "**Parties**" means, collectively, Corbus and Jenrin.

1.35 "**Patent**" means any United States or foreign (i) unexpired letters patent (including inventor's certificates) that have not been held invalid or unenforceable by a court of competent jurisdiction from which no appeal can be taken or has been taken within the required time period, including any substitution, extension, registration, confirmation, reissue, re-examination, renewal or any like filing, and (ii) pending applications for letters patent, including any provisional, converted provisional, continued prosecution application, continuation, divisional or continuation-in-part.

1.36 "**Phase 1 Clinical Trial**" means, as to a specific Licensed Product, [*], as amended from time to time, or the corresponding regulation in jurisdictions other than the United States.

1.37 "**Phase 2 Clinical Trial**" means as to a specific Licensed Product, [*], as amended from time to time, or the corresponding regulation in jurisdictions other than the United States.

1.38 "**Phase 3 Clinical Trial**" means as to a specific Licensed Product, [*], as amended from time to time, or the corresponding regulation in jurisdictions other than the United States.

1.39 "**Regulatory Approval**" means any and all regulatory approvals (including any pricing approvals required by an applicable governmental authority to permit commercial sale in such country or territory), licenses, registrations or authorizations of any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, necessary for the marketing and sale of a pharmaceutical product in a given regulatory jurisdiction.

1.40 "**Regulatory Filings**" has the meaning set forth in Section 4.2.

1.41 "**Related Party**" means Corbus' Affiliates and Sublicensees.

1.42 "**Royalty Term**" has the meaning set forth in Section 3.3(c).

1.43 "**Skipped Milestone**" has the meaning set forth in Section 3.2(b)(ii).

1.44 "**Sole Invention**" has the meaning set forth in Section 5.1.

1.45 "**Sublicense Income**" means (a) upfront payments, (b) license fees, and, (c) the portion of any development, approval, sales or other milestone payments received by Corbus from a Sublicensee that exceeds the amount then owing to Jenrin under this Agreement with respect to the same event giving rise to such milestone payment, in each case in consideration for a sublicense under, but not an assignment of, the rights granted to Corbus under Article 2; *provided that*, Sublicense Income does not include (i) payments or reimbursement for documented research and/or development activities that occur after the Effective Date, valued at the actual direct cost of such activities plus overhead charges negotiated in good faith in an arm's-length transaction, (ii) payment or reimbursement of reasonable patent expenses actually incurred by Corbus after the Effective Date for the Licensed Patents, and (iii) any consideration received for an equity interest in, extension of credit to (including but limited to convertible debt) or other investment in Corbus or Corbus' Affiliates to the extent that such consideration does not exceed the fair market value of the equity or other interest received as determined in good faith by the Board of Directors of Corbus or its Affiliate (as applicable).

1.46 "**Sublicensee**" means an entity to which Corbus grants a sublicense under Corbus' rights under Article 2; *provided that* "Sublicensee" does not include any of Corbus' Affiliates or wholesale distributors of Corbus or its Affiliates who purchase Licensed Products from Corbus or its Affiliates in an arm's length transaction and who have no other obligation, including a reporting obligation, to Corbus or its Affiliates, with respect to any subsequent use or disposition of such Licensed Products.

1.47 "**Term**" has the meaning set forth in Section 9.1.

1.48 "**Territory**" means all the countries of the world.

1.49 "**Third Party**" means any entity other than Jenrin, Corbus and their respective Affiliates.

1.50 "**Third Party Agreements**" has the meaning set forth in Section 6.2(d).

1.51 "**Third Party Claim**" has the meaning set forth in Section 7.1.

1.52 "**Valid Claim**" means (a) an unexpired claim of an issued Patent within the Licensed Patents that has not been found to be unpatentable, invalid or unenforceable by an unreversed and unappealable decision of a court or other authority in the subject country; or (b) a claim of an application within the Licensed Patents that has been pending for less than seven (7) years from the original priority date.

Article 2
GRANT OF RIGHTS

2.1 License Grant to Corbus. Subject to the terms and conditions of this Agreement, Jenrin grants to Corbus an exclusive (even as to Jenrin), royalty-bearing license, with the right to grant sublicenses through multiple tiers, in the Territory under and to use the Licensed Intellectual Property to research, develop, make, have made, use, sell, offer for sale and import Licensed Products in the Field.

2.2 No Implied Licenses. Except as expressly set forth in this Agreement, neither Party grants any licenses under its intellectual property rights to the other Party.

Article 3
COMPENSATION

3.1 Fees.

(a) Upfront Fee. Corbus will pay to Jenrin a single payment of Two Hundred Fifty Thousand U.S. Dollars (U.S. $250,000) with five (5) business days after execution of this Agreement by both Parties.

3.2 Milestone Payments.

(a) Milestones. Corbus will make milestone payments to Jenrin based on achievement of the following milestone events by Corbus or its Related Parties for each Licensed Product to reach such milestone. As used in the table below, "Completion" means database lock for the applicable clinical trial.

Milestone Event	**Milestone Payment**
1. The earlier to occur of:	[*]
(a) [*]	
OR	
(b) [*]	

Milestone Event	Milestone Payment
2. [*]	[*]
3. [*]	[*]
4. [*]	[*]
5. [*]	[*]

(b) Payment.

(i) Corbus will notify Jenrin in writing promptly of the achievement of each of the milestone events listed above for each Licensed Product. Each milestone payment by Corbus to Jenrin under this Section 3.2 will be payable only once upon achievement of the applicable milestone event by a Licensed Product comprised of or containing a particular Compound, regardless of the number of times such milestone is achieved with respect to such Licensed Product. (For avoidance of doubt, and without limiting the foregoing, if a Licensed Product achieves a milestone while being developed for a new indication and such Licensed Product achieved previously achieved the same milestone while being developed for a prior indication, no additional milestone payment will be due.) Further, if further clinical development of a Licensed Product with respect to which one or more milestones payments have been made (an "**Original Product**") is halted, and such Licensed Product is replaced in development for the same indication by a Licensed Product comprised of or containing a different Compound (a "**Backup Product**"), then Corbus will not be obligated to make any payments with respect to milestones achieved by the Backup Product for which Corbus has already made a milestone payment with respect to the Original Product. Corbus will pay to Jenrin the applicable milestone payment within ninety (90) days after Corbus' achievement of the applicable milestone event;

(ii) The milestones set forth in Section 3.2(a) are intended to be successive. In the event that a Licensed Product is not required to meet the goal associated with a particular milestone ("**Skipped Milestone**"), such Skipped Milestone will be deemed to have been achieved upon the earlier to occur of:

A. If the Skipped Milestone is milestone #2, [*]; if the Skipped Milestone is milestone #3, [*]; and if the Skipped Milestone is milestone #4, [*]; or

B. Authorization or other communication from the relevant regulatory authority that expressly states that the goal associated with the Skipped Milestone is not required.

