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 ended March 31, 2020

or

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

For the transition period from _____ to _____ .

Commission File Number:

001-37348

Corbus Pharmaceuticals Holdings, Inc.
(Exact name of registrant as specified in its charter)

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

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

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

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

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, par value $0.0001 per share	CRBP	Nasdaq Global Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes [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	[ ]	Smaller reporting company	[X]
		Emerging growth company	[ ]

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

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

As of May 5, 2020, 72,490,449 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 March 31, 2020

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

Corbus Pharmaceuticals Holdings, Inc.
Condensed Consolidated Balance Sheets

	March 31, 2020	December 31, 2019
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 46,617,921	$ 31,748,686
Prepaid expenses and other current assets	3,596,908	3,724,932
Contract asset	4,443,124	2,681,065
Total current assets	54,657,953	38,154,683
Property and equipment, net	4,851,317	5,083,865
Operating lease right of use assets	5,680,467	5,818,983
Other assets	14,085	84,968
Total assets	$ 65,203,822	$ 49,142,499
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable	$ 432,905	$ 752,659
Accounts payable	9,960,544	11,091,363
Accrued expenses	23,516,354	22,447,939
Operating lease liabilities, current	742,893	595,745
Total current liabilities	34,652,696	34,887,706
Operating lease liabilities, noncurrent	7,859,636	8,097,228
Total liabilities	42,512,332	42,984,934
Commitments and Contingencies		
Stockholders' equity		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding at March 31, 2020 and December 31, 2019	—	—
Common stock, $0.0001 par value; 150,000,000 shares authorized, 72,490,449 and 64,672,893 shares issued and outstanding at March 31, 2020 and December 31, 2019	7,249	6,467
Additional paid-in capital	245,164,999	198,975,056
Accumulated deficit	(222,480,758)	(192,823,958)
Total stockholders' equity	22,691,490	6,157,565
Total liabilities and stockholders' equity	$ 65,203,822	$ 49,142,499

See notes to the unaudited condensed consolidated financial statements.

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

	For the Three Months Ended March 31,	
	2020	**2019**
Revenue from awards	$ 1,762,059	$ 1,885,682
Operating expenses:		
Research and development	23,947,866	21,783,704
General and administrative	7,699,479	6,624,747
Total operating expenses	31,647,345	28,408,451
Operating loss	(29,885,286)	(26,522,769)
Other income (expense):		
Interest income, net	101,993	334,595
Foreign currency exchange gain (loss), net	126,493	(46,635)
Other income, net	228,486	287,960
Net loss	$ (29,656,800)	$ (26,234,809)
Net loss per share, basic and diluted	$ (0.43)	$ (0.43)
Weighted average number of common shares outstanding, basic and diluted	69,272,402	61,675,904

See notes to the unaudited condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2020	**2019**
Cash flows from operating activities:		
Net loss	$ (29,656,800)	$ (26,234,809)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Stock-based compensation expense	3,137,519	3,088,939
Depreciation and amortization	319,488	152,622
(Gain) loss on foreign exchange	(157,073)	13,373
Operating lease right of use asset amortization	138,516	89,179
Changes in operating assets and liabilities:		
Decrease in prepaid expenses and other current assets	128,024	10,808
Increase in contract asset	(1,762,059)	(423,179)
Decrease in other assets	70,883	8,235
(Decrease) increase in accounts payable	(839,372)	2,450,756
Increase in accrued expenses	1,110,156	5,646,790
Increase in deferred revenue	—	25,537,497
Decrease in operating lease liabilities	(90,444)	(21,913)
Net cash (used in) provided by operating activities	(27,601,162)	10,318,298
Cash flows from investing activities:		
Purchases of property and equipment	(463,605)	(73,615)
Net cash used in investing activities	(463,605)	(73,615)
Cash flows from financing activities:		
Principal payments on notes payable	(319,754)	(146,921)
Proceeds from issuance of common stock	46,015,996	40,494,253
Issuance costs paid for common stock financings	(2,762,240)	(2,420,310)
Principal payments under capital lease obligation	—	(375)
Net cash provided by financing activities	42,934,002	37,926,647
Net increase in cash and cash equivalents	14,869,235	48,171,330
Cash, cash equivalents, at beginning of the period	31,748,686	41,748,468
Cash and cash equivalents, at end of the period	$ 46,617,921	$ 89,919,798
Supplemental disclosure of cash flow information and non-cash transactions:		
Cash paid during the period for interest	$ 8,484	$ 1,902
Stock issuance costs included in accounts payable or accrued expenses	$ 200,550	$ 151,242
Right of use assets obtained in exchange for lease obligations	$ —	$ 5,928,614
Purchases of property and equipment included in accounts payable or accrued expenses	$ —	$ 69,459

See notes to the unaudited condensed consolidated financial statements.

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

For the Three Months Ended March 31, 2020

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2019	64,672,893	$ 6,467	$ 198,975,056	$ (192,823,958)	$ 6,157,565
Issuance of common stock, net of issuance costs of $2,962,790	7,666,667	767	43,036,445	—	43,037,212
Stock compensation expense	—	—	3,137,519	—	3,137,519
Issuance of common stock upon exercise of stock options	150,889	15	15,979	—	15,994
Net loss	—	—	—	(29,656,800)	(29,656,800)
Balance at March 31, 2020 (Unaudited)	72,490,449	$ 7,249	$ 245,164,999	$ (222,480,758)	$ 22,691,490

For the Three Months Ended March 31, 2019

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2018	57,247,496	$ 5,725	$ 148,888,635	$ (121,370,240)	$ 27,524,120
Issuance of common stock, net of issuance costs of $2,571,552	6,198,500	620	37,718,078	—	37,718,698
Stock compensation expense	—	—	3,088,939	—	3,088,939
Issuance of common stock upon exercise of warrants	947,454	95	(95)	—	—
Issuance of common stock upon exercise of stock options	61,771	6	203,997	—	204,003
Net loss	—	—	—	(26,234,809)	(26,234,809)
Balance at March 31, 2019 (Unaudited)	64,455,221	$ 6,446	$ 189,899,554	$ (147,605,049)	$ 42,300,951

See notes to the unaudited condensed consolidated financial statements.

1. NATURE OF OPERATIONS

Business

Corbus Pharmaceuticals Holdings, Inc. (the "Company") is a clinical stage pharmaceutical company, focused on the development and commercialization of novel therapeutics to treat rare, chronic, and serious inflammatory and fibrotic diseases. Since its inception, the Company has devoted substantially all of its efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. The Company's business is subject to significant risks and uncertainties and the Company will be dependent on raising substantial additional capital before it becomes profitable and it may never achieve profitability.

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions and accounts have been eliminated in consolidation. In the opinion of management of the Company, the accompanying unaudited condensed consolidated interim financial statements reflect all adjustments (which include only normal recurring adjustments) necessary to present fairly, in all material respects, the consolidated financial position of the Company as of March 31, 2020 and the results of its operations and cash flows for the three months ended March 31, 2020 and 2019. The December 31, 2019 condensed consolidated balance sheet was derived from audited financial statements. The Company prepared the condensed consolidated financial statements following the requirements of the SEC for interim reporting. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted. It is suggested that these condensed consolidated financial statements be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 16, 2020. The results of operations for such interim periods are not necessarily indicative of the operating results for the full fiscal year.

2. LIQUIDITY AND GOING CONCERN

The accompanying 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 March 31, 2020, had an accumulated deficit of $222,480,758. The Company anticipates operating losses to continue for the foreseeable future due to, among other things, costs related to research funding, development of its product candidates and its preclinical and clinical programs, strategic alliances and the development of its administrative organization.

Should the Company be unable to raise sufficient additional capital, the Company may be required to undertake cost-cutting measures including delaying or discontinuing certain clinical activities. The Company will need to raise significant additional capital to continue to fund the clinical trials for lenabasum and 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 cause management to conclude there is a substantial doubt about the Company's ability to continue as a going concern. There have been no adjustments made to these consolidated financial statements as a result of these uncertainties.

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

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:

Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany transactions and accounts have been eliminated in consolidation.

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

Cash, and cash equivalents consists of the following:

	March 31, 2020	December 31, 2019
Cash	$ 1,581,194	$ 884,115
Money market fund	45,036,727	30,864,571
Total cash and cash equivalents	$ 46,617,921	$ 31,748,686

As of March 31, 2020, all of the Company's cash was held in the United States, except for approximately $1,029,000 of cash which was held in our subsidiaries in the United Kingdom and Australia. As of December 31, 2019, all of the Company's cash was held in the United States, except for approximately $466,000 of cash which was held in our subsidiaries in the United Kingdom and Australia.

Financial Instruments

The carrying 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 the 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 months ended March 31, 2020 and 2019, there were no material adjustments to the Company's prior period estimates of accrued expenses for clinical trials.

Leases

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

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

Concentrations of Credit Risk

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

Segment Information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and manages its business as principally one operating segment, which is developing and commercializing therapeutics to treat rare life-threatening, inflammatory and fibrotic diseases. As of March 31, 2020, all of the Company's assets were located in the United States, except for approximately $1,029,000 of cash, $2,057,000 of prepaid expenses, $13,000 of other assets, and $44,000 of property and equipment, net which were held outside of the United States, principally in our subsidiary in the United Kingdom. As of December 31, 2019, all of the Company's assets were located in the United States, except for approximately $466,000 of cash, $1,606,000 of prepaid expenses, $23,000 of other assets, and $52,000 of property and equipment, net which were held outside of the United States, principally in our subsidiary in the United Kingdom.

Income Taxes

For federal and state income taxes, deferred tax assets and liabilities are recognized based upon temporary differences between the financial statement and the tax basis of assets and liabilities. Deferred income taxes are based upon prescribed rates and enacted laws applicable to periods in which differences are expected to reverse. A valuation allowance is recorded to reduce a net deferred tax asset 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 March 31, 2020 or December 31, 2019.

Impairment of Long-lived Assets

The Company continually monitors events and changes in circumstances that could indicate that carrying amounts of long-lived assets may not be recoverable. An impairment loss is recognized when expected undiscounted cash flows of an asset are less than an asset's carrying value. Accordingly, when indicators of impairment are present, the Company evaluates the carrying value of such assets in relation to the operating performance and future undiscounted cash flows of the underlying assets. An impairment loss equal to the excess of the fair value of the asset over its carrying amount is recorded when it is determined that the carrying value of the asset may not be recoverable. No impairment charges were recorded during the three months ended March 31, 2020 and 2019.

Stock-based Payments

The Company recognizes compensation costs resulting from the issuance of stock-based awards to employees, non-employees and directors as an expense in the statement of operations over the service period based on a measurement of fair value for each stock-based award. The fair value of each option grant is estimated as of the date of grant using the Black-Scholes option-pricing model, net of estimated forfeitures. The fair value is amortized as compensation cost on a straight-line basis over the requisite service period of the awards, which is generally the vesting period. Prior to the Company's adoption of ASU 2018-07, *Compensation-Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"), stock options granted to non-employee consultants were revalued at the end of each reporting period until vested using the Black-Scholes option-pricing model and the changes in their fair value were recorded as adjustments to expense over the related vesting period.

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 excluded from diluted loss per share calculations. The following table sets forth the computation of basic and diluted earnings per share for the three months ended March 31, 2020 and 2019.

	Three Months Ended March 31	
	2020	**2019**
Basic and diluted net loss per share of common stock:		
Net loss	$ (29,656,800)	$ (26,234,809)
Weighted average shares of common stock outstanding	69,272,402	61,675,904
Net loss per share of common stock-basic and diluted	$ (0.43)	$ (0.43)

The impact of the following potentially dilutive securities outstanding during the three months ended March 31, 2020 and 2019 have been excluded from the computation of dilutive weighted average shares outstanding as the inclusion would be anti-dilutive.

	March 31,	
	2020	**2019**
Warrants	1,000,000	1,200,000
Stock options	16,313,506	11,891,741
Total	17,313,506	13,091,741

Recent Accounting Pronouncements

Accounting for Income Taxes

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* which is intended to simplify various aspects related to accounting for income taxes. The standard is effective for fiscal years, and interim periods within those years, beginning after December 15, 2020, with early adoption permitted. The standard will be adopted upon the effective date for us beginning January 1, 2021. The Company is currently evaluating the timing of the adoption of ASU 2019-12 and the expected impact it could have on the Company's financial statements and related disclosures.

Collaborative Arrangements

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606* ("ASU 2018-18"). ASU 2018-18 clarifies the interaction between the accounting guidance for collaborative arrangements and revenue from contracts with customers. ASU 2018-18 is effective for public business entities for fiscal years beginning after December 15, 2019, including interim periods within that fiscal year. The Company's adoption of ASU 2018-18 as of January 1, 2020 had no impact on the Company's financial statements and related disclosures.

4. LICENSE AGREEMENT

The Company entered into a License Agreement (the "Jenrin Agreement") with Jenrin Discovery, LLC, a privately-held Delaware limited liability company ("Jenrin"), effective September 20, 2018. Pursuant to the Jenrin Agreement, Jenrin granted the Company exclusive worldwide rights to develop and commercialize the Licensed Products (as defined in the Jenrin Agreement) which includes the Jenrin library of over 600 compounds and multiple issued and pending patent filings. The compounds are designed to treat inflammatory and fibrotic diseases by targeting the endocannabinoid system. The lead product candidate is CRB-4001, a peripherally-restricted CB-1 inverse agonist targeting fibrotic liver, lung, heart and kidney diseases.

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:

	March 31, 2020	December 31, 2019
Computer hardware and software	$ 774,554	$ 711,442
Office furniture and equipment	1,638,396	1,627,896
Leasehold improvements	4,163,816	4,150,488
Property and equipment, gross	6,576,766	6,489,826
Less: accumulated depreciation	(1,725,449)	(1,405,961)
Property and equipment, net	$ 4,851,317	$ 5,083,865

Depreciation expense was $319,488 and $152,622 for the three months ended March 31, 2020 and 2019, respectively.

6. COMMITMENTS AND CONTINGENCIES

Operating Lease Commitment

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

The Company adopted ASU 2016-02, *Leases (Topic 842),* as amended ("ASU 2016-02") using the effective date method as of January 1, 2019 and recorded a lease liability of approximately $3.8 million, and a right-of-use asset of approximately $2.4 million, with no operations adjustment to the accumulated deficit related to the Leased Premises. Operating leases are included in operating lease right-of-use assets, operating lease liabilities, current and operating lease liabilities, noncurrent in the Company's consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at the date of adoption based on the present value of lease payments over the lease term. As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments, which was 9%. This is the rate the Company would have to pay if borrowing on a collateralized basis over a similar term to each lease. The ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

On February 26, 2019, the Company amended its lease ("February 2019 Lease Agreement") pursuant to which an additional 30,023 square feet of office space ("New Premises") will be leased by the Company in the same building for an aggregate total of 62,756 square feet of leased office space ("Total Premises"). Per ASC 842, the February 2019 Lease Agreement constitutes a modification as it extends the original lease term and increases the scope of the lease (additional space provided under the amendment), which requires evaluation of the remeasurement of the lease liability and corresponding ROU asset. Accordingly, the Company reassessed the classification of the Leased Premises and remeasured the lease liability on the basis of the extended lease term using the 20 additional monthly rent payments and the incremental borrowing rate at the effective date of the modification of 9%. The remeasurement for the modification resulted in an increase to the lease liability and the ROU asset of approximately $855,000. The Company determined that the New Premises will be treated as a new standalone operating lease under ASC 842 and recorded a lease liability and a right-of-use asset of approximately $2.7 million for this lease.

On October 25, 2019, the Company amended its lease ("October 2019 Lease Amendment") pursuant to which the term of the lease was extended through November 30, 2026 and the existing office space under lease was expanded by 500 square feet for an aggregate total of 63,256 square feet of leased office space ("Amended Total Premises"). Per ASC 842, the October 2019 Lease Amendment constitutes a modification as it extends the original lease term and increases the scope of the lease (additional space provided under the amendment), which requires evaluation of the remeasurement of the lease liability and corresponding ROU asset. The additional space did not result in a separate contract as the rent increase was determined not to be commensurate with the standalone price for the additional right of use. Accordingly, the Company reassessed the classification of the Amended Total Premises, which resulted in operating classification, and remeasured the lease liability on the basis of the extended lease term using the additional monthly rent payments and the incremental borrowing rate at the effective date of the modification of 8%. The remeasurement for the modification resulted in an increase to the lease liability and the ROU asset of approximately $381,000 that was recorded in the fourth quarter of 2019.

The following table contains a summary of the lease costs recognized under ASC 842 and other information pertaining to the Company's operating leases for the year ended December 31, 2019:

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

Total lease expense for the three months ended March 31, 2020 and 2019 was $310,118 and $200,162, respectively.

Pursuant to the terms of our non-cancelable lease agreements in effect at March 31, 2020, the following table summarizes our maturities of operating lease liabilities as of March 31, 2020:

2020	$	1,003,714
2021		1,605,121
2022		1,652,563
2023		1,700,005
2024		1,747,447
Thereafter		3,483,034
Total lease payments	$	11,191,884
Less: imputed interest		(2,589,355)
Total	$	8,602,529

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 was for a three-year term that concluded in January 2019 and included a bargain purchase option at the end of the term.

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

7. NOTES PAYABLE

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

In November 2019, the Company entered into a loan agreement with a financing company for $963,514 to finance one of the Company's insurance policies. The terms of the loan stipulate equal monthly payments of principal and interest payments of $109,413 over a nine-month period. Interest accrues on this loan at an annual rate of 5.25%. Prepaid expenses as of March 31, 2020 and December 31, 2019, included $639,905 and $923,292, respectively, related to this insurance policy.

8. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	March 31, 2020	December 31, 2019
Accrued clinical operations and trials costs	$ 16,145,019	$ 14,242,669
Accrued product development costs	3,232,262	3,573,231
Accrued compensation	2,849,954	3,673,111
Accrued other	1,289,119	958,928
Total	$ 23,516,354	$ 22,447,939

9. DEVELOPMENT AWARDS AND DEFERRED REVENUE

Collaboration with Kaken

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

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

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

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

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

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

The Company assessed this arrangement in accordance with ASC 606 and concluded that the contract counterparty, Kaken, is a customer. The Company identified the following material promises under the arrangement: (1) the exclusive license to commercialize lenabasum; (2) the product's initial know-how transfer; (3) election to use the product trademarks; (4) the sharing of data gathered through the execution of the Global Development Plan for the Initial Indications; and (5) Japanese Pharmaceuticals and Medical Devices Agency ("PMDA")-required supplemental studies. The Company identified two performance obligations; (1) the combined performance obligation of the License, initial know-how transfer and license to the Company's product trademarks; and (2) the sharing of data gathered through the execution of the Global Development Plan (as defined in the Agreement) for the Initial Indications. The Company determined that the license and initial know-how transfer were not distinct from another in the context of the contract, as initial know-how transfer is highly interrelated to the license and Kaken would incur significant costs to re-create the know-how of the Company. The Company determined that the election to use the product trademarks license contributes to the exclusivity of the license and, therefore, is combined with the license. The PMDA-required supplemental study is a contingent promise although not a performance obligation as the promise does not provide Kaken with a material right.

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

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

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

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

2018 CFF Award

On January 26, 2018, the Company entered into the Cystic Fibrosis Program Related Investment Agreement with the CFF (“Investment Agreement”), a non-profit drug discovery and development corporation, pursuant to which the Company received an award for up to $25 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 $17.5 million in the aggregate through March 31, 2020 upon the Company’s achievement of milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The Company expects that the 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, and the Company expects to receive the remainder before the end of the fourth quarter of 2020.

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

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

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

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

Under the Investment Agreement, the Company recorded $1,762,059 and $1,885,682 of revenue during the three months ended March 31, 2020 and 2019. The Company concluded that the contract counterparty, CFF, is a customer. The Company identified the following material promise under the arrangement: research and development activities and related services under the Phase 2b Clinical Trial. Based on these assessments, the Company identified one performance obligation at the outset of the Investment Agreement, which consists of: Phase 2b Clinical Trial research and development activities and related services.

To determine the transaction price, the Company included the total aggregate payments under the Investment Agreement which amount to $25 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 year ended December 31, 2018 and 5,000,000 during the year ended December 31, 2019, which was recorded as an increase to deferred revenue. A roll forward of deferred revenue related to the Investment Agreement for the three months ended March 31, 2020 is presented below.

	March 31, 2020
Beginning balance, December 31, 2019	$ —
Billing to CFF upon achievement of milestones	—
Recognition of revenue	(1,762,059)
Reclass to contract asset	1,762,059
Ending balance	$ —

The CFF Warrant is accounted for as a payment to the customer under ASC 606. See Note 12 for further information related to the CFF Warrant. The Company notes that the Investment Agreement contains an initial payment that was received upon contract execution and subsequent milestone payments, which are a form of variable consideration that require evaluation for constraint considerations. The Company concluded that the related performance milestones are generally within the Company's control and as result are considered probable. Revenue associated with the performance obligation is being recognized as revenue as the research and development services are provided using an input method, according to the costs incurred as related to the research and development activities on each program and the costs expected to be incurred in the future to satisfy the performance obligation. The transfer of control occurs over this time period and, in management's judgment, is the best measure of progress towards satisfying the performance obligation. The research and development services related to this performance obligation are expected to be performed over approximately 2.75 years and is expected to be completed in the third 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 72,490,449 shares, and 64,672,893 shares were issued and outstanding as of March 31, 2020, and 2019, respectively.

On January 30, 2019, the Company consummated an underwritten public offering of shares of its common stock pursuant to which the Company sold an aggregate of 6,198,500 shares of its common stock, including 808,500 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a purchase price of $6.50 per share with gross proceeds to the Company totaling $40,290,250, less issuance costs incurred of approximately $2.6 million.

On February 11, 2020, the Company consummated an underwritten public offering of shares of its common stock pursuant to which the Company sold an aggregate of 7,666,667 shares of its common stock, including 1,000,000 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a purchase price of $6.00 per share with gross proceeds to the Company totaling $46.0 million, less estimated issuance costs incurred of approximately $3.0 million.

During the three months ended March 31, 2020 and 2019, the Company issued 150,889 and 61,771 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of $15,944 and $204,003 from these exercises, respectively. During the three months ended March 31, 2019, warrants to purchase 1,083,500 shares of common stock were exercised on a cashless basis resulting in the issuance of 947,454 shares of common stock. No warrants were exercised during the three months ended March 31, 2020.

11. STOCK OPTIONS

In April 2014, the Company adopted the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Incentive Plan (the "2014 Plan"). Pursuant to the 2014 Plan, the Company's Board of Directors may grant incentive and nonqualified stock options and restricted stock to employees, officers, directors, consultants and advisors. Options issued under the 2014 Plan generally vest over 4 years from the date of grant in multiple tranches and are exercisable for up to 10 years from the date of issuance.

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

In accordance with the terms of the 2014 Plan, effective as of January 1, 2019, the number of shares of common stock available for issuance under the 2014 Plan increased by 3,000,000 shares, which was less than seven percent (7%) of the outstanding shares of common stock on December 31, 2018. As of January 1, 2019, the 2014 Plan had a total reserve of 18,543,739 shares and there were 8,072,241 shares available for future grants. As of March 31, 2019, there were 5,712,719 shares available for future grants.

In accordance with the terms of the 2014 Plan, effective as of January 1, 2020, the number of shares of common stock available for issuance under the 2014 Plan increased by 4,527,103 shares, which was seven percent (7%) of the outstanding shares of common stock on December 31, 2019. As of January 1, 2020, the 2014 Plan had a total reserve of 23,070,842 shares and as of March 31, 2020 there were 5,621,910 shares available for future grants.

Stock-based Compensation

For stock options issued and outstanding for the three months ended March 31, 2020 and 2019, respectively, the Company recorded non-cash, stock-based compensation expense of $3,137,519 and $3,088,939, 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:

	Three Months Ended March 31,	
	2020	2019
Risk free interest rate	0.65%	2.64%
Expected dividend yield	0%	0%
Expected term in years	6.25	6.25
Expected volatility	82.9%	87.8%
Estimated forfeiture rate	6.37%	5%

A summary of option activity for the three months ended March 31, 2020 is presented below

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2019	13,245,366	$ 5.19		
Granted	3,405,600	4.53		
Exercised	(150,889)	0.11		
Forfeited	(186,571)	6.42		
Outstanding at March 31, 2020	16,313,506	$ 5.09	7.46	$ 20,977,274
Vested at March 31, 2020	8,699,682	$ 4.32	5.96	$ 18,476,342
Vested and expected to vest at March 31, 2020	15,623,186	$ 5.07	7.38	$ 20,665,358

The weighted average grant-date fair value of options granted during the three months ended March 31, 2020 and 2019 was $3.20 and $5.40 per share, respectively. The aggregate intrinsic value of options exercised during the three months ended March 31, 2020 and 2019 was approximately $936,115 and $216,306, respectively. The total fair value of options that were vested as of March 31, 2020 and 2019 was $28,661,461 and $17,136,030, respectively. As of March 31, 2020, there was approximately $28,013,124 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 weighted average period of 2.91 years as of March 31, 2020.

12. WARRANTS

During the three months ended March 31, 2019, warrants to purchase 1,083,500 shares of common stock were exercised on a cashless basis resulting in the issuance of 947,454 shares of common stock. No warrants were exercised during the three months ended March 31, 2020.

At March 31, 2020, there were warrants outstanding to purchase 1,000,000 shares of common stock with a weighted average exercise price of $13.20 and a weighted average remaining life of 4.83 years, related only to the warrant issued to CFF pursuant to the terms of the Investment Agreement (Note 9). The Company issued a warrant to CFF on January 26, 2018 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%

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

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

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

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

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

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

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

Overview

We are a Phase 3, clinical-stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat chronic and serious inflammatory and fibrotic diseases with clear unmet medical needs by targeting the human endocannabinoid system, or ECS. We are developing a pipeline of cannabinoid drug candidates which are rationally designed, synthetic, small molecule drugs which target the ECS to treat inflammatory and fibrotic diseases. Our focus on the ECS is backed by an ever-expanding body of knowledge on the biology of the ECS and its role as being a master regulator of inflammation and fibrosis. Our lead investigational drug candidate, lenabasum, is a novel, synthetic, oral, cannabinoid type 2 ("CB2"), agonist designed to resolve chronic inflammation, limit fibrosis and support tissue repair. We are currently developing lenabasum to treat four life threatening diseases: systemic sclerosis, ("SSc") dermatomyositis ("DM"), cystic fibrosis ("CF"), and systemic lupus erythematosus ("SLE"). In addition, we are developing a pipeline of experimental drug candidates from our library of novel compounds targeting the ECS. Our pipeline also includes CRB-4001, a second generation, peripherally restricted cannabinoid receptor type 1, or CB1, inverse agonist designed to treat organ specific fibrotic liver diseases, such as nonalcoholic steatohepatitis, or NASH.

Lenabasum selectively binds to CB2 in the periphery, which is preferentially expressed on activated immune cells, fibroblasts and other cell types, including muscle and bone cells. Lenabasum stimulates the production of Specialized Pro-Resolving Lipid Mediators, or SPMs, that act to resolve inflammation and halt fibrosis without immunosuppression 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 is currently being evaluated in a Phase 3 SSc study that has completed the enrollment of 365 patients with top-line data expected to be reported in the summer of 2020, a Phase 2b CF study that has completed the enrollment of 426 patients with top-line data expected in the summer of 2020, and a Phase 3 study in DM that is expected to enroll 150 patients. In addition, we are conducting a Phase 2 SLE study funded by a grant through the National Institutes of Health, or NIH, that is expected to enroll 100 patients. Open-label extension studies are ongoing in SSc and DM for patients who completed the Phase 2 studies and Phase 3 studies in these indications. Lenabasum has generated positive clinical data in three consecutive Phase 2 studies in diffuse cutaneous SSc, CF and skin-predominant DM. Lenabasum has demonstrated acceptable safety and tolerability profiles in clinical studies to date.

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

Since our inception, we have devoted substantially all of our efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Our research and development activities have included conducting preclinical studies, developing manufacturing methods and the manufacturing of our drug lenabasum for clinical trials and conducting clinical studies in patients. Two of the four clinical programs for lenabasum are being supported by non -dilutive awards and grants. The NIH has funded the majority of the clinical development costs for the DM Phase 2 clinical trial and is funding the SLE Phase 2 clinical trials. In cystic fibrosis, the Phase 2b clinical trial is being supported by a 2018 award from the Cystic Fibrosis Foundation, or CFF, of up to $25 million, and the Phase 2 clinical trial was partially funded by a $5 million award from the Cystic Fibrosis Foundation Therapeutics, Inc. ("CFFT"), a non-profit drug discovery and development affiliate of the CFF.

On February 11, 2020, we consummated an underwritten public offering of shares of our common stock pursuant to which we sold an aggregate of 7,666,667 shares of our common stock at a purchase price of $6.00 per share with gross proceeds to us totaling approximately $46.0 million, less estimated issuance costs incurred of approximately $3.0 million.

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

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

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

Financial Operations Overview

We are a clinical stage pharmaceutical company and have not generated any revenue from the sale of products. We have never been profitable and at March 31, 2020, we had an accumulated deficit of approximately $222,481,000. Our net losses for the three months ended March 31, 2020 and 2019 were approximately $29,657,000 and $26,235,000, 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 2020 and in the future in connection with our ongoing activities, as we:

- conduct clinical trials for our product candidates in scleroderma, cystic fibrosis, DM, 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, accrued research and development expense, and operating lease right of use assets and liabilities. We base our estimates and judgments on historical experience, current economic and industry conditions and on various other factors that are believed to be reasonable under the circumstances. This forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe 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.

Stock-Based Compensation

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

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

Accrued Research and Development Expenses

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

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

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

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

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

Leases

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

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

Revenue Recognition

Revenue from awards for the three months ended March 31, 2020 and 2019 was $1,762,059 and $1,885,682, 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 March 31, 2020 and 2019

Revenue

To date, we have not generated any revenue 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 recognized $1,762,059 and $1,885,682 of revenue from awards in the three months ended March 31, 2020 and 2019, respectively. Amounts recognized in revenue for the three months ended March 31, 2020 and 2019 were in connection with our entry on January 26, 2018 into the Cystic Fibrosis Program Related Investment Agreement ("Investment Agreement) with the Cystic Fibrosis Foundation ("CFF"), a non-profit drug discovery and development corporation, pursuant to which we received a development award for up to $25 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 $6.25 million in the first quarter of 2018, $6.25 million in the second quarter of 2018, and $5 million in the second quarter of 2019 upon our achievement of a milestone related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement. The $7.5 million remainder of the 2018 CFF Award is payable to us incrementally upon the achievement of the remaining milestones related to the progress of the Phase 2b Clinical Trial, as set forth in the Investment Agreement and we expect to receive the remainder before the end of the fourth quarter of 2020.

Research and Development Expenses

Research and development expenses are incurred for the development of lenabasum and consist primarily of payroll and payments to contract research and development companies. To date, these costs are related to generating pre-clinical data and the cost of manufacturing lenabasum for clinical trials and conducting clinical trials. These costs are expected to 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 March 31, 2020 totaled approximately $23,948,000, an increase of approximately $2,164,000 over the $21,784,000 recorded for the three months ended March 31, 2019. The increase was primarily attributable to increases of $2,325,000 in compensation costs and $270,000 in clinical trial costs, partially offset by a decrease of $431,000 in stock-based compensation expense.

During 2019, the Company formed a subsidiary in each of the United Kingdom and Australia and approximately 46% and 49% of research and development expenses recorded for the three months ended March 31, 2020 and 2019, respectively, was recorded in these entities.

General and Administrative Expenses

General and administrative expenses consist primarily of payroll, rent and professional services such as accounting and legal services. We anticipate that our general and administrative expenses will increase significantly during 2020 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 March 31, 2020 totaled approximately $7,699,000, an increase of approximately $1,074,000 over the $6,625,000 recorded for the three months ended March 31, 2019. The increases include approximately $1,301,000 in compensation costs, $498,000 in legal and audit services, $479,000 in stock-based compensation expense, $456,000 in brand design and market research, 291,000 in consulting costs, $254,000 in facility and insurance costs, $187,000 in temporary help and recruiting costs, $165,000 in software as a service costs, and an aggregate net increase of approximately $143,000 for other general and administrative expenses. These increases were partially offset by the $2,700,000 we recorded in the first quarter of 2019 related to the amount we owed to CFF as a royalty payment equal to 10% of any amounts we received as payment under the collaboration agreement with Kaken.

Other Income, Net

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

Other income, net for the three months ended March 31, 2020 totaled approximately $228,000, a decrease of approximately $60,000 over the $288,000 recorded for the three months ended March 31, 2019. The decrease was primarily attributable to an decrease in net interest income of approximately $233,000 due to lower cash balances in the first quarter of 2020 as compared to the first quarter of 2019, offset partially by increases in foreign currency exchange transaction gains of approximately $173,000.

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 March 31, 2020, our accumulated deficit since inception was approximately $222,481,000.

At March 31, 2020, we had total current assets of approximately $54,658,000 and total current liabilities of approximately $34,653,000, resulting in working capital of approximately $20,005,000.

Net cash used in operating activities for the three months ended March 31, 2020 was approximately $27,601,000, which included a net loss of approximately $29,657,000, adjusted for non-cash expenses of approximately $3,438,000 largely related to stock-based compensation expense, and decreases in net working capital items of $1,382,000.

Cash used in investing activities for the three months ended March 31, 2020 totaled approximately $464,000 which was principally related to purchases of property and equipment for the build out our office space that we occupied in the latter part of 2019.

Cash provided by financing activities for the three months ended March 31, 2020 totaled approximately $42,934,000. On February 11, 2020, we consummated an underwritten public offering of shares of our common stock pursuant to which we sold an aggregate of 7,666,667 shares of our common stock at a purchase price of $6.00 per share with gross proceeds to us totaling $46.0 million, less estimated issuance costs incurred of approximately $3.0 million, of which approximately $2.8 million was paid during the three months ended March 31, 2020.

During the three months ended March 31, 2020, the Company issued 150,889 shares of common stock upon the exercise of stock options to purchase common stock and the Company received proceeds of approximately $16,000 from these exercises. Cash provided by financing activities for the three months ended March 31, 2019 included principal payments on notes payable of approximately $320,000 in connection with our loan agreement with a financing company. The terms of the loan that we entered into in November 2019 stipulate equal monthly payments of principal and interest payments of $109,413 over a nine-month period. Interest accrues on this loan at an annual rate of 5.25%.

We expect our cash and cash equivalents of approximately $46.6 million at March 31, 2020 and the remaining milestones of $7.5 million in milestone payments that we expect to receive under the 2018 CFF Award before the end of the fourth quarter of 2020, to be sufficient to meet our operating and capital requirements into the fourth quarter of 2020, based on current planned expenditures. The $7.5 million 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, preferred stock or convertible debt securities, enter into a credit facility or another form of third-party funding or seek other debt financing. In addition, we may seek to raise cash through collaborative agreements or from government grants. The sale of equity and convertible debt securities may result in dilution to our stockholders and certain of those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of preferred stock, convertible debt securities or other debt financing, these securities or other debt could contain covenants that would restrict our operations. Any other third-party funding arrangement could require us to relinquish valuable rights.

The source, timing and availability of any future financing will depend principally upon market conditions, and, more specifically, on the progress of our clinical development programs. COVID-19 has also caused volatility in the global financial markets and threatened a slowdown in the global economy, which may negatively affect our ability to raise additional capital on attractive terms or at all.