3.3 Royalties.

(a) Rates. Subject to Section 3.3(d), Corbus will pay Jenrin royalties based on Net Sales of each Licensed Product by Corbus and its Related Parties in a given calendar year during the applicable Royalty Term for such Licensed Product at the rate below that is applicable to the portion of aggregate Net Sales within each of the following Net Sales levels during such calendar year:

Annual Worldwide Net Sales	**Royalty Rate**
US [*] or less	[*]
More than US [*] but less than US [*]	[*]
US [*] or more	[*]

(b) Blended Royalties. The Parties acknowledge and agree that the Licensed Patents and Licensed Know-How licensed pursuant to this Agreement justify royalty rates of differing amounts with respect to the sales of Licensed Products, which rates could be applied separately to Licensed Products involving the exercise of such Licensed Patents and/or the incorporation of such Licensed Know-How, and that, if such royalties were calculated separately, royalties relating to Licensed Patents and royalties relating to Licensed Know-How would last for different terms. Notwithstanding the foregoing, the Parties have determined, for reasons of convenience, that blended royalty rates for the Licensed Patents and the Licensed Know-How licensed under this Agreement, as set forth above, will apply during a single Royalty Term. The Parties further acknowledge and agree that nothing in this Agreement (including any exhibits or attachments to this Agreement) will be construed as representing an estimate or projection of either (A) the number of Licensed Products that will or may be successfully developed or commercialized or (B) anticipated sales or the actual value of any Licensed Product, and that the figures set forth in this Section 3.3 or elsewhere in this Agreement or that have otherwise been discussed by the Parties are merely intended to define the royalty payment obligations if such sales performance is achieved.

(c) Royalty Term. "**Royalty Term**" means, on a country-by-country and Licensed Product-by-Licensed Product basis, the period of time beginning upon the date of First Commercial Sale of a Licensed Product in that country, and ending upon the later of: (i) the seven (7) year anniversary of such First Commercial Sale; or (ii) expiration of the last-to-expire Valid Claim of a Licensed Patent that Covers such Licensed Product in such country.

(d) Third Party Royalties. If Corbus or its Related Parties obtains a license or similar right from any Third Party under any Patent covering technology that is reasonably necessary for the research, development, manufacture or commercialization of a Licensed Product, and if Corbus or any of its Related Parties is required to pay to such Third Party a royalty, license fees or milestone payments to obtain such license or similar right with respect to Licensed Products, then the royalties due pursuant to Section 3.3(a) will be reduced by [*] of the amount of the amounts attributable to such Licensed Product and paid to such Third Party; *provided, however*, that the royalties payable to Jenrin will not be reduced in any such event to less than [*] of the amounts set forth in Section 3.3(a), solely by reason of any reduction under this Section 3.3(d).

(e) Other Royalty Provisions. Only one royalty will be due with respect to the same unit of Licensed Product. No royalties will be due upon the sale or other transfer among Corbus and its Related Parties, but in such cases the royalty will be due and calculated upon Corbus' or its Related Parties' Net Sales to the first independent Third Party. No royalties will accrue on the sale or other disposition of the Licensed Product by Corbus or its Related Parties for use in a clinical study sponsored or funded by Corbus or on the disposition of a Licensed Product in reasonable quantities by Corbus or its Related Parties as samples without monetary consideration (promotion or otherwise) or as donations (for example, to non- profit institutions or government agencies for a non-commercial purpose).

3.4 Sublicense Income. If at any time during the Royalty Term, Corbus enters into one or more sublicenses with one or more Third Parties of any rights granted Corbus under Section 2.1 covering one or more Licensed Products, Corbus will pay Jenrin a portion of the Sublicense Income received by Corbus under each such sublicense as follows: (i) for a sublicense entered into prior to the first dosing of a subject in a [*] for a particular Licensed Product, an amount equal to [*] of all Sublicense Income received by Corbus as a result of the sublicense granted for such Licensed Product(s), and (ii) for a sublicense entered into after the first dosing of a subject in a [*] for such Licensed Product, an amount equal to [*] of all Sublicense Income received by Corbus as a result of the sublicense granted for such Licensed Product(s).

3.5 Royalty Payment and Reports. Within sixty (60) days after the end of each calendar quarter after the First Commercial Sale of a Licensed Product, Corbus will deliver to Jenrin a report containing the following information for the prior calendar quarter:

(a) the gross sales associated with each Licensed Product sold by Corbus and its Related Parties (including the number and size of units of Licensed Product sold by Corbus and its Related Parties); Related Parties;

(b) a calculation of Net Sales of each Licensed Product that is sold by Corbus and its

(c) if applicable, the amount of Sublicense Income subject to Section 3.4 received by Corbus from its Sublicensees;

(d) the amount of taxes, if any, withheld to comply with applicable law; and

(e) a calculation of payments due to Jenrin with respect to the foregoing (including the calculation of any royalty adjustments pursuant to Section 3.3 and any calculation of currency conversion).

Concurrent with these reports, Corbus will remit to Jenrin any payment due for the applicable calendar quarter. All such reports will be considered Confidential Information of Corbus and will be maintained in confidence by Jenrin. If no royalties or other payments are due to Jenrin for such reporting period, the report will so state. Along with the last report for a calendar year provided under this Section 3.5, Corbus will provide a final report for the entire such year, and statement on whether any reconciling payments must be made at such time to effect the intent of this Article 3. Within thirty (30) days after such statement is provided, the Party that owes any amounts to the other Party to effect such reconciliation will pay the relevant amount to the other Party.

3.6 Tax Withholding. If Corbus concludes upon the advice of its tax advisor that tax withholdings under the laws of any country within the Territory are required with respect to payments to Jenrin, Corbus will withhold the required amount and pay it to the appropriate governmental authority. In any such case, Corbus will promptly provide Jenrin with original receipts or other evidence reasonably desirable and sufficient to allow Jenrin to document such tax withholdings for purposes of claiming foreign tax credits and similar benefits.

3.7 Currency; Blocked Payments. All dollar ($) amounts specified in this Agreement are United States dollar amounts and all payments to be made under this Agreement will be made in United States dollars and will be paid by bank wire transfer in immediately available funds to such bank account in the United States as may be designated in writing by the receiving Party from time to time. In the case of sales of Licensed Products outside the United States by Corbus and its Related Parties, the rate of exchange to be used in computing the amount of currency equivalent in United States dollars due will be made at the rate of exchange utilized by Corbus (or its Sublicensee, if applicable) in its worldwide accounting system, prevailing on the last day of the applicable calendar quarter. In the event that, by reason of applicable laws or regulations in any country, it becomes impossible or illegal for a Party to transfer, or have transferred on its behalf, royalties or other payments to the receiving Party, payments will be made in the country in local currency by deposit in a local bank designated by the receiving Party.