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

Contractual Obligations and Commitments

The following section presents information about our known contractual obligations as of March 31, 2020. 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**	**2020**	**Fiscal 2021-2022**	**Fiscal 2023-2024**	**After Fiscal 2024**
Operating lease obligations	$ 11,191,884	$ 1,003,714	$ 3,257,684	$ 3,447,452	$ 3,483,034

Pursuant to the terms of our non-cancelable lease agreements in effect at March 31, 2020, the following table summarizes our maturities of operating lease liabilities as of March 31, 2020:

2020	$	1,003,714
2021		1,605,121
2022		1,652,563
2023		1,700,005
2024		1,747,447
Thereafter		3,483,034
Total lease payments	$	11,191,884
Less: imputed interest		(2,589,355)
Total	$	8,602,529

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 March 31, 2020, 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 royalty payments under development award agreements discussed as follows:

Collaboration Agreement with Kaken

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

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

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

License Agreement with Jenrin

Pursuant to the terms of the Jenrin Agreement, we are obligated to pay potential milestone payments to Jenrin totaling up to $18.4 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.

2018 CFF Award

Pursuant to the terms of the Investment Agreement, we are obligated to make certain royalty payments to CFF, including a royalty payment of one and one-half times the amount of the 2018 CFF Award, payable in cash within sixty days upon the first receipt of approval of lenabasum in the United States and a second royalty payment of one and one-half times the amount of the 2018 CFF Award upon approval in another major market, as set forth in the Investment Agreement (the "Approval Royalty"). At our election, we may satisfy the first of the two Approval Royalties in registered shares of our common stock. Additionally, we will owe to CFF a royalty payment equal to 10% of any amounts we receive as payment under the collaboration agreement with Kaken, provided that the total royalties that we will be required to pay under the Investment Agreement resulting from income from licenses or sales subject to the Investment Agreement are capped at five times the total amount of the 2018 CFF Award, and we may credit such royalties against any royalties on net sales otherwise owed to CFF under the Investment Agreement. Accordingly, we were required to pay CFF $2,700,000 in May 2019, which is within 60 days of our receipt of the $27,000,000 upfront cash payment from Kaken described below.

Additionally, we are obligated to make (i) royalty payments to CFF of two and one-half percent of net sales from lenabasum due within sixty days after any quarter in which such net sales occur in the Field, as defined in the Investment Agreement, (ii) royalty payments to CFF of one percent of net sales of Non-Field Products, as defined in the Investment Agreement due within sixty days after any quarter in which such net sales occur, and (iii) royalty payments to CFF of ten percent of any amount that we and our stockholders receive in connection with the license, sale, or other transfer to a third party of lenabasum, if indicated for the treatment or prevention of CF, or a change of control transaction, except that such payment shall not exceed five times the amount of the 2018 CFF Award, with such payments to be credited against any other net sales royalty payments due. Either CFF or we may terminate the Investment Agreement for cause, which includes our material failure to achieve certain commercialization and development milestones. Our payment obligations survive the termination of the Investment Agreement.

2015 CFFT Award

Pursuant to the terms of the 2015 CFFT Award agreement, we are obligated to make royalty payments to CFFT contingent upon commercialization of lenabasum in the Field of Use (as defined in the 2015 CFFT Award Agreement) as follows: (i) a royalty payment equal to five times the amount we receive under the 2015 CFFT Award Agreement, up to $25 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.

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 any foreign currency or 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 and our cash valued in Australia in Australian Dollars because our functional currency is the U.S. Dollar in our foreign-based subsidiaries. Our foreign denominated assets and liabilities are remeasured each reporting period with any exchange gains and losses recorded in our consolidated statements of operations.

Item 4. Controls and Procedures.

Evaluation of Our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that material information required to be disclosed in our periodic reports filed under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, our principal executive officer and our principal financial officer, to allow timely decisions regarding required disclosure. We carried out an evaluation, under the supervision and with the participation of our management, including our principal executive and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13(a)-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer concluded that, as of March 31, 2020, our disclosure controls and procedures were not effective due to material weaknesses in our internal controls over financial reporting described in Item 9A of our annual report on Form 10-K for the fiscal year ended December 31, 2019.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the above evaluation that occurred during the first quarter of 2020 that have materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

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

Item 1A. Risk Factors.

There have been no material changes in or additions to the risk factors included in or Annual Report on Form 10-K for the year ended December 31, 2019, other than as set forth below.

Risks Related to COVID-19

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

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

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

To date, many countries around the world have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of COVID-19 and have closed non-essential businesses. As local jurisdictions continue to put restrictions in place, our ability to continue to operate our business may also be limited. Such events may result in a period of business, supply and drug product manufacturing disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations.

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

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

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

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

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

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

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits

Exhibit No.	Description
10.1	Third Amended and Restated Employment Agreement between Corbus Pharmaceuticals Holdings, Inc. and Yuval Cohen, effective as of April 11, 2020.*
10.2	Second Amended and Restated Employment Agreement between Corbus Pharmaceuticals Holdings, Inc. and Barbara White, effective as of April 11, 2020.*
10.3	Fourth Amended and Restated Employment Agreement between Corbus Pharmaceuticals Holdings, Inc. and Sean Moran, effective as of April 11, 2020.*
10.4	Amended and Restated Employment Agreement between Corbus Pharmaceuticals Holdings, Inc. and Craig Millian, effective as of April 11, 2020.*
10.5	Amended and Restated Employment Agreement between Corbus Pharmaceuticals Holdings, Inc. and Robert Discordia, effective as of April 11, 2020.*
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a).*
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a).*
32.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b).**
32.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b).**
101.INS	XBRL Instance Document.*
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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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: May 11, 2020

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

Date: May 11, 2020

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

Exhibit 10.1

THIRD AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Third Amended and Restated Employment Agreement (this "**Agreement**"), effective as of April 11, 2020 (the "**Effective Date**"), is between Corbus Pharmaceuticals Holdings, Inc. (the "**Company**") and Yuval Cohen (the "**Executive**").

WITNESSETH:

WHEREAS, the Executive has been employed by the Company as its Chief Executive Officer pursuant to the terms of a second amended and restated employment agreement effective April 11, 2020 (the "**Prior 2020 Employment Agreement**");

WHEREAS, the Company desires to continue to employ the Executive as its Chief Executive Officer, and the Executive desires to accept such continued employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall amend, restate and replace the Prior 2020 Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. **EMPLOYMENT**. Subject to the terms and conditions set forth herein, the Company hereby employs the Executive, and the Executive hereby accepts such employment by the Company commencing on the Effective Date.

2. **SCOPE OF EMPLOYMENT**. During the term of this Agreement, Executive shall hold the position of Chief Executive Officer and shall have those duties and responsibilities customarily associated with the title of Chief Executive Officer plus any additional duties as may reasonably be assigned to him from time to time by the Company. The Executive shall report directly to the Board of Directors. The Executive will devote his full time and best efforts to the business and affairs of the Company. The Executive shall be subject to and comply with the Company's policies, procedures and approval practices as generally in effect at any time and from time to time.

3. **PREVIOUS OBLIGATIONS**. The Executive represents that his employment by the Company and the performance of his duties on behalf of the Company does not, and shall not, breach any agreement that obligates the Executive to keep in confidence any trade secrets or confidential or proprietary information of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Executive shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

4. **COMPENSATION**. As full compensation for all services to be rendered by Executive during the term of this Agreement, the Company will compensate the Executive as follows.

4.1 **Base Salary**. The Company shall pay the Executive a base salary (the "**Base Salary**") at the annualized rate of $559,000, which shall be subject to customary withholdings and authorized deductions and shall be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base Salary shall be subject to review on at least an annual basis. The foregoing annualized rate will be effective for fiscal year 2020 and may be reevaluated by the Company's Board of Directors for fiscal year 2021.

4.2 **Annual Bonus.**

(a) The Executive will be eligible to participate in an annual executive bonus plan pursuant to which he may earn a bonus ("**Bonus**") equal to up to 60% of his Base Salary (such maximum bonus may be referred to as the "**Target Bonus**").

(b) Prior to the commencement of each calendar year the Company's Board of Directors (the "**Board**") will establish and approve the Target Bonus for such calendar year. Achievement of the Target Bonus will be based on the Executive meeting individual objectives and the Company meeting Company-wide objectives (collectively, the "**Performance Criteria**").

(c) The Board may, in its discretion, grant the Executive a Bonus in excess of the Target Bonus if the Performance Criteria are exceeded.

(d) Following the close of each calendar year but in no event later than January 30th, the Board will meet and determine the extent to which the Performance Criteria have been achieved for such year and the amount of the Bonus. Based on that determination, payment of the Bonus (if any) shall be made by March 15th.

(e) Notwithstanding the foregoing to the contrary (including all Performance Criteria being met), payment of the Bonus shall be at the discretion of the Board based on the financial condition of the Company.

4.3 **Stock Option Grants**. During the Term (as defined below), subject to the terms of the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Compensation Plan (the "**2014 Plan**") or any successor equity compensation plan as may be in place from time to time and separate award agreements, the Executive shall be eligible to receive from time to time additional stock options or other awards in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

4.4 **Benefits.** During his employment and subject to any contribution therefore generally required of employees of the Company, the Executive shall be entitled to participate in any and all employee benefit plans from time to time in effect for executive employees of the Company generally. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board or any administrative or other committee provided for in or contemplated by such plan. The Company may alter, modify, add to or delete its employee benefit plans at any time as it, in its sole judgment, deems appropriate.

4.5 **Vacations, Sick Time, Holidays, and Other Leave**. During the term of his employment, the Executive shall be entitled to paid time off, including vacation time, sick time, holidays, and other leave time, in accordance with the Company's policies in force in its Employee Handbook as of the Effective Date of this Agreement or as such policies may be modified from time to time by the Company.

4.6 **Changes to Compensation**. After the Term (as defined below), the Company may, at its sole discretion, change the terms of the Executive's compensation (other than the terms and conditions of outstanding options or other awards under the 2014 Plan which shall continue to be governed by the applicable award agreements and the 2014 Plan). The Company shall give the Executive at least 14 days' prior written notice of any such changes.

5. **EXPENSES**. The Executive shall be entitled to reimbursement by the Company for all necessary and reasonable travel, entertainment and other business expenses incurred by him in connection with his duties hereunder. The Company shall reimburse the Executive for all such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies as in effect from time to time.

6. CONFIDENTIALITY.

6.1 **Definition**. During the term of his employment, the Executive will have access to the Company's confidential business information (the "**Confidential Information**"). Confidential Information means all trade secrets, know-how, show-how, theories, technical, operating, financial and other business information relating to the Company, its affiliates and each of their respective businesses or potential businesses, whether or not reduced to writing or other medium, and whether or not marked or labeled confidential, proprietary or the like, specifically including, without limitation, the following: inventions (including, without limitation, Work Product (as defined below)), designs, data, computer code, works of authorship, formulas, compounds, indications, techniques, ideas, discoveries, products and services under development, investor, customer and vendor information of any kind, marketing and business plans, pricing and profit margins, memoranda, notes, records, files, reports and other documentation, processes, business methods, improvements, modifications and creations, methodology, concepts, research, specifications, data processes, operations procedures, computer systems and software; provided, however, that Confidential Information shall not include information that is or becomes generally available to the public, unless such information has become generally available as a result of the Executive's direct or indirect act or omission or as a result of the disclosure by any other person in violation of any contractual, legal or fiduciary obligation.

6.2 **Use of Confidential Information**. Subject to the other provisions of this Agreement, the Executive shall use Confidential Information only in the performance of the Executive's duties for the Company. Subject to the other provisions of this Agreement, the Executive shall not use Confidential Information at any time (during or after the Executive's employment) for the Executive's personal benefit or in any manner adverse to the interests of the Company, its affiliates, or any of their respective investors and clients.

6.3 **Protection and Non-Disclosure of Confidential Information**. The Executive shall safeguard the Confidential Information by all reasonable steps and abide by all policies and procedures of the Company in effect from time to time regarding storage, copying, destroying, publication or posting, and handling of such Confidential Information, in whatever medium or format that Confidential Information takes. At all times during and after his employment by the Company, the Executive shall not disclose Confidential Information at any time except to persons or entities authorized by the Company to receive this information or as otherwise permitted by this Agreement. For the avoidance of doubt, the Executive is permitted, subject to the other provisions of this Agreement, to disclose Confidential Information to third parties with whom or which the Company has entered into confidentiality agreements. Notwithstanding the foregoing, nothing in this Agreement shall be construed to prevent disclosure of Confidential Information when required to do so by a court of law, a governmental agency, or an administrative or legislative body (each with jurisdiction to order the Executive to divulge, disclose or make accessible such information); provided that, the Executive shall give prompt written notice to the Company of such requirement and reasonably cooperate with any attempt by the Company and/or its affiliates to obtain a protective order or similar treatment. Notwithstanding the foregoing, nothing in this Agreement prohibits, limits, or otherwise interferes with the Executive's protected rights under federal, state or local law to, without notice to the Company, (i) communicate or file a charge with a government regulator; (ii) participate in an investigation or proceeding conducted by a government regulator; or (iii) receive an award paid by a government regulator for providing information.

6.4 **Return of Confidential Information**. Upon request of the Company, the Executive will promptly (i) deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect Confidential Information (including all copies, reproductions, digests, abstracts, analyses, and notes) and (ii) destroy any intangible materials that evidence, contain or reflect Confidential Information on equipment or media not owned by the Company.

6.5 **Other Agreements**. The Executive shall execute and abide by all confidentiality agreements which the Company reasonably requests the Executive to sign or abide by, whether those agreements are for the benefit of the Company, an affiliate of the Company, or an actual or a potential client thereof.

6.6 **Defend Trade Secrets**. The Executive acknowledges that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret if (i) the Executive makes such disclosure in confidence to a federal, State, or local government official, either directly or indirectly, or to an attorney and such disclosure is made solely for the purpose of reporting or investigating a suspected violation of law, or (ii) the Executive makes such disclosure in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. Further, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the employer's trade secrets to the attorney and use the trade secret information in the court proceeding if the individual: (i) files any document containing the trade secret under seal; and (ii) does not disclose the trade secret, except pursuant to court order. Nothing contained herein will waive, limit or affect any rights of the Company under any applicable trade secrets laws, including Defend Trade Secrets Act of 2016, which will be enforceable separate and apart from this Agreement.

7. **ASSIGNMENT OF WORK PRODUCT**.

7.1 **Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Intellectual Property**" means collectively all Work Product and all Intellectual Property Rights relating to all Work Product.

"**Intellectual Property Rights**" means all copyrights, copyright registrations and copyright applications, trademarks, service marks, trade dress, trade names, trademark registrations and trademark applications, patents and patent applications, trade secret rights, and all other intellectual property rights and intellectual property interests existing, created or protectable under any intellectual property or other law of any nation.

"**Work Product**" means any and all inventions, discoveries, works of authorship, developments, improvements, formulas, compounds, indications, techniques, concepts, data and ideas (whether or not patentable or registerable under patent, copyright, or similar statute) made, conceived, prepared, created, discovered, or reduced to practice by the Executive, either alone or jointly with others, during the period of his employment, that (i) result or relate to work performed by the Executive for the Company, (ii) are made by use of the equipment, supplies, facilities or Confidential Information of the Company, or are made, conceived or completed, wholly or in part, during hours in which the Executive is working for the Company, or (iii) are related to the business of the Company or the actual or demonstrably anticipated business of the Company.

7.2 **Property of the Company**. All Intellectual Property is and will be the sole property of the Company.

7.3 **Copyrights; Assignment**. The Executive agrees that all copyrightable materials that fall within the definition of Work Product, will be, to the maximum extent permitted by law, works-made-for-hire for the Company under copyright law, and to the extent not works-made-for-hire, the Executive hereby irrevocably assigns to the Company, without royalty or further consideration to the Executive, all right, title, and interest he may have, or may acquire, in and to all Intellectual Property.

7.4 **Disclosure**. The Executive will promptly disclose in writing all Work Product to the Company. The Executive agrees to keep adequate and current written records of all such Work Product, in the form of notes, sketches, drawings, electronic records and/or other reports, which records are, and will remain, the sole property of the Company and will be available to the Company at all times.

7.5 **Execution of Documents**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will promptly sign and deliver to the Company any and all applications, assignments and other documents that the Company considers necessary or desirable in order to: (a) assign, apply for, obtain, and maintain any Intellectual Property Rights in the United States and for other countries relating to any Work Product, (b) assign and convey to the Company or its designee the sole and exclusive right, title, and interest in and to all Intellectual Property, (c) provide evidence regarding the Intellectual Property that the Company considers necessary or desirable, and (d) confirm the Company's ownership of the Intellectual Property, all without royalty or any other further consideration to the Executive.

7.6 **Assistance to the Company**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will assist the Company in assigning, obtaining, maintaining, defending, registering and from time to time enforcing, in any and all countries, the Company's right to the Intellectual Property. This assistance may include, without limitation, testifying in a suit or other proceeding. If the Company requires assistance from the Executive after termination of his employment, other than assistance as set forth in Section 7.5, the Executive will be compensated for time actually spent in providing assistance at an hourly rate equivalent to his compensation at the time his employment was terminated together with his reasonable, actual out-of-pocket expenses incurred in providing such assistance, to the extent permitted by applicable law and/or court rules.

7.7 **Power of Attorney**. For use in the case that the Company cannot obtain the Executive's signature on any document that the Company considers necessary or desirable in order to assign, apply for, prosecute, obtain, or enforce any Intellectual Property, whether due to the Executive's non-cooperation, unavailability, or any other reason, the Executive hereby irrevocably designates and appoints the Company and each of its duly authorized officers and agents as his agent and attorney-in-fact to act for, and on the Executive's behalf, to execute and file any such document and to do all other lawfully permitted acts to further the assignment, transfer to the Company, application, registration, prosecution, issuance, and enforcement of all Intellectual Property, with the same force and effect as if executed and delivered by the Executive.