3.8 Records and Audits. Corbus will keep, and will require all its Related Parties to keep, correct and complete books of accounts and other records containing all information and data that may be necessary to ascertain and verify the royalties and Sublicense Income payable under this Agreement. During the Term and for a period of two (2) years following its termination, Jenrin has the right from time to time (not to exceed once during each calendar year) to have an independent certified public accountant inspect such books and records of Corbus and/or its Affiliates at Jenrin's expense. Such inspection will be conducted after reasonable prior notice by Jenrin to Corbus during Corbus' ordinary business hours, will not be more frequent than once during each calendar year and may cover only the two (2) years immediately preceding the date of the audit. Any such independent certified accountant will be reasonably acceptable to Corbus, will execute Corbus' standard form of confidentiality agreement, and will be permitted to share with Jenrin solely its findings with respect to the accuracy of the royalties reported as payable under this Agreement. If such accounting determines that Corbus paid Jenrin less than the amount properly due in respect of any calendar quarter, then Corbus will reimburse Jenrin such amount, and if the amount underpaid exceeds ten percent (10%) of the amount actually due, Corbus will also reimburse Jenrin for the costs of such accounting (including the fees and expenses of the certified public accountant). In the event such accounting determines that Corbus paid Jenrin more than the amount properly due in respect of any calendar quarter, then any excess payments made by Corbus will be credited against future amounts due to Jenrin from Corbus, or if no such future amounts are reasonably expected to be due to Jenrin from Corbus, then Jenrin will reimburse Corbus for any overpayment by Corbus.

Article 4
TECHNOLOGY TRANSFER; EXCLUSIVITY; REGULATORY MATTERS; DILIGENCE

4.1 Technology Transfer and Assistance.

(a) Transition Plan. As soon as possible after the Effective Date, the Parties will complete the Transition Plan attached to this Agreement as Exhibit B and Jenrin will complete the transfer to Corbus of all of the following in Jenrin's possession, to the extent they have not already been transferred:

(i) all Licensed Know-How;

(ii) complete and correct copies of all collaborative and other agreements with Third Parties relating to the Licensed Intellectual Property;

(iii) copies of the Licensed Patents and all correspondence with patent offices in the Territory with respect to such Licensed Patents;

(iv) all Regulatory Filings and all obligations with respect to all Regulatory Filings for the Compounds; and other Compounds;

(v) synthetic methods, analytical methods, and batch records covering JD5037

(vi) all existing inventories of JD-5037, other Compounds and precursor materials for the Compounds;

(vii) all synthetic methods, analytical methods, and batch records covering or necessary or useful for the manufacture and production of JD5037 and other Compounds; and

(viii) all study reports, results and data from pre-clinical studies relating to JD-5037 and other Compounds conducted prior to the Effective Date.

(b) Jenrin will also promptly provide or make available to Corbus any additional Licensed Know-How, materials, data and information in its possession or Control that are necessary or useful for the exploitation of the Licensed Intellectual Property and/or the research, development, manufacture, Regulatory Approval or commercialization of Licensed Products.

(c) Jenrin will also provide reasonable assistance to Corbus for the orderly transfer and transition of all research and development activities relating to the Compounds and/or Licensed Products to Corbus. In addition, for six (6) months after the Effective Date, or for such longer period as the Parties agree, Jenrin will make available to Corbus Robert J. Chorvat, Ph.D., Jenrin's Chief Scientific Officer, to consult with and assist Corbus in its research, development, manufacture, seeking of Regulatory Approval and commercialization of the Compounds and/or Licensed Products. Corbus will pay Jenrin [*] for such services, not to exceed [*] per month, with a minimum payment of US [*] over the first six (6) month period. Jenrin acknowledges that Corbus and its Affiliates are required to abide by federal and state disclosure laws and certain transparency policies governing their activities, including providing reports to the government and to the public concerning financial or other relationships with healthcare providers. Jenrin agrees that Corbus and its Affiliates may, in their sole discretion, disclose information about this Agreement and about Dr. Chorvat's services or any other services provided by Jenrin under this Agreement, including those relating to healthcare providers and any compensation paid to healthcare providers pursuant to this Agreement. Jenrin agrees to promptly supply information reasonably requested by Corbus for disclosure purposes. To the extent that Jenrin is independently obligated to disclose specific information concerning services relating to healthcare providers and compensation paid to healthcare providers pursuant to this Agreement, Jenrin will make timely and accurate required disclosures.

(d) Each Party will promptly inform the other Party upon the discovery, synthesis or development, by or on behalf of each Party or its Affiliates of any additional Compounds after the Effective Date and will provide to the other Party all information requested by such other Party relating to any such additional Compounds.

(e) For a period of ten (10) years after the Effective Date, neither Jenrin nor any of its Affiliates will research, develop or commercialize any compounds that are intended to, or do, modulate any cannabinoid receptor, except in connection with the performance of the services contemplated by Section 4.1(c) of this Agreement.

4.2 Regulatory Matters. Corbus (or its Related Parties) will file and own all INDs, marketing authorization applications and Regulatory Approvals for Licensed Products, and any related items such as investigator's brochures or IRB approvals, in the Field and in the Territory (collectively, "**Regulatory Filings**"), and will be solely responsible for all communications with regulatory authorities related to such matters. Jenrin will cooperate with, and provide reasonable assistance to Corbus or its Related Parties, in the preparation and submission of any portions of any Regulatory Filings that rely upon or contain information or data in the Licensed Intellectual Property generated by or on behalf of Jenrin. Corbus will promptly reimburse Jenrin for its reasonable out-of-pocket expenses in complying with this Section 4.2.

4.3 Diligence Obligations.

(a) In General. Corbus will use Commercially Reasonable Efforts to research, develop, obtain Regulatory Approvals for and commercialize a Licensed Product in the Field in the Territory, at its own expense. For purposes of this Section 4.3(a), the efforts of Corbus' Related Parties will also be considered the efforts of Corbus.