7.8 **Prior Inventions**. The Executive represents that any inventions, prior works of authorship, discoveries, concepts or ideas, if any, to which the Executive presently has any right, title or interest, and which were previously conceived either wholly or in part by the Executive, and that the Executive desires to exclude from the operation of this Agreement are identified on Schedule A of this Agreement (each a "**Prior Invention**"). The Executive represents that the list contained in Schedule A is complete to the best of his knowledge. If during the Executive's retention with the Company, the Executive incorporates a Prior Invention into a Company product, process or service or its use, the Executive shall be deemed to have automatically granted to the Company a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, display, perform sell and otherwise use such Prior Invention as part of or in connection with any Company product, process or service. The Executive shall not incorporate a Prior Invention into a Company product, process or service or its use without the Company's prior written consent.

8. NON-COMPETITION; NON-SOLICITATION.

8.1 **Non-competition**. To protect the Company's legitimate interests in, among other things, the Company's Confidential Information, trade secrets, and goodwill, during the Employment Period and the Non-Competition Restricted Period (as defined below), the Executive shall not, in any geographic location where within the two years prior to cessation of employment with the Company the Executive provided services to the Company or had a material presence or influence, directly or indirectly, whether as a partner, principal, shareholder, licensor, licensee, employee, officer, director, manager, agent, representative, advisor, promoter, associate, investor, or otherwise, assist in or engage in providing any services that the Executive provided to the Company during the prior two years, to a Competitive Business (as defined below). The geographic limitation as set forth in this Section 8.1 does not apply during the Employment Period, during which there is no geographic limitation to the restrictions as set forth in this Section 8.1.

In furtherance of the foregoing, the Company will provide the Executive with the following:

(a) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term (as defined below) other than during the Change in Control Period (as defined in subsection 8.1(b)), the Company shall pay to the Executive an amount equal to twelve months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment.

(b) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined in Section 11.2) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 8.1(a) above, the Company shall pay to the Executive an amount equal to twenty-four (24) months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 8.1(a), such payments or benefits shall be taken into account for purposes of this subsection 8.1(b).

The Executive has the right to consult with counsel prior to signing this Agreement, including this Section 8.1. This Section 8.1 shall not be effective until after ten (10) business days from the date the Executive received notice of this Section 8.1, but in no case earlier than the Effective Date of this Agreement.

The Executive shall not provide any services to any other person, company, entity or firm while the Executive is employed by the Company without the Company's written consent and may not do anything that may result in an actual or perceived conflict of interest to the Company.

During the Non-Competition Restricted Period, the Executive shall, upon the Company's request, honestly, accurately, and completely provide the Company with the name of any prospective new employer or hiring entity that follows the Executive's separation from the Company. During the Employment Period, the Non-Competition Restricted Period, and the Non-Solicitation Restricted Period (defined below), the Executive shall, upon the Company's request, provide a copy of this Agreement to any person, company, entity or firm.

8.2 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Competitive Business**" means any business that is developing or has developed a cannabinoid agonist for the treatment of scleroderma, cystic fibrosis or other inflammatory or fibrotic diseases.

"**Employment Period**" means the period commencing on the Effective Date and continuing through and including the date of cessation of the Executive's employment with the Company.
"**Non-Competition Restricted Period**" means the 6 months from the date of cessation of the Executive's employment with the Company.

"Non-Solicitation Restricted Period" means the 12 months from the date of cessation of the Executive's employment with the Company.

8.3 **Non-Solicitation**. During the Employment Period and the Non-Solicitation Restricted Period, the Executive shall not, directly or indirectly, whether on behalf of himself or anyone else: (i) induce or attempt to induce a business associate of the Company to refrain from doing business with the Company; or (ii) solicit any of the employees of the Company to leave the employ of the Company or hire anyone who is an employee of the Company or has worked for the Company during the previous 12 months. The Non-Solicitation Restricted Period shall be extended by the length of any period during which the Executive is in breach of the terms and conditions of this Section 8.3.

8.4 **Separate Covenants**. The Executive acknowledges and agrees that the covenants set forth in this Section 8 are an essential element of this Agreement and the transactions contemplated hereby and that, but for the agreement of the Executive to comply with such covenants, the Company would not have entered into this Agreement.

8.5 **Blue Pencil Provision**. The parties hereby expressly agree that the duration, scope and geographic area of restriction set forth in this Section 8 are reasonable and necessary to protect the legitimate business interests of the Company. If any provision of this Agreement should be found by any court of competent jurisdiction to be unenforceable for any reason, including but not limited to being too broad as to duration, scope, or area of restriction, then, and in that event, such provision will nonetheless remain valid and fully effective, but will be considered to be amended so that the duration, scope, and/or area of restriction set forth will be changed to be the maximum duration, scope, or area of restriction, as the case may be, that would be found enforceable by such court.

9. **INJUNCTIVE RELIEF**. The Executive acknowledges that the Company shall not have an adequate remedy in the event that the Executive breaches Section 6, 7, 8 or 12 of this Agreement and that the Company will suffer irreparable damage and injury in such event. The Executive agrees that the Company, in addition to any other available rights and remedies, shall be entitled to seek an injunction (without the necessity of posting a bond) restraining the Executive from committing or continuing any violation of Section 6, 7, 8 or 12 of this Agreement.

10. **TERM; TERMINATION**.

10.1 **Term**. Unless earlier terminated in accordance with the provisions of this Section 10, the term of this Agreement shall commence on the Effective Date and shall continue thereafter for a period of two (2) years (the "**Term**"). If the Company continues to employ the Executive after the expiration of the Term without a written extension of the term, such employment shall continue on an AT-WILL basis and the Company shall have the right to terminate the Executive's employment for any reason or no reason, with or without written notice.

10.2 **Death**. Upon the death of the Executive, the Executive's employment with the Company shall terminate.

10.3 **Disability**. If the Executive is unable to perform the essential functions of the Executive's employment with the Company for more than twelve weeks (unless a longer period is required by state or federal law), the Company shall have the right to terminate the Executive's employment upon prior written notice

10.4 **Termination by the Executive**. The Executive may terminate this Agreement and his employment hereunder with or without Good Reason (as defined below) upon 30 days prior written notice to the Company.

10.5 **Termination by Company**. The Company may terminate this Agreement and the Executive's employment hereunder (i) without Cause immediately upon written notice to the Executive or (ii) immediately for Cause.

10.6 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Cause**" means: (i) the Executive's chronic failure to perform those material duties assigned to him pursuant to Section 2 above to the reasonable satisfaction of the Board after written notice thereof and a reasonable opportunity to respond and/or cure of not less than 30 days; (ii) the Executive's gross negligence or misconduct (including but not limited to acts of fraud or theft or the violation of applicable laws) in connection with the performance of his duties; (iii) the Executive's material breach of Section 6, 7 or 8 above; (iv) the Executive's commission of an act of moral turpitude; (v) the Executive being dependent on or addicted to alcohol or drugs; or (vi) the Executive's conviction of or plea of nolo contendere to a felony.

"**Good Reason**" means the voluntary termination by the Executive within thirty (30) days following: (i) a requirement that the Executive physically relocates to another office that is more than 75 miles from the office location that the Executive reported to on the Effective Date; (ii) a reduction in the Executive's rate of compensation, potential incentive compensation, or general benefits (other than general changes, in each case, affecting all similarly situated employees to substantially the same extent); or (iii) a material adverse change in the Executive's job description or a significant reduction of the scope of the Executive's authority or responsibilities.

11. EFFECT OF TERMINATION

11.1 **Payments Upon Termination**. In the event that the Executive's employment with the Company is terminated for any reason, the Executive shall have the right to receive (i) the compensation and reimbursable expenses then accrued and/or earned and unpaid under Sections 4.1 and 5 of this Agreement through the date of termination, (ii) payment for unused vacation days accrued through the date of termination and (iii) any benefits required by the Consolidated Omnibus Budget Reconciliation Act of 1985.

11.2 **Additional Payments.** (a) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term other than during the Change in Control Period (as defined in subsection 11.2(b)), (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twelve months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), and (B) if the Executive is entitled to a Bonus, subject to the Board's discretion and approval as set forth in Section 4.2 above, the Company shall pay such Bonus in accordance with the terms of the applicable plan and on the same basis as other participants in the plan except that the Bonus amount shall be prorated (based on the percentage of days the Executive was employed relative to the total number of days in the bonus earning period).

(b) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined below) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 11.2(a) above, the Company shall (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twenty-four (24) months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), (B) pay the current year Bonus at two (2) times the Target Bonus level, which payment shall be made by March 15th of the following calendar year, and (C) fully accelerate vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards upon the later of (x) the Change in Control or (y) the Executive's termination of employment with the Company. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 11.2(a), such payments or benefits shall be taken into account for purposes of this subsection 11.2(b).

As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

11.3 **Release Agreement.** In order to receive the payments and benefits set forth in Sections 8.1 and 11.2, as applicable (collectively referred to herein as the "**Severance Payments**"), the Executive must timely execute (and not revoke) a separation agreement and general release (the "**Release Agreement**") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion, and which form will include a non-compete provision. If the Executive is eligible for Severance Payments pursuant to Sections 8.1 and 11.2, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the date of termination of employment. The Severance Payments are subject to the Executive's execution and delivery of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

11.4 **Post-Termination Breach.** Notwithstanding anything to the contrary contained in this Agreement, the Company's obligation to provide the Severance Payments will immediately cease if the Executive breaches any of the provisions of Sections 6, 7 or 8, the Release Agreement or any other Agreement the Executive has with the Company.

11.5 **No Other Payments or Benefits**. The Executive acknowledges and agrees that upon the termination of his employment, no other benefits, compensation or remuneration of any kind is owed by the Company to the Executive other than as set forth in Sections 8.1 and 11 or as set forth in the Option Agreements.

11.6 **Survival**. Notwithstanding anything to the contrary set forth herein, Sections 6, 7, 8, 9 and 11-19 of this Agreement and any remedies for the breach thereof, shall survive the termination of this Agreement under the terms hereof. Termination of this Agreement shall not relieve or release either party from any rights, liabilities or obligations which it/he has accrued prior to the effective date of such termination.

12. **RETURN OF COMPANY PROPERTY; EXIT INTERVIEW**. Upon termination of the Executive's employment with the Company for any reason, the Executive will promptly:

(a) Deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect (A) Confidential Information or (B) Work Product, in each case whether prepared by the Executive or otherwise coming into the Executive's possession or control;

(b) Destroy any intangible materials that evidence, contain or reflect Confidential Information or Work Product on equipment or media not owned by the Company, unless otherwise directed by the Company; and

(c) Return to the Company all equipment, files, software programs and other personal property belonging to the Company.

Upon termination of the Executive's employment with the Company for any reason, the Executive will attend an exit interview with a representative of the Company to review the Executive's continuing obligations under this Agreement.

13. **ENTIRE AGREEMENT**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all contemporaneous and prior agreements and understandings between them as to such subject matter. Not in limitation of the foregoing, this Agreement supersedes the Prior 2020 Employment Agreement. Except as otherwise expressly provided herein, this Agreement may not be amended except by an instrument in writing executed by the Company and the Executive. Subject to the other provisions of this Agreement, any subsequent change or changes in the Executive's duties, salary, or compensation will not affect the validity or scope of this Agreement, including the validity or scope of Section 8.

14. **ASSIGNMENT**. The Executive shall not be permitted to assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company.

15. **GOVERNING LAW; JURISDICTION**. This Agreement shall be construed and enforced in accordance with and governed by the laws of the Commonwealth of Massachusetts without giving effect to the principles of conflicts of laws thereof. The parties hereby consent and submit to the exclusive jurisdiction and venue of the courts located in Suffolk County, Massachusetts in connection with any actions or proceedings brought against either of them (or each of them) arising out of or relating to this Agreement.

16. **MISCELLANEOUS**. No waiver by either party of any term or condition of this Agreement, whether by conduct or otherwise, in any one or more instance, shall be deemed a continuing waiver of any such term or condition, or a waiver of any other term or condition of this Agreement. Headings set forth in this Agreement are solely for the convenience of the parties and have no legal effect. If any provision of this Agreement shall be found to be invalid by any court having competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof. This Agreement shall be (i) binding upon, and will inure to the benefit of, the parties and their permitted respective successors and assigns, (ii) construed without presumption of any rule requiring construction to be made against the party causing it to be drafted and (iii) executed in any number of counterparts, each of which will for all purposes be deemed to be an original, and all of which are identical.

17. **TAX WITHHOLDING**. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

18. **SECTION 409A COMPLIANCE.** All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the date of termination of employment and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Sections 8.1 and 11.2 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

19. **280G MODIFIED CUTBACK.**

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar ($1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in a manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 19, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

IN WITNESS WHEREOF, the undersigned have executed this Employment Agreement.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: */s/ Sean Moran*
Name: Sean Moran
Title: Chief Financial Officer
Dated: 4/17/2020

By: */s/ Yuval Cohen*
Yuval Cohen
Dated: 4/17/2020
Address:

Schedule A

Executive Statement Regarding Prior Inventions

Except as set forth below, the Executive acknowledges that at this time he does not have any right, title or interest in or to any Prior Inventions (as defined in Section 7.8 of this Agreement) except those (if any) listed below:

[List any applicable Prior Inventions or write "None".] None

[If you need more space please attach a separate continuation sheet]

The Executive certifies that the foregoing is true, accurate and complete.

The Executive's Name:	Yuval Cohen
Date:	4/17/2020
Signature:	*/s/ Yuval Cohen*

Exhibit 10.2

SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Second Amended and Restated Employment Agreement (the "**Agreement**"), effective as of April 11, 2020 (the "**Effective Date**"), is between Corbus Pharmaceuticals Holdings, Inc. (the "**Company**") and Barbara White (the "**Executive**").

WITNESSETH:

WHEREAS, the Executive has been employed by the Company as its Chief Medical Officer pursuant to the terms of an amended and restated employment agreement dated April 11, 2018, as amended (the "**Prior Employment Agreement**");

WHEREAS, the Company desires to continue to employ the Executive as its Chief Medical Officer, and as its Head of Research, and the Executive desires to accept such continued employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall amend, restate and replace the Prior Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. **EMPLOYMENT**. Subject to the terms and conditions set forth herein, the Company hereby employs the Executive, and the Executive hereby accepts such employment by the Company commencing on the Effective Date.

2. **SCOPE OF EMPLOYMENT**. During the term of this Agreement, Executive shall hold the positions of Chief Medical Officer and Head of Research and shall have those duties and responsibilities customarily associated with the titles Chief Medical Officer and Head of Research plus any additional duties as may reasonably be assigned to her from time to time by the Company. The Executive shall report directly to the Chief Executive Officer. The Executive will devote her full time and best efforts to the business and affairs of the Company. The Executive shall be subject to and comply with the Company's policies, procedures and approval practices as generally in effect at any time and from time to time.

3. **PREVIOUS OBLIGATIONS**. The Executive represents that her employment by the Company and the performance of her duties on behalf of the Company does not, and shall not, breach any agreement that obligates the Executive to keep in confidence any trade secrets or confidential or proprietary information of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Executive shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

4. **COMPENSATION**. As full compensation for all services to be rendered by Executive during the term of this Agreement, the Company will compensate the Executive as follows.

4.1 **Base Salary**. The Company shall pay the Executive a base salary (the "**Base Salary**") at the annualized rate of $439,000, which shall be subject to customary withholdings and authorized deductions and shall be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base Salary shall be subject to review on at least an annual basis. The foregoing annualized rate will be effective for fiscal year 2020 and may be reevaluated by the Company's Board of Directors for fiscal year 2021.

4.2 **Annual Bonus.**

(a) The Executive will be eligible to participate in an annual executive bonus plan pursuant to which she may earn a bonus ("**Bonus**") equal to up to 40% of her Base Salary (such maximum bonus may be referred to as the "**Target Bonus**").

(b) Prior to the commencement of each calendar year the Company's Board of Directors (the "**Board**") will establish and approve the Target Bonus for such calendar year. Achievement of the Target Bonus will be based on the Executive meeting individual objectives and the Company meeting Company-wide objectives (collectively, the "**Performance Criteria**").

(c) The Board may, in its discretion, grant the Executive a Bonus in excess of the Target Bonus if the Performance Criteria are exceeded.

(d) Following the close of each calendar year but in no event later than January 30th, the Board will meet and determine the extent to which the Performance Criteria have been achieved for such year and the amount of the Bonus. Based on that determination, payment of the Bonus (if any) shall be made by March 15th.

(e) Notwithstanding the foregoing to the contrary (including all Performance Criteria being met), payment of the Bonus shall be at the discretion of the Board based on the financial condition of the Company.

4.3 **Benefits**. During her employment and subject to any contribution therefore generally required of employees of the Company, the Executive shall be entitled to participate in any and all employee benefit plans from time to time in effect for executive employees of the Company generally. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board or any administrative or other committee provided for in or contemplated by such plan. The Company may alter, modify, add to or delete its employee benefit plans at any time as it, in its sole judgment, deems appropriate.

4.4 **Vacations, Sick Time, Holidays, and Other Leave**. During the term of her employment, the Executive shall be entitled to paid time off, including vacation time, sick time, holidays, and other leave time, in accordance with the Company's policies in force in its Employee Handbook as of the Effective Date of this Agreement or as such policies may be modified from time to time by the Company.

4.5 **Changes to Compensation**. After the Term (as defined below), the Company may, at its sole discretion, change the terms of the Executive's compensation (other than the terms and conditions of outstanding options or other awards under the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Compensation Plan (the "**2014 Plan**") which shall continue to be governed by the applicable award agreements and the 2014 Plan). The Company shall give the Executive at least 14 days' prior written notice of any such changes.

5. **EXPENSES**. The Executive shall be entitled to reimbursement by the Company for all necessary and reasonable travel, entertainment and other business expenses incurred by her in connection with her duties hereunder. The Company shall reimburse the Executive for all such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies as in effect from time to time.

6. **CONFIDENTIALITY.**

6.1 **Definition**. During the term of her employment, the Executive will have access to the Company's confidential business information (the "Confidential Information"). Confidential Information means all trade secrets, know-how, show-how, theories, technical, operating, financial and other business information relating to the Company, its affiliates and each of their respective businesses or potential businesses, whether or not reduced to writing or other medium, and whether or not marked or labeled confidential, proprietary or the like, specifically including, without limitation, the following: inventions (including, without limitation, Work Product (as defined below)), designs, data, computer code, works of authorship, formulas, compounds, indications, techniques, ideas, discoveries, products and services under development, investor, customer and vendor information of any kind, marketing and business plans, pricing and profit margins, memoranda, notes, records, files, reports and other documentation, processes, business methods, improvements, modifications and creations, methodology, concepts, research, specifications, data processes, operations procedures, computer systems and software; provided, however, that Confidential Information shall not include information that is or becomes generally available to the public, unless such information has become generally available as a result of the Executive's direct or indirect act or omission or as a result of the disclosure by any other person in violation of any contractual, legal or fiduciary obligation.

6.2 **Use of Confidential Information**. Subject to the other provisions of this Agreement, the Executive shall use Confidential Information only in the performance of the Executive's duties for the Company. Subject to the other provisions of this Agreement, the Executive shall not use Confidential Information at any time (during or after the Executive's employment) for the Executive's personal benefit or in any manner adverse to the interests of the Company, its affiliates, or any of their respective investors and clients.

6.3 **Protection and Non-Disclosure of Confidential Information**. The Executive shall safeguard the Confidential Information by all reasonable steps and abide by all policies and procedures of the Company in effect from time to time regarding storage, copying, destroying, publication or posting, and handling of such Confidential Information, in whatever medium or format that Confidential Information takes. At all times during and after her employment by the Company, the Executive shall not disclose Confidential Information at any time except to persons or entities authorized by the Company to receive this information or as otherwise permitted by this Agreement. For the avoidance of doubt, the Executive is permitted, subject to the other provisions of this Agreement, to disclose Confidential Information to third parties with whom or which the Company has entered into confidentiality agreements. Notwithstanding the foregoing, nothing in this Agreement shall be construed to prevent disclosure of Confidential Information when required to do so by a court of law, a governmental agency, or an administrative or legislative body (each with jurisdiction to order the Executive to divulge, disclose or make accessible such information); provided that, the Executive shall give prompt written notice to the Company of such requirement and reasonably cooperate with any attempt by the Company and/or its affiliates to obtain a protective order or similar treatment. Notwithstanding the foregoing, nothing in this Agreement prohibits, limits, or otherwise interferes with the Executive's protected rights under federal, state or local law to, without notice to the Company, (i) communicate or file a charge with a government regulator; (ii) participate in an investigation or proceeding conducted by a government regulator; or (iii) receive an award paid by a government regulator for providing information.

6.4 **Return of Confidential Information**. Upon request of the Company, the Executive will promptly (i) deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect Confidential Information (including all copies, reproductions, digests, abstracts, analyses, and notes) and (ii) destroy any intangible materials that evidence, contain or reflect Confidential Information on equipment or media not owned by the Company.

6.5 **Other Agreements**. The Executive shall execute and abide by all confidentiality agreements which the Company reasonably requests the Executive to sign or abide by, whether those agreements are for the benefit of the Company, an affiliate of the Company, or an actual or a potential client thereof.

6.6 **Defend Trade Secrets**. The Executive acknowledges that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret if (i) the Executive makes such disclosure in confidence to a federal, State, or local government official, either directly or indirectly, or to an attorney and such disclosure is made solely for the purpose of reporting or investigating a suspected violation of law, or (ii) the Executive makes such disclosure in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. Further, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the employer's trade secrets to the attorney and use the trade secret information in the court proceeding if the individual: (i) files any document containing the trade secret under seal; and (ii) does not disclose the trade secret, except pursuant to court order. Nothing contained herein will waive, limit or affect any rights of the Company under any applicable trade secrets laws, including Defend Trade Secrets Act of 2016, which will be enforceable separate and apart from this Agreement.

7. **ASSIGNMENT OF WORK PRODUCT**.

7.1 **Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Intellectual Property**" means collectively all Work Product and all Intellectual Property Rights relating to all Work Product.

"**Intellectual Property Rights**" means all copyrights, copyright registrations and copyright applications, trademarks, service marks, trade dress, trade names, trademark registrations and trademark applications, patents and patent applications, trade secret rights, and all other intellectual property rights and intellectual property interests existing, created or protectable under any intellectual property or other law of any nation.

"**Work Product**" means any and all inventions, discoveries, works of authorship, developments, improvements, formulas, compounds, indications, techniques, concepts, data and ideas (whether or not patentable or registerable under patent, copyright, or similar statute) made, conceived, prepared, created, discovered, or reduced to practice by the Executive, either alone or jointly with others, during the period of her employment, that (i) result or relate to work performed by the Executive for the Company, (ii) are made by use of the equipment, supplies, facilities or Confidential Information of the Company, or are made, conceived or completed, wholly or in part, during hours in which the Executive is working for the Company, or (iii) are related to the business of the Company or the actual or demonstrably anticipated business of the Company.

7.2 **Property of the Company**. All Intellectual Property is and will be the sole property of the Company.

7.3 **Copyrights; Assignment**. The Executive agrees that all copyrightable materials that fall within the definition of Work Product, will be, to the maximum extent permitted by law, works-made-for-hire for the Company under copyright law, and to the extent not works-made-for-hire, the Executive hereby irrevocably assigns to the Company, without royalty or further consideration to the Executive, all right, title, and interest she may have, or may acquire, in and to all Intellectual Property.

7.4 **Disclosure**. The Executive will promptly disclose in writing all Work Product to the Company. The Executive agrees to keep adequate and current written records of all such Work Product, in the form of notes, sketches, drawings, electronic records and/or other reports, which records are, and will remain, the sole property of the Company and will be available to the Company at all times.

7.5 **Execution of Documents**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will promptly sign and deliver to the Company any and all applications, assignments and other documents that the Company considers necessary or desirable in order to: (a) assign, apply for, obtain, and maintain any Intellectual Property Rights in the United States and for other countries relating to any Work Product, (b) assign and convey to the Company or its designee the sole and exclusive right, title, and interest in and to all Intellectual Property, (c) provide evidence regarding the Intellectual Property that the Company considers necessary or desirable, and (d) confirm the Company's ownership of the Intellectual Property, all without royalty or any other further consideration to the Executive.

7.6 **Assistance to the Company**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will assist the Company in assigning, obtaining, maintaining, defending, registering and from time to time enforcing, in any and all countries, the Company's right to the Intellectual Property. This assistance may include, without limitation, testifying in a suit or other proceeding. If the Company requires assistance from the Executive after termination of her employment, other than assistance as set forth in Section 7.5, the Executive will be compensated for time actually spent in providing assistance at an hourly rate equivalent to her compensation at the time her employment was terminated together with her reasonable, actual out-of-pocket expenses incurred in providing such assistance, to the extent permitted by applicable law and/or court rules.

7.7 **Power of Attorney**. For use in the case that the Company cannot obtain the Executive's signature on any document that the Company considers necessary or desirable in order to assign, apply for, prosecute, obtain, or enforce any Intellectual Property, whether due to the Executive's non-cooperation, unavailability, or any other reason, the Executive hereby irrevocably designates and appoints the Company and each of its duly authorized officers and agents as her agent and attorney-in-fact to act for, and on the Executive's behalf, to execute and file any such document and to do all other lawfully permitted acts to further the assignment, transfer to the Company, application, registration, prosecution, issuance, and enforcement of all Intellectual Property, with the same force and effect as if executed and delivered by the Executive.

7.8 **Prior Inventions**. The Executive represents that any inventions, prior works of authorship, discoveries, concepts or ideas, if any, to which the Executive presently has any right, title or interest, and which were previously conceived either wholly or in part by the Executive, and that the Executive desires to exclude from the operation of this Agreement are identified on Schedule A of this Agreement (each a "Prior Invention"). The Executive represents that the list contained in Schedule A is complete to the best of her knowledge. If during the Executive's retention with the Company, the Executive incorporates a Prior Invention into a Company product, process or service or its use, the Executive shall be deemed to have automatically granted to the Company a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, display, perform sell and otherwise use such Prior Invention as part of or in connection with any Company product, process or service. The Executive shall not incorporate a Prior Invention into a Company product, process or service or its use without the Company's prior written consent.

8. **NON-COMPETITION; NON-SOLICITATION**.

8.1 **Non-competition**. To protect the Company's legitimate interests in, among other things, the Company's Confidential Information, trade secrets, and goodwill, during the Employment Period and the Non-Competition Restricted Period (as defined below), the Executive shall not, in any geographic location where within the two years prior to cessation of employment with the Company the Executive provided services to the Company or had a material presence or influence, directly or indirectly, whether as a partner, principal, shareholder, licensor, licensee, employee, officer, director, manager, agent, representative, advisor, promoter, associate, investor, or otherwise, assist in or engage in providing any services that the Executive provided to the Company during the prior two years, to a Competitive Business (as defined below). The geographic limitation as set forth in this Section 8.1 does not apply during the Employment Period, during which there is no geographic limitation to the restrictions as set forth in this Section 8.1.

In furtherance of the foregoing, the Company will provide the Executive with the following:

(a) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term (as defined below) other than during the Change in Control Period (as defined in subsection 8.1(b)), the Company shall pay to the Executive an amount equal to twelve months of her then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment.

(b) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined in Section 11.2) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 8.1(a) above, the Company shall pay to the Executive an amount equal to eighteen (18) months of her then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 8.1(a), such payments or benefits shall be taken into account for purposes of this subsection 8.1(b).

The Executive has the right to consult with counsel prior to signing this Agreement, including this Section 8.1. This Section 8.1 shall not be effective until after ten (10) business days from the date the Executive received notice of this Section 8.1, but in no case earlier than the Effective Date of this Agreement.

The Executive shall not provide any services to any other person, company, entity or firm while the Executive is employed by the Company without the Company's written consent and may not do anything that may result in an actual or perceived conflict of interest to the Company.

During the Non-Competition Restricted Period, the Executive shall, upon the Company's request, honestly, accurately, and completely provide the Company with the name of any prospective new employer or hiring entity that follows the Executive's separation from the Company. During the Employment Period, the Non-Competition Restricted Period, and the Non-Solicitation Restricted Period (defined below), the Executive shall, upon the Company's request, provide a copy of this Agreement to any person, company, entity or firm.

8.2 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Competitive Business**" means any business that is developing or has developed a cannabinoid agonist for the treatment of scleroderma, cystic fibrosis or other inflammatory or fibrotic diseases.

"**Employment Period**" means the period commencing on the Effective Date and continuing through and including the date of cessation of the Executive's employment with the Company.

"**Non-Competition Restricted Period**" means the 6 months from the date of cessation of the Executive's employment with the Company.

"Non-Solicitation Restricted Period" means the 12 months from the date of cessation of the Executive's employment with the Company.

8.3 **Non-Solicitation**. During the Employment Period and the Non-Solicitation Restricted Period, the Executive shall not, directly or indirectly, whether on behalf of herself or anyone else: (i) induce or attempt to induce a business associate of the Company to refrain from doing business with the Company; or (ii) solicit any of the employees of the Company to leave the employ of the Company or hire anyone who is an employee of the Company or has worked for the Company during the previous 12 months. The Non-Solicitation Restricted Period shall be extended by the length of any period during which the Executive is in breach of the terms and conditions of this Section 8.3.

8.4 **Separate Covenants**. The Executive acknowledges and agrees that the covenants set forth in this Section 8 are an essential element of this Agreement and the transactions contemplated hereby and that, but for the agreement of the Executive to comply with such covenants, the Company would not have entered into this Agreement.

8.5 **Blue Pencil Provision**. The parties hereby expressly agree that the duration, scope and geographic area of restriction set forth in this Section 8 are reasonable and necessary to protect the legitimate business interests of the Company. If any provision of this Agreement should be found by any court of competent jurisdiction to be unenforceable for any reason, including but not limited to being too broad as to duration, scope, or area of restriction, then, and in that event, such provision will nonetheless remain valid and fully effective, but will be considered to be amended so that the duration, scope, and/or area of restriction set forth will be changed to be the maximum duration, scope, or area of restriction, as the case may be, that would be found enforceable by such court.

9. **INJUNCTIVE RELIEF**. The Executive acknowledges that the Company shall not have an adequate remedy in the event that the Executive breaches Section 6, 7, 8 or 12 of this Agreement and that the Company will suffer irreparable damage and injury in such event. The Executive agrees that the Company, in addition to any other available rights and remedies, shall be entitled to seek an injunction (without the necessity of posting a bond) restraining the Executive from committing or continuing any violation of Section 6, 7, 8 or 12 of this Agreement.

10. TERM; TERMINATION.

10.1 **Term**. Unless earlier terminated in accordance with the provisions of this Section 10, the term of this Agreement shall commence on the Effective Date and shall continue thereafter for a period of two (2) years (the "**Term**"). If the Company continues to employ the Executive after the expiration of the Term without a written extension of the term, such employment shall continue on an AT-WILL basis and the Company shall have the right to terminate the Executive's employment for any reason or no reason, with or without written notice.

10.2 **Death**. Upon the death of the Executive, the Executive's employment with the Company shall terminate.

10.3 **Disability**. If the Executive is unable to perform the essential functions of the Executive's employment with the Company for more than twelve weeks (unless a longer period is required by state or federal law), the Company shall have the right to terminate the Executive's employment upon prior written notice.

10.4 **Termination by the Executive**. The Executive may terminate this Agreement and her employment hereunder with or without Good Reason (as defined below) upon 30 days prior written notice to the Company.

10.5 **Termination by Company**. The Company may terminate this Agreement and the Executive's employment hereunder (i) without Cause immediately upon written notice to the Executive or (ii) immediately for Cause.

10.6 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Cause**" means: (i) the Executive's chronic failure to perform those material duties assigned to her pursuant to Section 2 above to the reasonable satisfaction of the Board after written notice thereof and a reasonable opportunity to respond and/or cure of not less than 30 days; (ii) the Executive's gross negligence or misconduct (including but not limited to acts of fraud or theft or the violation of applicable laws) in connection with the performance of her duties; (iii) the Executive's material breach of Section 6, 7 or 8 above; (iv) the Executive's commission of an act of moral turpitude; (v) the Executive being dependent on or addicted to alcohol or drugs; or (vi) the Executive's conviction of or plea of nolo contendere to a felony.

"**Good Reason**" means the voluntary termination by the Executive within thirty (30) days following: (i) a requirement that the Executive physically relocates to another office that is more than 75 miles from the office location that the Executive reported to on the Effective Date; (ii) a reduction in the Executive's rate of compensation, potential incentive compensation, or general benefits (other than general changes, in each case, affecting all similarly situated employees to substantially the same extent); or (iii) a material adverse change in the Executive's job description or a significant reduction of the scope of the Executive's authority or responsibilities.

11. EFFECT OF TERMINATION

11.1 **Payments Upon Termination**. In the event that the Executive's employment with the Company is terminated for any reason, the Executive shall have the right to receive (i) the compensation and reimbursable expenses then accrued and/or earned and unpaid under Sections 4.1 and 5 of this Agreement through the date of termination, (ii) payment for unused vacation days accrued through the date of termination and (iii) any benefits required by the Consolidated Omnibus Budget Reconciliation Act of 1985.

11.2 **Additional Payments**.(a) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term other than during the Change in Control Period (as defined in subsection 11.2(b)), (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twelve months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), and (B) if the Executive is entitled to a Bonus, subject to the Board's discretion and approval as set forth in Section 4.2 above, the Company shall pay such Bonus in accordance with the terms of the applicable plan and on the same basis as other participants in the plan except that the Bonus amount shall be prorated (based on the percentage of days the Executive was employed relative to the total number of days in the bonus earning period).

(b) Subject to Sections 11.3 and 11.4, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined below) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 11.2(a) above, the Company shall (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of eighteen (18) months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), (B) pay the current year Bonus at the Target Bonus level, which payment shall be made by March 15th of the following calendar year, and (C) fully accelerate vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards upon the later of (x) the Change in Control or (y) the Executive's termination of employment with the Company. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 11.2(a), such payments or benefits shall be taken into account for purposes of this subsection 11.2(b).

As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

11.3 **Release Agreement.** In order to receive the payments and benefits set forth in Sections 8.1 and 11.2, as applicable (collectively referred to herein as the "**Severance Payments**"), the Executive must timely execute (and not revoke) a separation agreement and general release (the "**Release Agreement**") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion and which form shall include a non-compete provision. If the Executive is eligible for Severance Payments pursuant to Sections 8.1 and 11.2, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the date of termination of employment. The Severance Payments are subject to the Executive's execution and delivery of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

11.4 **Post-Termination Breach.** Notwithstanding anything to the contrary contained in this Agreement, the Company's obligation to provide the Severance Payments will immediately cease if the Executive breaches any of the provisions of Sections 6, 7 or 8, the Release Agreement or any other Agreement the Executive has with the Company.

11.5 **No Other Payments or Benefits**. The Executive acknowledges and agrees that upon the termination of her employment, no other benefits, compensation or remuneration of any kind is owed by the Company to the Executive other than as set forth in Sections 8.1 and 11 or as set forth in the Option Agreements.

11.6 **Survival**. Notwithstanding anything to the contrary set forth herein, Sections 6, 7, 8, 9 and 11-19 of this Agreement and any remedies for the breach thereof, shall survive the termination of this Agreement under the terms hereof. Termination of this Agreement shall not relieve or release either party from any rights, liabilities or obligations which it/she has accrued prior to the effective date of such termination.

12. **RETURN OF COMPANY PROPERTY; EXIT INTERVIEW**. Upon termination of the Executive's employment with the Company for any reason, the Executive will promptly:

(a) Deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect (A) Confidential Information or (B) Work Product, in each case whether prepared by the Executive or otherwise coming into the Executive's possession or control;

(b) Destroy any intangible materials that evidence, contain or reflect Confidential Information or Work Product on equipment or media not owned by the Company, unless otherwise directed by the Company; and

(c) Return to the Company all equipment, files, software programs and other personal property belonging to the Company.