(b) Fulfillment. Notwithstanding anything to the contrary in Section 4.3(a), Corbus will be deemed to have fulfilled all of its obligations, and will have no further obligations, under this Section 4.3 if:

(i) during the first twelve (12) months after the Effective Date, [*]; and

(ii) [*]

Article 5
INTELLECTUAL PROPERTY

5.1 Ownership of Inventions. Each Party will own all know-how developed and inventions conceived or reduced to practice solely by its employees, agents or independent contractors (each, a "**Sole Invention**"). Although the Parties do not intend or expect to jointly develop any know-how or inventions, in the event they do so, then all inventions made jointly by employees, agents or independent contractors of each Party will be owned jointly by the Parties such that each Party has an undivided one-half interest in such inventions ("**Joint Inventions**"). (All Patents claiming patentable Joint Inventions will be referred to as "**Joint Patents**.") Except to the extent either Party is restricted by the rights granted to the other Party and covenants contained in this Agreement, each Party will be entitled to practice, and to grant to Third Parties or its Related Parties the right to practice, inventions claimed in a Joint Patent without restriction or an obligation to account to the other Party. Inventorship will be determined in accordance with United States patent laws.

5.2 Prosecution of Patents.

(a) Licensed Patents. Corbus will be responsible, at its expense, for obtaining, prosecuting, maintaining and defending the Licensed Patents in Jenrin's name throughout the Territory. If Corbus elects not to (i) pursue the filing, prosecution, maintenance or defense of a Licensed Patent or any claim in such Licensed Patent in a particular country, or (ii) take any other action with respect to a Licensed Patent in a particular country that is necessary or useful to establish or preserve rights to such Licensed Patent, then in each such case Corbus will so notify Jenrin promptly in writing and in reasonable time to enable Jenrin to meet any deadlines by which an action must be taken to establish or preserve any such rights in such Licensed Patent, as applicable, in such country. Upon receipt of each such notice by Corbus, Jenrin has the right, but not the obligation, to pursue the filing or support the continued prosecution, maintenance or defense of such Licensed Patent at its expense in such country. If Jenrin elects to pursue such filing or continue such support, then Jenrin will notify Corbus of such election. Each Party will, at the other Party's request, assist and cooperate in the filing and prosecution, maintenance or defense of any application, amendment, submission, response or correspondence with respect to any Licensed Patents. Each Party will provide the other Party, sufficiently in advance for the other Party to comment, with copies of all patent applications and other material submissions and correspondence with any patent counsel or patent authorities pertaining to the Licensed Patents. Each Party will give due consideration in good faith to the comments of the other Party.

(b) Other Patents Claiming Inventions. Subject to Section 5.2(a), each Party will be responsible, at its expense, for the prosecution and maintenance of Patents claiming its Sole Inventions; *provided that*, any Patents Covering Jenrin's Sole Inventions that claim or Cover any Compound will be deemed Licensed Patents subject to Corbus' rights and obligations (including payment of all expenses) under Section 2.1 and Section 5.2(a). The Parties will mutually agree upon which Party will prosecute Joint Patents that are not Licensed Patents, based on the contribution of each Party to such invention and each Party's potential interest in products based upon such invention; *provided that*, any Patents Covering Joint Inventions that claim or Cover any Compound will be deemed Licensed Patents subject to Corbus' rights and obligations (including payment of all expenses) under Section 2.1 and Section 5.2(a). Except as provided in the immediately preceding sentence, if either Party prosecutes a Joint Patent pursuant to this Section 5.2(b), such Party will solely bear its own internal costs for such prosecution, and the external costs for such prosecution (e.g., outside counsel, filing fees, etc.) will be borne equally by the Parties unless otherwise mutually agreed. Jenrin will have no obligation to prosecute or maintain any Patents Covering its Sole Inventions or its rights in any Joint Inventions; *provided that*, the foregoing will not affect either Party's rights or obligations regarding any Licensed Patents Covering such Sole Inventions or Joint Inventions.

5.3 Infringement of Certain Patents by Third Parties. Each Party will promptly notify the other Party in writing of any alleged or threatened infringement of the Licensed Patents, Joint Patents or Patents claiming Sole Inventions of which it becomes aware.

(a) Licensed Patents. Corbus has the sole right, but not the obligation, to initiate an appropriate suit anywhere in the world against any Third Party who at any time is suspected of infringing all or any portion of the Licensed Patents or using without proper authorization all or any portion of the Licensed Know-How (each an "**Infringement**"), and will control any such action for which it exercises such right.

(b) Joint Patents. The Parties will each have the right, but not the obligation to prosecute infringement of any Joint Patents that are not Licensed Patents; *provided* that they first confer and mutually agree regarding such matter. If Jenrin is involuntarily joined as a party to any enforcement proceeding, Corbus will reimburse Jenrin for its reasonable out-of-pocket expenses incurred by reason of its participation in such proceeding.

5.4 Infringement of Third Party Rights. If any Licensed Product that is manufactured, used or sold by or for Corbus becomes the subject of a Third Party's claim or assertion of infringement of a Patent controlled by such Third Party, the Party first having notice of the claim or assertion will promptly notify the other Party in writing, and the Parties will promptly meet to consider the claim or assertion and the appropriate course of action. Each Party has the right to take action to defend any such claim brought against it by a Third Party, *provided, however*, that Jenrin will not enter into any settlement of any claim described in this Section 5.4 that affects adversely Corbus' rights or interests without first obtaining Corbus' written consent, which consent will not be unreasonably withheld. Nothing in this Section 5.4 will be deemed to relieve either Party of its obligations under Article 7.

5.5 Other Infringement Resolutions. In the event of a dispute or potential dispute that has not ripened into a demand, claim or suit of the types described in Sections 5.3 and 5.4, the same principles governing control of the resolution of the dispute, consent to settlement of the dispute, and implementation of the settlement of the dispute (including the sharing in and allocating the payment or receipt of damages, license fees, royalties and other compensation) will apply.

5.6 Patent Marking. Each Party agrees to comply with the patent marking statutes in each country in which a Licensed Product is sold by such Party or its Related Parties.

5.7 Validity of Licensed Patents. As an inducement to Jenrin to enter into this Agreement and to grant the exclusive license to Corbus pursuant to Section 2.1 hereof, Corbus hereby advises Jenrin that Corbus does not intend to challenge the validity of the Licensed Patents.

Article 6
REPRESENTATIONS AND WARRANTIES

6.1 Mutual Representations and Warranties. Each Party represents, warrants and covenants to the other Party as follows:

(a) Corporate Existence and Power. It is a company or corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as contemplated in this Agreement, including the right to transfer the rights granted under this Agreement.

(b) Authority and Binding Agreement. As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations under this Agreement; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid and binding obligation of such Party that is enforceable against it in accordance with its terms, subject to bankruptcy, insolvency, reorganization, arrangement, winding-up, moratorium, and similar laws of general application affecting the enforcement of creditors' rights generally, and subject to general equitable principles, including the fact that the availability of equitable remedies, such as injunctive relief or specific performance, is in the discretion of the court.