Upon termination of the Executive's employment with the Company for any reason, the Executive will attend an exit interview with a representative of the Company to review the Executive's continuing obligations under this Agreement.

13. **ENTIRE AGREEMENT**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all contemporaneous and prior agreements and understandings between them as to such subject matter. Not in limitation of the foregoing, this Agreement supersedes the Prior Employment Agreement. Except as otherwise expressly provided herein, this Agreement may not be amended except by an instrument in writing executed by the Company and the Executive. Subject to the other provisions of this Agreement, any subsequent change or changes in the Executive's duties, salary, or compensation will not affect the validity or scope of this Agreement, including the validity or scope of Section 8.

14. **ASSIGNMENT**. The Executive shall not be permitted to assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company.

15. **GOVERNING LAW; JURISDICTION**. This Agreement shall be construed and enforced in accordance with and governed by the laws of the Commonwealth of Massachusetts without giving effect to the principles of conflicts of laws thereof. The parties hereby consent and submit to the exclusive jurisdiction and venue of the courts located in Suffolk County, Massachusetts in connection with any actions or proceedings brought against either of them (or each of them) arising out of or relating to this Agreement.

16. **MISCELLANEOUS**. No waiver by either party of any term or condition of this Agreement, whether by conduct or otherwise, in any one or more instance, shall be deemed a continuing waiver of any such term or condition, or a waiver of any other term or condition of this Agreement. Headings set forth in this Agreement are solely for the convenience of the parties and have no legal effect. If any provision of this Agreement shall be found to be invalid by any court having competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof. This Agreement shall be (i) binding upon, and will inure to the benefit of, the parties and their permitted respective successors and assigns, (ii) construed without presumption of any rule requiring construction to be made against the party causing it to be drafted and (iii) executed in any number of counterparts, each of which will for all purposes be deemed to be an original, and all of which are identical.

17. **TAX WITHHOLDING**. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against her with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

18. **SECTION 409A COMPLIANCE.** All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the date of termination of employment and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Sections 8.1 and 11.2 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

19. 280G MODIFIED CUTBACK.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar ($1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in a manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 19, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

IN WITNESS WHEREOF, the undersigned have executed this Employment Agreement.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: */s/ Yuval Cohen, Ph.D.*
Name: Yuval Cohen, Ph.D.
Title: Chief Executive Officer
Dated: 4/17/2020

By: */s/ Barbara White*
Barbara White
Dated: 4/21/2020
Address:

Schedule A

Executive Statement Regarding Prior Inventions

Except as set forth below, the Executive acknowledges that at this time she does not have any right, title or interest in or to any Prior Inventions (as defined in Section 7.8 of this Agreement) except those (if any) listed below:

[List any applicable Prior Inventions or write "None".] see attached list

[If you need more space please attach a separate continuation sheet]

The Executive certifies that the foregoing is true, accurate and complete.

The Executive's Name:	Barbara White
Date:	4/21/2020
Signature:	*/s/ Barbara White*

Exhibit 10.3

FOURTH AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This FOURTH AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement"), effective as of April 11, 2020 (the "**Effective Date**"), is between Corbus Pharmaceuticals Holdings, Inc. (the "**Company**") and Sean Moran (the "**Executive**").

WITNESSETH:

WHEREAS, the Executive has been employed by the Company as its Chief Financial Officer pursuant to the terms of a third amended and restated employment agreement effective April 11, 2020 (the "**Prior 2020 Employment Agreement**");

WHEREAS, the Company desires to continue to employ the Executive as its Chief Financial Officer, and the Executive desires to accept such continued employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall amend, restate and replace the Prior 2020 Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. **EMPLOYMENT**. Subject to the terms and conditions set forth herein, the Company hereby employs the Executive, and the Executive hereby accepts such employment by the Company commencing on the Effective Date.

2. **SCOPE OF EMPLOYMENT**. During the term of this Agreement, Executive shall hold the position of Chief Financial Officer and shall have those duties and responsibilities customarily associated with the title of Chief Financial Officer plus any additional duties as may reasonably be assigned to him from time to time by the Company. The Executive shall report directly to the Chief Executive Officer and work closely with other members of the management team. The Executive will devote his full time and best efforts to the business and affairs of the Company. The Executive shall be subject to and comply with the Company's policies, procedures and approval practices as generally in effect at any time and from time to time.

3. **PREVIOUS OBLIGATIONS**. The Executive represents that his employment by the Company and the performance of his duties on behalf of the Company does not, and shall not, breach any agreement that obligates the Executive to keep in confidence any trade secrets or confidential or proprietary information of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Executive shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

4. **COMPENSATION**. As full compensation for all services to be rendered by Executive during the term of this Agreement, the Company will compensate the Executive as follows.

4.1 **Base Salary**. The Company shall pay the Executive a base salary (the "**Base Salary**") at the annualized rate of $400,000, which shall be subject to customary withholdings and authorized deductions and shall be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base Salary shall be subject to review on at least an annual basis. The foregoing annualized rate will be effective for fiscal year 2020 and may be reevaluated by the Company's Board of Directors for fiscal year 2021.

4.2 **Annual Bonus**.

(a) The Executive will be eligible to participate in an annual executive bonus plan pursuant to which he may earn a bonus ("**Bonus**") equal to up to 40% of his Base Salary (such maximum bonus may be referred to as the "**Target Bonus**").

(b) Prior to the commencement of each calendar year the Company's Board of Directors (the "**Board**") will establish and approve the Target Bonus for such calendar year. Achievement of the Target Bonus will be based on the Executive meeting individual objectives and the Company meeting Company-wide objectives (collectively, the "**Performance Criteria**").

(c) The Board may, in its discretion, grant the Executive a Bonus in excess of the Target Bonus if the Performance Criteria are exceeded.

(d) Following the close of each calendar year but in no event later than January 30th, the Board will meet and determine the extent to which the Performance Criteria have been achieved for such year and the amount of the Bonus. Based on that determination, payment of the Bonus (if any) shall be made by March 15th.

(e) Notwithstanding the foregoing to the contrary (including all Performance Criteria being met), payment of the Bonus shall be at the sole and absolute discretion of the Board, based on, among other things, the financial condition of the Company.

4.3 **Stock Option Grants.** During the Term (as defined below), subject to the terms of the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Compensation Plan (the "**2014 Plan**") or any successor equity compensation plan as may be in place from time to time and separate award agreements, the Executive also shall be eligible to receive from time to time additional stock options or other awards in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

4.4 **Benefits**. During his employment and subject to any contribution therefore generally required of employees of the Company, the Executive shall be entitled to participate in any and all employee benefit plans from time to time in effect for executive employees of the Company generally. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board or any administrative or other committee provided for in or contemplated by such plan. The Company may alter, modify, add to or delete its employee benefit plans at any time as it, in its sole judgment, deems appropriate.

4.5 **Vacations, Sick Time, Holidays, and Other Leave**. During the term of his employment, the Executive shall be entitled to paid time off, including vacation time, sick time, holidays, and other leave time, in accordance with the Company's policies in force in its Employee Handbook as of the Effective Date of this Agreement or as such policies may be modified from time to time by the Company.

4.6 **Changes to Compensation**. The Company may, at its sole discretion, change the terms and conditions of Executive's employment, including without limitation, the terms of the Executive's compensation (other than the terms and conditions of outstanding options or other awards under the 2014 Plan which shall continue to be governed by the applicable award agreements and the 2014 Plan). After completion of the Term (as defined below), the Company shall give the Executive at least 14 days' prior written notice of any changes to Executive's compensation.

5. **EXPENSES**. The Executive shall be entitled to reimbursement by the Company for all necessary and reasonable travel, entertainment and other business expenses incurred by him in connection with his duties hereunder. The Company shall reimburse the Executive for all such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies as in effect from time to time.

6. CONFIDENTIALITY.

6.1 **Definition**. During the term of his employment, the Executive will have access to the Company's confidential business information (the "**Confidential Information**"). Confidential Information means all trade secrets, know-how, show-how, theories, technical, operating, financial and other business information relating to the Company, its affiliates and each of their respective businesses or potential businesses, whether or not reduced to writing or other medium, and whether or not marked or labeled confidential, proprietary or the like, specifically including, without limitation, the following: inventions (including, without limitation, Work Product (as defined below)), designs, data, computer code, works of authorship, formulas, compounds, indications, techniques, ideas, discoveries, products and services under development, investor, customer and vendor information of any kind, marketing and business plans, pricing and profit margins, memoranda, notes, records, files, reports and other documentation, processes, business methods, improvements, modifications and creations, methodology, concepts, research, specifications, data processes, operations procedures, computer systems and software; provided, however, that Confidential Information shall not include information that is or becomes generally available to the public, unless such information has become generally available as a result of the Executive's direct or indirect act or omission or as a result of the disclosure by any other person in violation of any contractual, legal or fiduciary obligation.

6.2 **Use of Confidential Information**. Subject to the other provisions of this Agreement, the Executive shall use Confidential Information only in the performance of the Executive's duties for the Company. Subject to the other provisions of this Agreement, the Executive shall not use Confidential Information at any time (during or after the Executive's employment) for the Executive's personal benefit or in any manner adverse to the interests of the Company, its affiliates, or any of their respective investors and clients.

6.3 **Protection and Non-Disclosure of Confidential Information**. The Executive shall safeguard the Confidential Information by all reasonable steps and abide by all policies and procedures of the Company in effect from time to time regarding storage, copying, destroying, publication or posting, and handling of such Confidential Information, in whatever medium or format that Confidential Information takes. At all times during and after his employment by the Company, the Executive shall not disclose Confidential Information at any time except to persons or entities authorized by the Company to receive this information or as otherwise permitted by this Agreement. For the avoidance of doubt, the Executive is permitted, subject to the other provisions of this Agreement, to disclose Confidential Information to third parties with whom or which the Company has entered into confidentiality agreements. Notwithstanding the foregoing, nothing in this Agreement shall be construed to prevent disclosure of Confidential Information when required to do so by a court of law, a governmental agency, or an administrative or legislative body (each with jurisdiction to order the Executive to divulge, disclose or make accessible such information); provided that, the Executive shall give prompt written notice to the Company of such requirement and reasonably cooperate with any attempt by the Company and/or its affiliates to obtain a protective order or similar treatment. Notwithstanding the foregoing, nothing in this Agreement prohibits, limits, or otherwise interferes with the Executive's protected rights under federal, state or local law to, without notice to the Company, (i) communicate or file a charge with a government regulator; (ii) participate in an investigation or proceeding conducted by a government regulator; or (iii) receive an award paid by a government regulator for providing information.

6.4 **Return of Confidential Information**. Upon request of the Company, the Executive will promptly (i) deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect Confidential Information (including all copies, reproductions, digests, abstracts, analyses, and notes) and (ii) destroy any intangible materials that evidence, contain or reflect Confidential Information on equipment or media not owned by the Company.

6.5 **Other Agreements**. The Executive shall execute and abide by all confidentiality agreements which the Company reasonably requests the Executive to sign or abide by, whether those agreements are for the benefit of the Company, an affiliate of the Company, or an actual or a potential client thereof.

6.6 **Defend Trade Secrets**. The Executive acknowledges that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret if (i) the Executive makes such disclosure in confidence to a federal, State, or local government official, either directly or indirectly, or to an attorney and such disclosure is made solely for the purpose of reporting or investigating a suspected violation of law, or (ii) the Executive makes such disclosure in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. Further, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the employer's trade secrets to the attorney and use the trade secret information in the court proceeding if the individual: (i) files any document containing the trade secret under seal; and (ii) does not disclose the trade secret, except pursuant to court order. Nothing contained herein will waive, limit or affect any rights of the Company under any applicable trade secrets laws, including Defend Trade Secrets Act of 2016, which will be enforceable separate and apart from this Agreement.

7. **ASSIGNMENT OF WORK PRODUCT**.

7.1 **Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Intellectual Property**" means collectively all Work Product and all Intellectual Property Rights relating to all Work Product.

"**Intellectual Property Rights**" means all copyrights, copyright registrations and copyright applications, trademarks, service marks, trade dress, trade names, trademark registrations and trademark applications, patents and patent applications, trade secret rights, and all other intellectual property rights and intellectual property interests existing, created or protectable under any intellectual property or other law of any nation.

"**Work Product**" means any and all inventions, discoveries, works of authorship, developments, improvements, formulas, compounds, indications, techniques, concepts, data and ideas (whether or not patentable or registerable under patent, copyright, or similar statute) made, conceived, prepared, created, discovered, or reduced to practice by the Executive, either alone or jointly with others, during the period of his employment, that (i) result or relate to work performed by the Executive for the Company, (ii) are made by use of the equipment, supplies, facilities or Confidential Information of the Company, or are made, conceived or completed, wholly or in part, during hours in which the Executive is working for the Company, or (iii) are related to the business of the Company or the actual or demonstrably anticipated business of the Company.

7.2 **Property of the Company**. All Intellectual Property is and will be the sole property of the Company.

7.3 **Copyrights; Assignment**. The Executive agrees that all copyrightable materials that fall within the definition of Work Product, will be, to the maximum extent permitted by law, works-made-for-hire for the Company under copyright law, and to the extent not works-made-for-hire, the Executive hereby irrevocably assigns to the Company, without royalty or further consideration to the Executive, all right, title, and interest he may have, or may acquire, in and to all Intellectual Property.

7.4 **Disclosure**. The Executive will promptly disclose in writing all Work Product to the Company. The Executive agrees to keep adequate and current written records of all such Work Product, in the form of notes, sketches, drawings, electronic records and/or other reports, which records are, and will remain, the sole property of the Company and will be available to the Company at all times.

7.5 **Execution of Documents**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will promptly sign and deliver to the Company any and all applications, assignments and other documents that the Company considers necessary or desirable in order to: (a) assign, apply for, obtain, and maintain any Intellectual Property Rights in the United States and for other countries relating to any Work Product, (b) assign and convey to the Company or its designee the sole and exclusive right, title, and interest in and to all Intellectual Property, (c) provide evidence regarding the Intellectual Property that the Company considers necessary or desirable, and (d) confirm the Company's ownership of the Intellectual Property, all without royalty or any other further consideration to the Executive.

7.6 **Assistance to the Company**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will assist the Company in assigning, obtaining, maintaining, defending, registering and from time to time enforcing, in any and all countries, the Company's right to the Intellectual Property. This assistance may include, without limitation, testifying in a suit or other proceeding. If the Company requires assistance from the Executive after termination of his employment, other than assistance as set forth in Section 7.5, the Executive will be compensated for time actually spent in providing assistance at an hourly rate equivalent to his compensation at the time his employment was terminated together with his reasonable, actual out-of-pocket expenses incurred in providing such assistance, to the extent permitted by applicable law and/or court rules.

7.7 **Power of Attorney**. For use in the case that the Company cannot obtain the Executive's signature on any document that the Company considers necessary or desirable in order to assign, apply for, prosecute, obtain, or enforce any Intellectual Property, whether due to the Executive's non-cooperation, unavailability, or any other reason, the Executive hereby irrevocably designates and appoints the Company and each of its duly authorized officers and agents as his agent and attorney-in-fact to act for, and on the Executive's behalf, to execute and file any such document and to do all other lawfully permitted acts to further the assignment, transfer to the Company, application, registration, prosecution, issuance, and enforcement of all Intellectual Property, with the same force and effect as if executed and delivered by the Executive.

7.8 **Prior Inventions**. The Executive represents that any inventions, prior works of authorship, discoveries, concepts or ideas, if any, to which the Executive presently has any right, title or interest, and which were previously conceived either wholly or in part by the Executive, and that the Executive desires to exclude from the operation of this Agreement are identified on Schedule A of this Agreement (each a "**Prior Invention**"). The Executive represents that the list contained in Schedule A is complete to the best of his knowledge. If during the Executive's retention with the Company, the Executive incorporates a Prior Invention into a Company product, process or service or its use, the Executive shall be deemed to have automatically granted to the Company a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, display, perform sell and otherwise use such Prior Invention as part of or in connection with any Company product, process or service. The Executive shall not incorporate a Prior Invention into a Company product, process or service or its use without the Company's prior written consent.

8. NON-COMPETITION; NON-SOLICITATION.

8.1 **Non-competition**. To protect the Company's legitimate interests in, among other things, the Company's Confidential Information, trade secrets, and goodwill, during the Employment Period and the Non-Competition Restricted Period (as defined below), the Executive shall not, in any geographic location where within the two years prior to cessation of employment with the Company the Executive provided services to the Company or had a material presence or influence, directly or indirectly, whether as a partner, principal, shareholder, licensor, licensee, employee, officer, director, manager, agent, representative, advisor, promoter, associate, investor, or otherwise, assist in or engage in providing any services that the Executive provided to the Company during the prior two years, to a Competitive Business (as defined below). The geographic limitation as set forth in this Section 8.1 does not apply during the Employment Period, during which there is no geographic limitation to the restrictions as set forth in this Section 8.1.

In furtherance of the foregoing, the Company will provide the Executive with the following:

(a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term (as defined below) other than during the Change in Control Period (as defined in subsection 8.1(b)), the Company shall pay to the Executive an amount equal to twelve months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment.

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined in Section 11.4) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 8.1(a) above, the Company shall pay to the Executive an amount equal to eighteen (18) months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 8.1(a), such payments or benefits shall be taken into account for purposes of this subsection 8.1(b).

The Executive has the right to consult with counsel prior to signing this Agreement, including this Section 8.1. This Section 8.1 shall not be effective until after ten (10) business days from the date the Executive received notice of this Section 8.1, but in no case earlier than the Effective Date of this Agreement.

The Executive shall not provide any services to any other person, company, entity or firm while the Executive is employed by the Company without the Company's written consent and may not do anything that may result in an actual or perceived conflict of interest to the Company.