(c) No Conflict. It has not entered, and will not enter, into any agreement with any Third Party that is in conflict with the rights granted to the other Party under this Agreement, and has not taken and will not take any action that would in any way prevent it from granting the rights granted to the other Party under this Agreement, or that would otherwise materially conflict with or adversely affect the rights granted to the other Party under this Agreement. Its performance and execution of this Agreement does not and will not result in a breach of any other contract to which it is a party.

(d) No Debarment. Neither it nor any of its Affiliates has been Debarred and, in the course of its research, development or manufacture of products, such Party, its Affiliates, their respective officers, and any person or entity engaged by such Party or its Affiliates, have not used, and during the Term will not use in performing any activities pursuant to this Agreement, any person or entity who is or has been Debarred by the FDA or equivalent regulatory authorities or who, to the best knowledge of such Party, its Affiliates or any such person or entity engaged by such Party or its Affiliates, is the subject of Debarment proceedings by the FDA or equivalent regulatory authorities. Each Party agrees to notify the other Party in writing immediately if such Party or its Affiliates, or any of their respective officers, or any person or entity used by such Party or its Affiliates under this Agreement, is subject to any of the foregoing, or if any action, suit, claim, investigation, or proceeding relating to the foregoing is pending, or to the best knowledge of such Party, its Affiliates or any such person or entity engaged by such Party or its Affiliates, is threatened,

6.2 Jenrin Representations. Jenrin represents, warrants and covenants to Corbus as follows:

(a) Licensed Intellectual Property. The Licensed Intellectual Property constitutes all of the intellectual property owned or Controlled by Jenrin that would, but for the rights granted to Corbus pursuant to this Agreement, be infringed or misappropriated by the exercise by Corbus of its rights under this Agreement.

(b) Compounds. The Compounds developed by or for Jenrin constitute all chemical entities Controlled by Jenrin or its Affiliates as of the Effective Date that modulate any cannabinoid receptor.

(c) Existence, Validity and Ownership. As of the Effective Date, (i) the Licensed Patents exist and, to the best knowledge of Jenrin after reasonable inquiry, are not invalid or unenforceable, in whole or in part, (ii) Jenrin is the sole and exclusive owner of all right, title and interest in and to the Licensed Intellectual Property, and (iii) the Licensed Intellectual Property is free and clear of any liens, charges and encumbrances. As of the Effective Date Jenrin has no knowledge of any claim made against it (x) asserting the invalidity, misuse, unregisterability or unenforceability of any of the Licensed Patents or (y) challenging Jenrin's Control of the Licensed Intellectual Property or making any adverse claim of ownership of the Licensed Intellectual Property.

(d) Third Party Agreements. As of the Effective Date, there are no agreements between Jenrin and Third Parties pursuant to which Jenrin has rights and/or obligations with respect to any Licensed Intellectual Property ("**Third Party Agreements**") and Jenrin will not enter into any Third Party Agreements after the Effective Date.

(e) Non-Infringement of Third Party Rights. As of the Effective Date, (i) Jenrin has no knowledge of any Patents (other than the Licensed Patents) that may be infringed by the manufacture, use or sale of Licensed Products, (ii) no claim of infringement of the Patents of any Third Party has been made nor, to Jenrin's knowledge, threatened against Jenrin or any of its Affiliates with respect to the development, manufacture, sale or use of Licensed Products, and (iii) there are no other claims, judgments or settlements against or owed by Jenrin or to which Jenrin is a party or pending or threatened claims or litigation, in either case relating to any Licensed Product. Neither Jenrin nor any of its Affiliates or their respective current or former employees has misappropriated any of the Licensed Know-How from any Third Party, and Jenrin has no knowledge of any claim by a Third Party that such misappropriation has occurred.

(f) Non-Infringement of Licensed Intellectual Property by Third Parties. As of the Effective Date Jenrin has no knowledge of any activities by Third Parties that would constitute infringement or misappropriation of the Licensed Intellectual Property.

6.3 No Other Representations. THE EXPRESS REPRESENTATIONS AND WARRANTIES STATED IN THIS ARTICLE 6 ARE IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS. EACH PARTY DISCLAIMS ANY REPRESENTATION OR WARRANTY THAT THE DEVELOPMENT, MANUFACTURE OR COMMERCIALIZATION OF ANY LICENSED PRODUCT PURSUANT TO THIS AGREEMENT WILL BE SUCCESSFUL OR THAT ANY PARTICULAR SALES LEVEL WITH RESPECT TO A LICENSED PRODUCT WILL BE ACHIEVED.

Article 7
INDEMNIFICATION AND INSURANCE

7.1 Indemnification by Jenrin. Jenrin will defend, hold harmless and indemnify (collectively "**Indemnify**") Corbus and its Affiliates and their respective agents, directors, officers employees and Sublicensees (the "**Corbus Indemnitees**") from and against any and all liabilities, expenses and/or losses, including reasonable legal expenses and attorneys' fees (collectively "**Losses**") in each case resulting from Third Party suits, claims, actions and demands (each, a "**Third Party Claim**") to the extent arising from or related to (a) a breach of any representation, warranty, covenant or other obligation of Jenrin set forth in this Agreement, (b) the gross negligence or willful misconduct of any Jenrin Indemnitee in exercising its rights or performing its obligations under this Agreement, or (c) any claim that any Compounds or other information or materials provided by or on behalf of Jenrin to Corbus or its designee under this Agreement infringes or misappropriates any Third Party rights, except, in each case, to the extent such Loss arises from a matter for which Corbus is obligated to indemnify the Jenrin Indemnitees under this Agreement.

7.2 Indemnification by Corbus. Corbus will Indemnify Jenrin and its Affiliates and their respective agents, directors, officers and employees (the "**Jenrin Indemnitees**") from and against any and all Losses resulting from Third Party Claims arising from or related to (a) a breach of any representation, warranty, covenant or other obligation of Corbus set forth in this Agreement, (b) the research, development, use, testing, design, composition, manufacture, promotion, commercialization, marketing, sale, distribution or other disposition of Licensed Products by Corbus or its Related Parties, including a claim that any Licensed Product infringes or misappropriates any Third Party rights, or (c) the gross negligence or willful misconduct of any Corbus Indemnitee in exercising its rights or performing its obligations under this Agreement, except, in each case, to the extent such Loss arises from a matter for which Jenrin is obligated to Indemnify the Corbus Indemnitees under Section 7.1.

7.3 Procedure. To be eligible to be indemnified under Section 7.1 or 7.2, as applicable, the indemnified Party will provide the indemnifying Party with prompt notice of the claim giving rise to the indemnification obligation pursuant to this Article 7 and the exclusive ability to defend (with the reasonable cooperation of the indemnified Party) or settle any such claim; *provided, however*, that the indemnifying Party will not enter into any settlement for damages other than monetary damages without the indemnified Party's written consent, such consent not to be unreasonably withheld or delayed. The indemnified Party has the right to participate, at its own expense and with counsel of its choice, in the defense of any claim or suit that has been assumed by the indemnifying Party. If the Parties cannot agree as to the application of Sections 7.1 or 7.2, as applicable, to any particular Third Party Claim, the Parties may conduct separate defenses of such Third Party Claim. Each Party reserves the right to claim indemnity from the other in accordance with Sections 7.1 or 7.2, as applicable, upon resolution of the underlying claim, notwithstanding the provisions of this Section 7.3 requiring the indemnified Party to tender to the indemnifying Party the exclusive ability to defend such claim or suit.

7.4 Limitation of Liability. NEITHER PARTY WILL BE LIABLE UNDER ANY LEGAL THEORY (WHETHER TORT, CONTRACT OR OTHERWISE) FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE EXERCISE OF ITS RIGHTS UNDER THIS AGREEMENT, INCLUDING LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES, EXCEPT AS A RESULT OF A MATERIAL BREACH OF THE CONFIDENTIALITY AND NON-USE OBLIGATIONS IN ARTICLE 8; PROVIDED, HOWEVER, THAT NOTHING IN THIS SECTION 7.4 IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF EITHER PARTY.

7.5 Insurance. Each Party will maintain insurance during the Term of this Agreement and for a period of at least two (2) years thereafter with a reputable, solvent insurer in an amount appropriate for its business and products of the type that are the subject of this Agreement, and for its obligations under this Agreement. Each Party will provide the other Party with evidence of the existence and maintenance of such insurance coverage at the other Party's written request.

Article 8
CONFIDENTIALITY AND PUBLICITY

8.1 Confidential Information. Each Party agrees (a) to take all steps reasonably necessary to maintain the confidentiality of the Confidential Information of the other Party, (b) not to disclose the other Party's Confidential Information to any Third Party without the prior written consent of such other Party, and (c) to use such Confidential Information only as necessary to fulfill its obligations or in the reasonable exercise of rights granted to it under this Agreement; *provided, however*, that the foregoing obligations will not apply to Confidential Information that the receiving Party can show, by competent evidence (i) is in possession of the receiving Party at the time of disclosure, as reasonably demonstrated by written records and without obligation of confidentiality, (ii) later becomes part of the public domain through no fault of the receiving Party, (iii) is received by the receiving Party without obligation of confidentiality from a Third Party with a right to such information, or (iv) is developed independently by the receiving Party without use of, reference to, or reliance upon the disclosing Party's Confidential Information by individuals who did not have access to such Confidential Information. Furthermore, a Party may disclose Confidential Information of the other Party to (x) its Affiliates, and to its and their directors, employees, consultants, professional advisors and agents in each case who have a specific need to know such Confidential Information and who are bound by a like obligation of confidentiality and restriction on use, (y) any bona fide actual or prospective collaborators, underwriters, investors, lenders or other financing sources who are obligated to keep such information confidential, to the extent reasonably necessary to enable such actual or prospective collaborators, underwriters, investors, lenders or other financing sources to determine their interest in collaborating with, underwriting or making an investment in, or otherwise providing financing to, the receiving Party, and (z) the extent such disclosure is required to comply with applicable law or regulation or the order of a court of competent jurisdiction, to defend or prosecute litigation or to comply with the rules of the U.S. Securities and Exchange Commission, any stock exchange or listing entity; *provided, however*, that the receiving Party provides prior written notice of such disclosure to the disclosing Party and takes reasonable and lawful actions to avoid or minimize the degree of such disclosure. Notwithstanding any other provision of this Agreement, each Party may disclose and use Confidential Information of the other Party as necessary to file or prosecute Patent applications, prosecute or defend litigation or otherwise establish rights or enforce obligations under this Agreement, or to submit Regulatory Filings. Further, notwithstanding the foregoing restrictions in this Article 8, Corbus has the right to disclose or publish any Licensed Know-How transferred or licensed to it under this Agreement as Corbus reasonably deems necessary or useful for the research, development or commercialization of Licensed Products in accordance with the terms of this Agreement. Moreover, Corbus may disclose Confidential Information of Jenrin relating to the research, development or commercialization of Licensed Products to entities with whom Corbus has (or may have) a marketing and/or development collaboration and who have a specific need to know such Confidential Information and who are bound by a like obligation of confidentiality and restrictions on use.

8.2 Publicity. Upon the execution of this Agreement, Corbus has the right to issue a press release regarding the subject matter of this Agreement. Each Party understands that this Agreement is likely to be of significant interest to investors, analysts and others and, therefore, that either Party has the right to make announcements of events or developments with respect to this Agreement that are material to such Party. The Parties agree that any such announcement will not contain Confidential Information or, if disclosure of Confidential Information is required by law or regulation or the rules of the U.S. Securities and Exchange Commission, any stock exchange or listing entity, will make reasonable efforts to minimize such disclosure and obtain confidential treatment for any such information that is disclosed to a government agency. Each Party agrees to provide the other Party with a copy of any public announcement as soon as reasonably practicable prior to its scheduled release. Except in the case of extraordinary circumstances, each Party will provide the other with an advance copy of any announcement at least five (5) days prior to its scheduled release and provide the opportunity to comment thereon.

Article 9
TERM AND TERMINATION

9.1 Term. This Agreement will become effective on the Effective Date and unless earlier terminated pursuant to this Article 9, will remain in effect until the expiration of the last-to-expire Royalty Term for a Licensed Product (the "**Term**"). Thereafter, the rights granted under Article 2 will become fully- paid and perpetual.

9.2 Elective Termination. Corbus has, at any time, the right to terminate this Agreement at will in its entirety upon thirty (30) days prior written notice to Jenrin.

9.3 Termination for Breach. If either Party believes that the other is in material breach of this Agreement, then the Party holding such belief (the "**Non-Breaching Party**") may deliver notice of such breach to the other Party (the "**Notified Party**"). The Notified Party will have (a) thirty (30) days to cure such breach to the extent involving non-payment of amounts due under Article 3; and (b) ninety (90) days to either cure such breach for all other material breaches, or, if cure of such breach other than non-payment cannot reasonably be effected within such ninety (90) day period, to deliver to the Non-Breaching Party a plan reasonably calculated to cure such breach within a timeframe that is reasonably prompt in light of the circumstances then prevailing. Following delivery of such a plan, the Notified Party will carry out the plan and cure the breach. If the Notified Party fails to cure a material breach of this Agreement as provided above, then the Non-Breaching Party may terminate this Agreement upon written notice to the Notified Party. If there is a good faith dispute as to the existence or cure of a breach or default pursuant to this Section 9.3, all applicable cure periods will be tolled during the existence of such good faith dispute and no termination for a breach that is disputed in good faith will become effective until such dispute is resolved.