During the Non-Competition Restricted Period, the Executive shall, upon the Company's request, honestly, accurately, and completely provide the Company with the name of any prospective new employer or hiring entity that follows the Executive's separation from the Company. During the Employment Period, the Non-Competition Restricted Period, and the Non-Solicitation Restricted Period (defined below), the Executive shall, upon the Company's request, provide a copy of this Agreement to any person, company, entity or firm.

8.2 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Competitive Business**" means any business that is developing or has developed a cannabinoid agonist for the treatment of scleroderma, cystic fibrosis or other inflammatory or fibrotic diseases.

"**Employment Period**" means the period commencing on the Effective Date and continuing through and including the date of cessation of the Executive's employment with the Company.

"Non-Competition Restricted Period" means the 6 months from the date of cessation of the Executive's employment with the Company.

"Non-Solicitation Restricted Period" means the 12 months from the date of cessation of the Executive's employment with the Company.

8.3 **Non-Solicitation**. During the Employment Period and the Non-Solicitation Restricted Period, the Executive shall not, directly or indirectly, whether on behalf of himself or anyone else: (i) induce or attempt to induce a business associate of the Company to refrain from doing business with the Company; or (ii) solicit any of the employees of the Company to leave the employ of the Company or hire anyone who is an employee of the Company or has worked for the Company during the previous 12 months. The Non-Solicitation Restricted Period shall be extended by the length of any period during which the Executive is in breach of the terms and conditions of this Section 8.3.

8.4 **Separate Covenants**. The Executive acknowledges and agrees that the covenants set forth in this Section 8 are an essential element of this Agreement and the transactions contemplated hereby and that, but for the agreement of the Executive to comply with such covenants, the Company would not have entered into this Agreement.

8.5 **Blue Pencil Provision**. The parties hereby expressly agree that the duration, scope and geographic area of restriction set forth in this Section 8 are reasonable and necessary to protect the legitimate business interests of the Company. If any provision of this Agreement should be found by any court of competent jurisdiction to be unenforceable for any reason, including but not limited to being too broad as to duration, scope, or area of restriction, then, and in that event, such provision will nonetheless remain valid and fully effective, but will be considered to be amended so that the duration, scope, and/or area of restriction set forth will be changed to be the maximum duration, scope, or area of restriction, as the case may be, that would be found enforceable by such court.

9. **INJUNCTIVE RELIEF**. The Executive acknowledges that the Company shall not have an adequate remedy in the event that the Executive breaches Section 6, 7, 8 or 12 of this Agreement and that the Company will suffer irreparable damage and injury in such event. The Executive agrees that the Company, in addition to any other available rights and remedies, shall be entitled to seek an injunction (without the necessity of posting a bond) restraining the Executive from committing or continuing any violation of Section 6, 7, 8 or 12 of this Agreement.

10. **TERM; TERMINATION**

10.1. **Term**. Unless earlier terminated in accordance with the provisions of this Section 10, the term of this Agreement shall continue for a period of (2) years from the Effective Date (the "**Term**"). If the Company continues to employ the Executive after the expiration of the Term without a written extension of the term, such employment shall continue on an AT-WILL basis and the Company shall have the right to terminate the Executive's employment for any reason or no reason, with or without written notice.

10.2. **Death.** Upon the death of the Executive, the Executive's employment with the Company shall terminate.

10.3. **Disability.** If the Executive is unable to perform the essential functions of the Executive's employment with the Company for more than twelve weeks (unless a longer period is required by state or federal law), the Company shall have the right to terminate the Executive's employment upon prior written notice.

10.4 **Termination by the Executive.** The Executive may terminate this Agreement and his employment hereunder with or without Good Reason (as defined below) upon 30 days prior written notice to the Company.

10.5 **Termination by the Company.** The Company may terminate this Agreement and the Executive's employment hereunder (i) without Cause immediately upon written notice to the Executive or (ii) immediately for Cause.

10.6 **Certain Definitions.** The following capitalized terms shall have the meanings assigned to them below:

"**Cause**" means: (i) the Executive's chronic failure to perform those material duties assigned to him pursuant to Section 2 above to the reasonable satisfaction of the Board after written notice thereof and a reasonable opportunity to respond and/or cure of not less than 30 days; (ii) the Executive's gross negligence or misconduct (including but not limited to acts of fraud or theft or the violation of applicable laws) in connection with the performance of his duties; (iii) the Executive's material breach of Section 6, 7 or 8 above; (iv) the Executive's commission of an act of moral turpitude; (v) the Executive being dependent on or addicted to alcohol or drugs; or (vi) the Executive's conviction of or plea of nolo contendere to a felony.

"**Good Reason**" means the voluntary termination by the Executive within thirty (30) days following: (i) a requirement that the Executive physically relocates to another office that is more than 75 miles from the office location that the Executive reported to on the Effective Date; (ii) a reduction in the Executive's rate of compensation, potential incentive compensation, or general benefits (other than general changes, in each case, affecting all similarly situated employees to substantially the same extent); or (iii) a material adverse change in the Executive's job description or a significant reduction of the scope of the Executive's authority or responsibilities.

11. EFFECT OF TERMINATION

11.1 **Payments Upon Termination**. In the event that the Executive's employment with the Company is terminated for any reason, the Executive shall have the right to receive (i) the compensation and reimbursable expenses then accrued and/or earned and unpaid under Sections 4.1 and 5 of this Agreement through the date of termination, (ii) payment for unused vacation days accrued through the date of termination and (iii) any benefits required by the Consolidated Omnibus Budget Reconciliation Act of 1985.

11.2 **No Other Payments or Benefits**. The Executive acknowledges and agrees that upon the termination of his employment, no other benefits, compensation or remuneration of any kind is owed by the Company to the Executive other than as set forth in Sections 8.1 and 11 or as set forth in the agreements pertaining to stock options granted to the Executive by the Company.

11.3 **Survival**. Notwithstanding anything to the contrary set forth herein, Sections 6, 7, 8, 9 and 11-19 of this Agreement and any remedies for the breach thereof, shall survive the termination of this Agreement under the terms hereof. Termination of this Agreement shall not relieve or release either party from any rights, liabilities or obligations which it/he has accrued prior to the effective date of such termination.

11.4 **Additional Payments**. (a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term other than during the Change in Control Period (as defined in subsection 11.4(b)), (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twelve months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), and (B) if the Executive is entitled to a Bonus, subject to the Board's discretion and approval as set forth in Section 4.2 above, the Company shall pay such Bonus in accordance with the terms of the applicable plan and on the same basis as other participants in the plan except that the Bonus amount shall be prorated (based on the percentage of days the Executive was employed relative to the total number of days in the bonus earning period).

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined below) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 11.4(a) above, the Company shall (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of eighteen (18) months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), (B) pay the current year Bonus at the Target Bonus level, which payment shall be made by March 15th of the following calendar year, and (C) fully accelerate vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards upon the later of (x) the Change in Control or (y) the Executive's termination of employment with the Company. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 11.4(a), such payments or benefits shall be taken into account for purposes of this subsection 11.4(b).

As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

11.5 **Release Agreement**. In order to receive the payments and benefits set forth in Sections 8.1 and 11.4, as applicable, (collectively referred to herein as the "**Severance Payments**"), the Executive must timely execute (and not revoke) a separation agreement and general release (the "**Release Agreement**") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion and which form will include a non-compete provision. If the Executive is eligible for Severance Payments pursuant to Sections 8.1 and 11.4, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the date of termination of employment. The Severance Payments are subject to the Executive's execution and delivery of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

11.6 **Post-Termination Breach**. Notwithstanding anything to the contrary contained in this Agreement, the Company's obligation to provide the Severance Payments will immediately cease if the Executive breaches any of the provisions of Sections 6, 7 or 8, the Release Agreement or any other Agreement the Executive has with the Company.

12. **RETURN OF COMPANY PROPERTY; EXIT INTERVIEW**. Upon termination of the Executive's employment with the Company for any reason, the Executive will promptly:

(a) Deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect (A) Confidential Information or (B) Work Product, in each case whether prepared by the Executive or otherwise coming into the Executive's possession or control;

(b) Destroy any intangible materials that evidence, contain or reflect Confidential Information or Work Product on equipment or media not owned by the Company, unless otherwise directed by the Company; and

(c) Return to the Company all equipment, files, software programs and other personal property belonging to the Company.

Upon termination of the Executive's employment with the Company for any reason, the Executive will attend an exit interview with a representative of the Company to review the Executive's continuing obligations under this Agreement.

13. **ENTIRE AGREEMENT**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all contemporaneous and prior agreements and understandings between them as to such subject matter. Not in limitation of the foregoing, this Agreement supersedes the Prior 2020 Employment Agreement. Except as otherwise expressly provided herein, this Agreement may not be amended except by an instrument in writing executed by the Company and the Executive. Subject to the other provisions of this Agreement, any subsequent change or changes in the Executive's duties, salary, or compensation will not affect the validity or scope of this Agreement, including the validity or scope of Section 8.

14. **ASSIGNMENT**. The Executive shall not be permitted to assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company.

15. **GOVERNING LAW; JURISDICTION**. This Agreement shall be construed and enforced in accordance with and governed by the laws of the Commonwealth of Massachusetts without giving effect to the principles of conflicts of laws thereof. The parties hereby consent and submit to the exclusive jurisdiction and venue of the courts located in Suffolk County, Massachusetts in connection with any actions or proceedings brought against either of them (or each of them) arising out of or relating to this Agreement.

16. **MISCELLANEOUS**. No waiver by either party of any term or condition of this Agreement, whether by conduct or otherwise, in any one or more instance, shall be deemed a continuing waiver of any such term or condition, or a waiver of any other term or condition of this Agreement. Headings set forth in this Agreement are solely for the convenience of the parties and have no legal effect. If any provision of this Agreement shall be found to be invalid by any court having competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof. This Agreement shall be (i) binding upon, and will inure to the benefit of, the parties and their permitted respective successors and assigns, (ii) construed without presumption of any rule requiring construction to be made against the party causing it to be drafted and (iii) executed in any number of counterparts, each of which will for all purposes be deemed to be an original, and all of which are identical.

17. **TAX WITHHOLDING**. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

18. **SECTION 409A COMPLIANCE.** All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the date of termination of employment and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Sections 8.1 and 11.4 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

19. **280G MODIFIED CUTBACK**.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar ($1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in a manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 19, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

IN WITNESS WHEREOF, the undersigned have executed this Employment Agreement.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: */s/ Yuval Cohen, Ph.D.*
Name: Yuval Cohen, Ph.D.
Title: Chief Executive Officer
Dated: 4/17/2020

By: */s/ Sean Moran*
Sean Moran
Dated: 4/17/2020
Address:

Schedule A

Executive Statement Regarding Prior Inventions

Except as set forth below, the Executive acknowledges that at this time he does not have any right, title or interest in or to any Prior Inventions (as defined in Section 7.8 of this Agreement) except those (if any) listed below:

[List any applicable Prior Inventions or write "None".] None

[If you need more space please attach a separate continuation sheet]

The Executive certifies that the foregoing is true, accurate and complete.

The Executive's Name: Sean Moran

Date: 4/17/2020

Signature: */s/ Sean Moran*

Exhibit 10.4

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement"), effective as of April 11, 2020 (the "**Effective Date**"), is between Corbus Pharmaceuticals Holdings, Inc. (the "**Company**") and Craig Millian (the "**Executive**").

WITNESSETH:

WHEREAS, the Executive has been employed by the Company as its Chief Commercial Officer pursuant to the terms of an employment agreement effective April 11, 2020 (the "**Prior 2020 Employment Agreement**");

WHEREAS, the Company desires to continue to employ the Executive as its Chief Commercial Officer, and the Executive desires to accept such continued employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall amend, restate and replace the Prior 2020 Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. **EMPLOYMENT**. Subject to the terms and conditions set forth herein, the Company hereby employs the Executive, and the Executive hereby accepts such employment by the Company commencing on the Effective Date.

2. **SCOPE OF EMPLOYMENT**. During the term of this Agreement, Executive shall hold the position of Chief Commercial Officer and shall have those duties and responsibilities customarily associated with the title of Chief Commercial Officer plus any additional duties as may reasonably be assigned to him from time to time by the Company. The Executive shall report directly to the Chief Executive Officer and work closely with other members of the management team. The Executive will devote his full time and best efforts to the business and affairs of the Company. The Executive shall be subject to and comply with the Company's policies, procedures and approval practices as generally in effect at any time and from time to time.

3. **PREVIOUS OBLIGATIONS**. The Executive represents that his employment by the Company and the performance of his duties on behalf of the Company does not, and shall not, breach any agreement that obligates the Executive to keep in confidence any trade secrets or confidential or proprietary information of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Executive shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

4. **COMPENSATION**. As full compensation for all services to be rendered by Executive during the term of this Agreement, the Company will compensate the Executive as follows.

4.1 **Base Salary**. The Company shall pay the Executive a base salary (the "**Base Salary**") at the annualized rate of $400,000, which shall be subject to customary withholdings and authorized deductions and shall be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base Salary shall be subject to review on at least an annual basis. The foregoing annualized rate will be effective for fiscal year 2020 and may be reevaluated by the Company's Board of Directors for fiscal year 2021.

4.2 **Annual Bonus**.

(a) The Executive will be eligible to participate in an annual executive bonus plan pursuant to which he may earn a bonus ("**Bonus**") equal to up to 40% of his Base Salary (such maximum bonus may be referred to as the "**Target Bonus**").

(b) Prior to the commencement of each calendar year the Company's Board of Directors (the "**Board**") will establish and approve the Target Bonus for such calendar year. Achievement of the Target Bonus will be based on the Executive meeting individual objectives and the Company meeting Company-wide objectives (collectively, the "**Performance Criteria**").

(c) The Board may, in its discretion, grant the Executive a Bonus in excess of the Target Bonus if the Performance Criteria are exceeded.

(d) Following the close of each calendar year but in no event later than January 30th, the Board will meet and determine the extent to which the Performance Criteria have been achieved for such year and the amount of the Bonus. Based on that determination, payment of the Bonus (if any) shall be made by March 15th.

(e) Notwithstanding the foregoing to the contrary (including all Performance Criteria being met), payment of the Bonus shall be at the sole and absolute discretion of the Board, based on, among other things, the financial condition of the Company.

4.3 **Stock Option Grants.** During the Term (as defined below), subject to the terms of the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Compensation Plan (the "**2014 Plan**") or any successor equity compensation plan as may be in place from time to time and separate award agreements, the Executive also shall be eligible to receive from time to time additional stock options or other awards in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

4.4 **Benefits**. During his employment and subject to any contribution therefore generally required of employees of the Company, the Executive shall be entitled to participate in any and all employee benefit plans from time to time in effect for executive employees of the Company generally. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board or any administrative or other committee provided for in or contemplated by such plan. The Company may alter, modify, add to or delete its employee benefit plans at any time as it, in its sole judgment, deems appropriate.

4.5 **Vacations, Sick Time, Holidays, and Other Leave**. During the term of his employment, the Executive shall be entitled to paid time off, including vacation time, sick time, holidays, and other leave time, in accordance with the Company's policies in force in its Employee Handbook as of the Effective Date of this Agreement or as such policies may be modified from time to time by the Company.

4.6 **Changes to Compensation**. The Company may, at its sole discretion, change the terms and conditions of Executive's employment, including without limitation, the terms of the Executive's compensation (other than the terms and conditions of outstanding options or other awards under the 2014 Plan which shall continue to be governed by the applicable award agreements and the 2014 Plan). After completion of the Term (as defined below), the Company shall give the Executive at least 14 days' prior written notice of any changes to Executive's compensation.

5. **EXPENSES**. The Executive shall be entitled to reimbursement by the Company for all necessary and reasonable travel, entertainment and other business expenses incurred by him in connection with his duties hereunder. The Company shall reimburse the Executive for all such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies as in effect from time to time.

6. **CONFIDENTIALITY.**

6.1 **Definition**. During the term of his employment, the Executive will have access to the Company's confidential business information (the "**Confidential Information**"). Confidential Information means all trade secrets, know-how, show-how, theories, technical, operating, financial and other business information relating to the Company, its affiliates and each of their respective businesses or potential businesses, whether or not reduced to writing or other medium, and whether or not marked or labeled confidential, proprietary or the like, specifically including, without limitation, the following: inventions (including, without limitation, Work Product (as defined below)), designs, data, computer code, works of authorship, formulas, compounds, indications, techniques, ideas, discoveries, products and services under development, investor, customer and vendor information of any kind, marketing and business plans, pricing and profit margins, memoranda, notes, records, files, reports and other documentation, processes, business methods, improvements, modifications and creations, methodology, concepts, research, specifications, data processes, operations procedures, computer systems and software; provided, however, that Confidential Information shall not include information that is or becomes generally available to the public, unless such information has become generally available as a result of the Executive's direct or indirect act or omission or as a result of the disclosure by any other person in violation of any contractual, legal or fiduciary obligation.

6.2 **Use of Confidential Information**. Subject to the other provisions of this Agreement, the Executive shall use Confidential Information only in the performance of the Executive's duties for the Company. Subject to the other provisions of this Agreement, the Executive shall not use Confidential Information at any time (during or after the Executive's employment) for the Executive's personal benefit or in any manner adverse to the interests of the Company, its affiliates, or any of their respective investors and clients.

6.3 **Protection and Non-Disclosure of Confidential Information**. The Executive shall safeguard the Confidential Information by all reasonable steps and abide by all policies and procedures of the Company in effect from time to time regarding storage, copying, destroying, publication or posting, and handling of such Confidential Information, in whatever medium or format that Confidential Information takes. At all times during and after his employment by the Company, the Executive shall not disclose Confidential Information at any time except to persons or entities authorized by the Company to receive this information or as otherwise permitted by this Agreement. For the avoidance of doubt, the Executive is permitted, subject to the other provisions of this Agreement, to disclose Confidential Information to third parties with whom or which the Company has entered into confidentiality agreements. Notwithstanding the foregoing, nothing in this Agreement shall be construed to prevent disclosure of Confidential Information when required to do so by a court of law, a governmental agency, or an administrative or legislative body (each with jurisdiction to order the Executive to divulge, disclose or make accessible such information); provided that, the Executive shall give prompt written notice to the Company of such requirement and reasonably cooperate with any attempt by the Company and/or its affiliates to obtain a protective order or similar treatment. Notwithstanding the foregoing, nothing in this Agreement prohibits, limits, or otherwise interferes with the Executive's protected rights under federal, state or local law to, without notice to the Company, (i) communicate or file a charge with a government regulator; (ii) participate in an investigation or proceeding conducted by a government regulator; or (iii) receive an award paid by a government regulator for providing information.