9.4 Termination for Bankruptcy.

(a) This Agreement may be terminated by a Party upon the filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors by the other Party; *provided, however*, that in the event of any involuntary bankruptcy or receivership proceeding such right to terminate will only become effective if the affected Party consents to the involuntary bankruptcy or receivership or such proceeding is not dismissed within sixty (60) days after the filing of such bankruptcy or receivership.

(b) All licenses and rights to licenses granted under or pursuant to this Agreement by Jenrin to Corbus are, and will otherwise be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code (the "**Bankruptcy Code**"), licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that Corbus, as a licensee of such rights under this Agreement, will retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The Parties further agree that that upon commencement of a bankruptcy proceeding by or against Jenrin under the Bankruptcy Code, Jenrin (in any capacity, including debtor-in-possession) and its successors and assigns (including any trustee) agrees not to interfere with the exercise by Corbus or its Affiliates of its rights and licenses to such intellectual property and such embodiments of intellectual property in accordance with this Agreement. The foregoing provisions are without prejudice to any rights Corbus may have arising under the Bankruptcy Code or other applicable law.

9.5 Consequences of Termination.

(a) In the event that the license granted to Corbus under this Agreement is terminated, any granted sublicenses will remain in full force and effect; *provided* that the Sublicensee is not then in breach of its sublicense agreement and the Sublicensee agrees to be bound to Jenrin as a licensor under the terms and conditions of the sublicense agreement. Jenrin will enter into appropriate agreements or amendments to the sublicense agreement with the Sublicensee to substitute itself for Corbus as the licensor under such agreement.

(b) Upon any termination of this Agreement other than termination by Corbus pursuant to Section 9.3 as a result of a breach by Jenrin, (i) except as provided in Section 9.5(c), the rights granted Corbus under Section 2.1 will lapse, and (ii) Corbus will grant to Jenrin a limited, non-exclusive license, with the right to grant sublicenses to Third Parties to whom Jenrin assigns or licenses the Licensed Intellectual Property, under any intellectual property and know-how Controlled by Corbus that (A) constitutes an improvement to the Licensed Intellectual Property, (B) was developed by or for Corbus under the rights granted Corbus under this Agreement, and (C) is necessary or useful to research, develop, manufacture and commercialize Licensed Products ("**Corbus IP**") solely for the purpose of allowing Jenrin to research, develop, manufacture and commercialize Licensed Products. For avoidance of doubt, this license is solely to permit Jenrin to have freedom to operate under such Corbus IP solely for the purpose of researching, developing, manufacturing and commercializing Licensed Products, and Corbus will have no obligation to provide to Jenrin any information, data, Compounds, Regulatory Approvals or other materials of any kind or otherwise take any steps to enable Jenrin's use of the Corbus IP. If Jenrin is interested in receiving any information, data, Compounds, Regulatory Approvals or other materials resulting from Corbus' exercise of its rights under this Agreement, Corbus will, in good faith, discuss with Jenrin the terms, including financial terms, of an agreement under which Corbus would be willing to provide such information, data, Compounds, Regulatory Approvals or other materials to Jenrin.

(c) Upon any termination of this Agreement after the First Commercial Sale of a Licensed Product, Corbus will have the right to sell off over the eighteen (18) months immediately following such termination, any quantities of Licensed Product then in its inventory or on order from any supplier; *provided that* Corbus pays to Jenrin the royalties calculated in accordance with Section 3.3 and all other amounts due for such sales under this Agreement.

9.6 Survival. The following provisions will survive any expiration or termination of this Agreement for the period of time specified in such provision, or if not specified, then they will survive indefinitely: Articles 1, 6, 7 (solely as to actions arising during the Term or in the course of a Party's exercise of licenses it retains after the Term), and 10, and Sections 3.5 (final report), 3.6, 3.7, 3.8, 4.2, 5.1, 5.2(a) (if termination under Section 9.4 by Corbus), 5.2(b), 5.3 (if termination under Section 9.4 by Corbus), 5.4, 5.5, 8.1, 9.4(b), 9.5, and 9.6. Termination of this Agreement will not relieve the Parties of any liability that accrued under this Agreement prior to the effective date of such termination nor preclude either Party from pursuing all rights and remedies it may have under this Agreement or at law or in equity with respect to any breach of this Agreement. Except as expressly set forth in Section 9.3, the remedies provided in this Article 9 are not exclusive of any other remedies a Party may have in law or equity.

Article 10
MISCELLANEOUS

10.1 Entire Agreement; Amendment. This Agreement, including the Exhibits attached to and incorporated into this Agreement, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties with respect to the subject matter of this Agreement and supersedes and terminates all prior agreements and understandings between the Parties with respect to such subject matter. No subsequent alteration, amendment, change or addition to this Agreement will be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

10.2 Dispute Resolution. In the event of any controversy or claim arising out of or relating to this Agreement, or the rights or obligations of the Parties hereunder, or the relationship between the Parties with respect to the Licensed Intellectual Property, Licensed Product or a Compound, the Parties shall first try to settle their differences amicably between themselves. Either Party may initiate such informal dispute resolution by sending written notice of the dispute to the other Party, and within thirty (30) days after such notice appropriate representatives of the Parties shall meet for attempted resolution by good faith negotiations. If such representatives are unable to resolve promptly such disputed matter within such thirty (30) days, either Party may refer the matter by written notice to the other to the Chief Executive Officer of Corbus, or his designee, and the Board of Managers of Jenrin, or its designee, for discussion and resolution. If such individuals or their designees are unable to resolve such dispute within thirty (30) days of such written notice, either Party may pursue any other remedy available under applicable law. The foregoing is not intended to deprive a Party of the right to seek injunctive relief, specific performance or other equitable remedies.

10.3 Governing Law. This Agreement will be construed in accordance with, and governed in all respects by, the laws of the State of New York (without giving effect to principles of conflicts of laws that would require the application of any other law); *provided* that matters of intellectual property law will be determined in accordance with the United States federal law. The Parties agree to submit to the jurisdiction of the state and federal courts located in the State of New York and waive any defense of inconvenient forum to the maintenance of any action or proceeding in such courts.

10.4 Force Majeure. Each Party will be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by a *force majeure* event and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse will be continued so long as the condition constituting *force majeure* continues and the nonperforming Party uses reasonable efforts to remove the condition. For purposes of this Agreement, *force majeure* will include conditions beyond the reasonable control of the Parties, including an act of God or terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, civil commotion, labor strike or lock-out, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe.

10.5 Notices. Any notice required or permitted to be given under this Agreement will be in writing, will specifically refer to this Agreement and will be deemed to have been sufficiently given for all purposes upon receipt if delivered (a) by first class certified or registered mail, postage prepaid, (b) international express delivery service or (c) personally. Unless otherwise specified in writing, the notice addresses of the Parties will be as described below.

For Corbus:	Corbus Pharmaceuticals, Inc. Attention: Yuval Cohen, CEO 500 River Ridge Drive, Second Floor Norwood, MA 02062
With a copy to:	Faber Daeufer & Itrato PC Attn: Jonathan M. Linden, Esq. 890 Winter Street, Suite 315 Waltham, MA 02451
For Jenrin:	Jenrin Discovery, LLC Attention: Robert J. Chorvat, Ph.D., Chief Scientific Officer 285 Wilmington-West Chester Pike Chadds Ford, PA 19317
With a copy to:	Duane Morris LLP Attention: Kathleen M. Shay 30 South 17th Street Philadelphia, PA 19103

10.6 No Strict Construction. This Agreement has been prepared jointly and will not be strictly construed against either Party.

10.7 Assignment. Neither Party may assign or transfer this Agreement or any rights or obligations under this Agreement without the prior written consent of the other Party, except that, subject to Section 10.8, a Party may make such an assignment or transfer without the other Party's consent (a) to the assigning Party's Affiliates or (b) to one successor to all or substantially all of the business or assets of such Party to which this Agreement relates (whether by merger, sale of stock, sale of assets or other transaction). Any permitted successor or assignee of rights and/or obligations under this Agreement will, in a writing to the other Party, expressly assume performance of such rights and/or obligations, but the assigning Party will remain primarily liable and responsible for the performance of all of its obligations under this Agreement and for causing its assignees to act in a manner consistent with this Agreement. Any permitted assignment will be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 10.7 will be null and void.

10.8 Performance by Affiliates. Each of Jenrin and Corbus acknowledge that their obligations under this Agreement may be performed by their respective Affiliates. Notwithstanding any delegation of obligations under this Agreement by a Party to an Affiliate, each Party will remain primarily liable and responsible for the performance of all of its obligations under this Agreement and for causing its Affiliates to act in a manner consistent with this Agreement. Wherever in this Agreement the Parties delegate responsibility to Affiliates or local operating entities, the Parties agree that such entities will not make decisions inconsistent with this Agreement, amend the terms of this Agreement or act contrary to its terms in any way.

10.9 Independent Contractors. It is understood and agreed that the relationship between the Parties is that of independent contractors and that nothing in this Agreement will be construed as authorization for either Party to act as the agent for the other Party.

10.10 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

10.11 Severability. Each provision in this Agreement is independent and severable from the others, and no provision will be rendered unenforceable because any other provision may be invalid or unenforceable in whole or in part. If the scope of any restrictive provision in this Agreement is too broad to permit enforcement to its full extent, then such restriction will be reformed to the maximum extent permitted by law. If any royalty provision for Licensed Intellectual Property in this Agreement is or becomes unenforceable, then it shall be reformed to the maximum extent permitted by law (a) so as not to adversely affect Corbus' license rights, and (b) to achieve the same or substantially the same aggregate royalty payment to Jenrin as intended by the original royalty provision.

10.12 Headings. The headings for each Article and Section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular Article or Section.

10.13 No Waiver. Any delay in enforcing a Party's rights under this Agreement, or any waiver as to a particular default or other matter, will not constitute a waiver of such Party's rights to the future enforcement of its rights under this Agreement, except with respect to an express written and signed waiver relating to a particular matter for a particular period of time.

10.14 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which will be deemed an original, but all of which together will constitute one (1) and the same instrument. For purposes of executing this Agreement, a facsimile copy of this Agreement, or .pdf copy, including the signature pages, will be deemed an original.

[Signature page follows]

IN WITNESS **WHEREOF** the Parties have executed this Agreement in duplicate originals by their duly authorized officers as of the Effective Date.

Corbus Pharmaceuticals, Inc.	**Jenrin Discovery, LLC** ·
Bv: /s/ Yuval Cohen,Ph.D.	Bv: /s/ Bob Charvat. Ph.D.
Name: Yuval Cohen,Ph.D.	Name: Bob Charvat. Ph.D.
Title: Chief Executive Officer	Title: Chief Scientific Officer
Date: September 20th.2018	Date: September 20th.2018

<u>EXHIBIT A</u> JENRIN PATENTS
Current Active – JD5037 Type

[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*] [*]
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EXHIBIT B

TRANSITION PLAN

1.0 Transition Plan Summary

1.1 Transition Plan Objective

The purpose of the Transition Plan is to provide a structure and measurable objectives for the transfer of all reports, methods, know-how, regulatory materials and compounds from Jenrin to Corbus following the closing of the license agreement. This Transition Plan shall guide the expeditious and efficient development of the Compounds being licensed from Jenrin to Corbus.

1.2 Transition Plan Overview

The Transition Plan outline key Transition requirements, describes transition methodology, targets key Transition objectives, describes the transition processes and identifies the responsible parties.

2.0 Transition Management

2.1 Transition Managers

The Corbus team has appointed an individual Transition manager who will be responsible for overseeing the Transition Plan responsibilities, activities, and tasks.

2.1.1 Transition Managers
- a) [*]
- b) [*]
- c) [*]
- d) [*]
- e) [*]
- f) [*]

2.2 Transition Planning and Kickoff

[*]

3.0 Transition Management Plans

The purpose of the Transition Management Plans is to [*]

3.1 CMC Transition

3.1.1 Asset (Compound) Transfer- [*]

3.1.2 Pharmaceutical Development Strategy

a) [*]

3.2 Non-Clinical Transition

3.2.1 Research and Development Plan

a) [*]

3.3 Clinical Transition

3.3.1 Phase I Protocol

a) [*]

3.4 Regulatory Transition

3.4.1 Regulatory Strategy

a) [*]

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, 2018 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 8, 2018

/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, 2018 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 8, 2018

/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 of Corbus Pharmaceuticals Holdings, Inc. for the quarter ended September 30, 2018, each of the undersigned hereby certifies in his capacity as an officer of Corbus Pharmaceuticals Holdings, Inc. 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; 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 8, 2018

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 of Corbus Pharmaceuticals Holdings, Inc. for the quarter ended September 30, 2018, each of the undersigned hereby certifies in his capacity as an officer of Corbus Pharmaceuticals Holdings, Inc. 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; 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*
Sean Moran
Chief Financial Officer
(Principal Financial Officer and Chief Accounting Officer)

Dated: November 8, 2018