6.4 **Return of Confidential Information**. Upon request of the Company, the Executive will promptly (i) deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect Confidential Information (including all copies, reproductions, digests, abstracts, analyses, and notes) and (ii) destroy any intangible materials that evidence, contain or reflect Confidential Information on equipment or media not owned by the Company.

6.5 **Other Agreements**. The Executive shall execute and abide by all confidentiality agreements which the Company reasonably requests the Executive to sign or abide by, whether those agreements are for the benefit of the Company, an affiliate of the Company, or an actual or a potential client thereof.

6.6 **Defend Trade Secrets**. The Executive acknowledges that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret if (i) the Executive makes such disclosure in confidence to a federal, State, or local government official, either directly or indirectly, or to an attorney and such disclosure is made solely for the purpose of reporting or investigating a suspected violation of law, or (ii) the Executive makes such disclosure in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. Further, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the employer's trade secrets to the attorney and use the trade secret information in the court proceeding if the individual: (i) files any document containing the trade secret under seal; and (ii) does not disclose the trade secret, except pursuant to court order. Nothing contained herein will waive, limit or affect any rights of the Company under any applicable trade secrets laws, including Defend Trade Secrets Act of 2016, which will be enforceable separate and apart from this Agreement.

7. **ASSIGNMENT OF WORK PRODUCT**.

7.1 **Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Intellectual Property**" means collectively all Work Product and all Intellectual Property Rights relating to all Work Product.

"**Intellectual Property Rights**" means all copyrights, copyright registrations and copyright applications, trademarks, service marks, trade dress, trade names, trademark registrations and trademark applications, patents and patent applications, trade secret rights, and all other intellectual property rights and intellectual property interests existing, created or protectable under any intellectual property or other law of any nation.

"**Work Product**" means any and all inventions, discoveries, works of authorship, developments, improvements, formulas, compounds, indications, techniques, concepts, data and ideas (whether or not patentable or registerable under patent, copyright, or similar statute) made, conceived, prepared, created, discovered, or reduced to practice by the Executive, either alone or jointly with others, during the period of his employment, that (i) result or relate to work performed by the Executive for the Company, (ii) are made by use of the equipment, supplies, facilities or Confidential Information of the Company, or are made, conceived or completed, wholly or in part, during hours in which the Executive is working for the Company, or (iii) are related to the business of the Company or the actual or demonstrably anticipated business of the Company.

7.2 **Property of the Company**. All Intellectual Property is and will be the sole property of the Company.

7.3 **Copyrights; Assignment**. The Executive agrees that all copyrightable materials that fall within the definition of Work Product, will be, to the maximum extent permitted by law, works-made-for-hire for the Company under copyright law, and to the extent not works-made-for-hire, the Executive hereby irrevocably assigns to the Company, without royalty or further consideration to the Executive, all right, title, and interest he may have, or may acquire, in and to all Intellectual Property.

7.4 **Disclosure**. The Executive will promptly disclose in writing all Work Product to the Company. The Executive agrees to keep adequate and current written records of all such Work Product, in the form of notes, sketches, drawings, electronic records and/or other reports, which records are, and will remain, the sole property of the Company and will be available to the Company at all times.

7.5 **Execution of Documents**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will promptly sign and deliver to the Company any and all applications, assignments and other documents that the Company considers necessary or desirable in order to: (a) assign, apply for, obtain, and maintain any Intellectual Property Rights in the United States and for other countries relating to any Work Product, (b) assign and convey to the Company or its designee the sole and exclusive right, title, and interest in and to all Intellectual Property, (c) provide evidence regarding the Intellectual Property that the Company considers necessary or desirable, and (d) confirm the Company's ownership of the Intellectual Property, all without royalty or any other further consideration to the Executive.

7.6 **Assistance to the Company**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will assist the Company in assigning, obtaining, maintaining, defending, registering and from time to time enforcing, in any and all countries, the Company's right to the Intellectual Property. This assistance may include, without limitation, testifying in a suit or other proceeding. If the Company requires assistance from the Executive after termination of his employment, other than assistance as set forth in Section 7.5, the Executive will be compensated for time actually spent in providing assistance at an hourly rate equivalent to his compensation at the time his employment was terminated together with his reasonable, actual out-of-pocket expenses incurred in providing such assistance, to the extent permitted by applicable law and/or court rules.

7.7 **Power of Attorney**. For use in the case that the Company cannot obtain the Executive's signature on any document that the Company considers necessary or desirable in order to assign, apply for, prosecute, obtain, or enforce any Intellectual Property, whether due to the Executive's non-cooperation, unavailability, or any other reason, the Executive hereby irrevocably designates and appoints the Company and each of its duly authorized officers and agents as his agent and attorney-in-fact to act for, and on the Executive's behalf, to execute and file any such document and to do all other lawfully permitted acts to further the assignment, transfer to the Company, application, registration, prosecution, issuance, and enforcement of all Intellectual Property, with the same force and effect as if executed and delivered by the Executive.

7.8 **Prior Inventions**. The Executive represents that any inventions, prior works of authorship, discoveries, concepts or ideas, if any, to which the Executive presently has any right, title or interest, and which were previously conceived either wholly or in part by the Executive, and that the Executive desires to exclude from the operation of this Agreement are identified on Schedule A of this Agreement (each a "**Prior Invention**"). The Executive represents that the list contained in Schedule A is complete to the best of his knowledge. If during the Executive's retention with the Company, the Executive incorporates a Prior Invention into a Company product, process or service or its use, the Executive shall be deemed to have automatically granted to the Company a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, display, perform sell and otherwise use such Prior Invention as part of or in connection with any Company product, process or service. The Executive shall not incorporate a Prior Invention into a Company product, process or service or its use without the Company's prior written consent.

8. NON-COMPETITION; NON-SOLICITATION.

8.1 **Non-competition**. To protect the Company's legitimate interests in, among other things, the Company's Confidential Information, trade secrets, and goodwill, during the Employment Period and the Non-Competition Restricted Period (as defined below), the Executive shall not, in any geographic location where within the two years prior to cessation of employment with the Company the Executive provided services to the Company or had a material presence or influence, directly or indirectly, whether as a partner, principal, shareholder, licensor, licensee, employee, officer, director, manager, agent, representative, advisor, promoter, associate, investor, or otherwise, assist in or engage in providing any services that the Executive provided to the Company during the prior two years, to a Competitive Business (as defined below). The geographic limitation as set forth in this Section 8.1 does not apply during the Employment Period, during which there is no geographic limitation to the restrictions as set forth in this Section 8.1.

In furtherance of the foregoing, the Company will provide the Executive with the following:

(a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term (as defined below) other than during the Change in Control Period (as defined in subsection 8.1(b)), the Company shall pay to the Executive an amount equal to twelve months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment.

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined in Section 11.4) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 8.1(a) above, the Company shall pay to the Executive an amount equal to eighteen (18) months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 8.1(a), such payments or benefits shall be taken into account for purposes of this subsection 8.1(b).

The Executive has the right to consult with counsel prior to signing this Agreement, including this Section 8.1. This Section 8.1 shall not be effective until after ten (10) business days from the date the Executive received notice of this Section 8.1, but in no case earlier than the Effective Date of this Agreement.

The Executive shall not provide any services to any other person, company, entity or firm while the Executive is employed by the Company without the Company's written consent and may not do anything that may result in an actual or perceived conflict of interest to the Company.

During the Non-Competition Restricted Period, the Executive shall, upon the Company's request, honestly, accurately, and completely provide the Company with the name of any prospective new employer or hiring entity that follows the Executive's separation from the Company. During the Employment Period, the Non-Competition Restricted Period, and the Non-Solicitation Restricted Period (defined below), the Executive shall, upon the Company's request, provide a copy of this Agreement to any person, company, entity or firm.

8.2 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Competitive Business**" means any business that is developing or has developed a cannabinoid agonist for the treatment of scleroderma, cystic fibrosis or other inflammatory or fibrotic diseases.

"**Employment Period**" means the period commencing on the Effective Date and continuing through and including the date of cessation of the Executive's employment with the Company.

"**Non-Competition Restricted Period**" means the 6 months from the date of cessation of the Executive's employment with the Company.

"Non-Solicitation Restricted Period" means the 12 months from the date of cessation of the Executive's employment with the Company.

8.3 **Non-Solicitation**. During the Employment Period and the Non-Solicitation Restricted Period, the Executive shall not, directly or indirectly, whether on behalf of himself or anyone else: (i) induce or attempt to induce a business associate of the Company to refrain from doing business with the Company; or (ii) solicit any of the employees of the Company to leave the employ of the Company or hire anyone who is an employee of the Company or has worked for the Company during the previous 12 months. The Non-Solicitation Restricted Period shall be extended by the length of any period during which the Executive is in breach of the terms and conditions of this Section 8.3.

8.4 **Separate Covenants**. The Executive acknowledges and agrees that the covenants set forth in this Section 8 are an essential element of this Agreement and the transactions contemplated hereby and that, but for the agreement of the Executive to comply with such covenants, the Company would not have entered into this Agreement.

8.5 **Blue Pencil Provision**. The parties hereby expressly agree that the duration, scope and geographic area of restriction set forth in this Section 8 are reasonable and necessary to protect the legitimate business interests of the Company. If any provision of this Agreement should be found by any court of competent jurisdiction to be unenforceable for any reason, including but not limited to being too broad as to duration, scope, or area of restriction, then, and in that event, such provision will nonetheless remain valid and fully effective, but will be considered to be amended so that the duration, scope, and/or area of restriction set forth will be changed to be the maximum duration, scope, or area of restriction, as the case may be, that would be found enforceable by such court.

9. **INJUNCTIVE RELIEF**. The Executive acknowledges that the Company shall not have an adequate remedy in the event that the Executive breaches Section 6, 7, 8 or 12 of this Agreement and that the Company will suffer irreparable damage and injury in such event. The Executive agrees that the Company, in addition to any other available rights and remedies, shall be entitled to seek an injunction (without the necessity of posting a bond) restraining the Executive from committing or continuing any violation of Section 6, 7, 8 or 12 of this Agreement.

10. TERM; TERMINATION

10.1. **Term**. Unless earlier terminated in accordance with the provisions of this Section 10, the term of this Agreement shall continue for a period of (2) years from the Effective Date (the "**Term**"). If the Company continues to employ the Executive after the expiration of the Term without a written extension of the term, such employment shall continue on an AT-WILL basis and the Company shall have the right to terminate the Executive's employment for any reason or no reason, with or without written notice.

10.2. **Death.** Upon the death of the Executive, the Executive's employment with the Company shall terminate.

10.3. **Disability.** If the Executive is unable to perform the essential functions of the Executive's employment with the Company for more than twelve weeks (unless a longer period is required by state or federal law), the Company shall have the right to terminate the Executive's employment upon prior written notice.

10.4 **Termination by the Executive.** The Executive may terminate this Agreement and his employment hereunder with or without Good Reason (as defined below) upon 30 days prior written notice to the Company.

10.5 **Termination by the Company.** The Company may terminate this Agreement and the Executive's employment hereunder (i) without Cause immediately upon written notice to the Executive or (ii) immediately for Cause.

10.6 **Certain Definitions.** The following capitalized terms shall have the meanings assigned to them below:

"**Cause**" means: (i) the Executive's chronic failure to perform those material duties assigned to him pursuant to Section 2 above to the reasonable satisfaction of the Board after written notice thereof and a reasonable opportunity to respond and/or cure of not less than 30 days; (ii) the Executive's gross negligence or misconduct (including but not limited to acts of fraud or theft or the violation of applicable laws) in connection with the performance of his duties; (iii) the Executive's material breach of Section 6, 7 or 8 above; (iv) the Executive's commission of an act of moral turpitude; (v) the Executive being dependent on or addicted to alcohol or drugs; or (vi) the Executive's conviction of or plea of nolo contendere to a felony.

"**Good Reason**" means the voluntary termination by the Executive within thirty (30) days following: (i) a requirement that the Executive physically relocates to another office that is more than 75 miles from the office location that the Executive reported to on the Effective Date; (ii) a reduction in the Executive's rate of compensation, potential incentive compensation, or general benefits (other than general changes, in each case, affecting all similarly situated employees to substantially the same extent); or (iii) a material adverse change in the Executive's job description or a significant reduction of the scope of the Executive's authority or responsibilities

11. EFFECT OF TERMINATION

11.1 **Payments Upon Termination**. In the event that the Executive's employment with the Company is terminated for any reason, the Executive shall have the right to receive (i) the compensation and reimbursable expenses then accrued and/or earned and unpaid under Sections 4.1 and 5 of this Agreement through the date of termination, (ii) payment for unused vacation days accrued through the date of termination and (iii) any benefits required by the Consolidated Omnibus Budget Reconciliation Act of 1985.

11.2 **No Other Payments or Benefits**. The Executive acknowledges and agrees that upon the termination of his employment, no other benefits, compensation or remuneration of any kind is owed by the Company to the Executive other than as set forth in Sections 8.1 and 11 or as set forth in the agreements pertaining to stock options granted to the Executive by the Company.

11.3 **Survival**. Notwithstanding anything to the contrary set forth herein, Sections 6, 7, 8, 9 and 11-19 of this Agreement and any remedies for the breach thereof, shall survive the termination of this Agreement under the terms hereof. Termination of this Agreement shall not relieve or release either party from any rights, liabilities or obligations which it/he has accrued prior to the effective date of such termination.

11.4 **Additional Payments**. (a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term other than during the Change in Control Period (as defined in subsection 11.4(b)), (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twelve months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), and (B) if the Executive is entitled to a Bonus, subject to the Board's discretion and approval as set forth in Section 4.2 above, the Company shall pay such Bonus in accordance with the terms of the applicable plan and on the same basis as other participants in the plan except that the Bonus amount shall be prorated (based on the percentage of days the Executive was employed relative to the total number of days in the bonus earning period).

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined below) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 11.4(a) above, the Company shall (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of eighteen (18) months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), (B) pay the current year Bonus at the Target Bonus level, which payment shall be made by March 15th of the following calendar year, and (C) fully accelerate vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards upon the later of (x) the Change in Control or (y) the Executive's termination of employment with the Company. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 11.4(a), such payments or benefits shall be taken into account for purposes of this subsection 11.4(b).

As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

11.5 **Release Agreement**. In order to receive the payments and benefits set forth in Sections 8.1 and 11.4, as applicable, (collectively referred to herein as the "**Severance Payments**"), the Executive must timely execute (and not revoke) a separation agreement and general release (the "**Release Agreement**") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion and which form will include a non-compete provision. If the Executive is eligible for Severance Payments pursuant to Sections 8.1 and 11.4, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the date of termination of employment. The Severance Payments are subject to the Executive's execution and delivery of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

11.6 **Post-Termination Breach**. Notwithstanding anything to the contrary contained in this Agreement, the Company's obligation to provide the Severance Payments will immediately cease if the Executive breaches any of the provisions of Sections 6, 7 or 8, the Release Agreement or any other Agreement the Executive has with the Company.

12. **RETURN OF COMPANY PROPERTY; EXIT INTERVIEW**. Upon termination of the Executive's employment with the Company for any reason, the Executive will promptly:

(a) Deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect (A) Confidential Information or (B) Work Product, in each case whether prepared by the Executive or otherwise coming into the Executive's possession or control;

(b) Destroy any intangible materials that evidence, contain or reflect Confidential Information or Work Product on equipment or media not owned by the Company, unless otherwise directed by the Company; and

(c) Return to the Company all equipment, files, software programs and other personal property belonging to the Company.

Upon termination of the Executive's employment with the Company for any reason, the Executive will attend an exit interview with a representative of the Company to review the Executive's continuing obligations under this Agreement.

13. **ENTIRE AGREEMENT**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all contemporaneous and prior agreements and understandings between them as to such subject matter. Not in limitation of the foregoing, this Agreement supersedes the Prior 2020 Employment Agreement. Except as otherwise expressly provided herein, this Agreement may not be amended except by an instrument in writing executed by the Company and the Executive. Subject to the other provisions of this Agreement, any subsequent change or changes in the Executive's duties, salary, or compensation will not affect the validity or scope of this Agreement, including the validity or scope of Section 8.

14. **ASSIGNMENT**. The Executive shall not be permitted to assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company.

15. **GOVERNING LAW; JURISDICTION**. This Agreement shall be construed and enforced in accordance with and governed by the laws of the Commonwealth of Massachusetts without giving effect to the principles of conflicts of laws thereof. The parties hereby consent and submit to the exclusive jurisdiction and venue of the courts located in Suffolk County, Massachusetts in connection with any actions or proceedings brought against either of them (or each of them) arising out of or relating to this Agreement.

16. **MISCELLANEOUS**. No waiver by either party of any term or condition of this Agreement, whether by conduct or otherwise, in any one or more instance, shall be deemed a continuing waiver of any such term or condition, or a waiver of any other term or condition of this Agreement. Headings set forth in this Agreement are solely for the convenience of the parties and have no legal effect. If any provision of this Agreement shall be found to be invalid by any court having competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof. This Agreement shall be (i) binding upon, and will inure to the benefit of, the parties and their permitted respective successors and assigns, (ii) construed without presumption of any rule requiring construction to be made against the party causing it to be drafted and (iii) executed in any number of counterparts, each of which will for all purposes be deemed to be an original, and all of which are identical.

17. **TAX WITHHOLDING**. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

18. **SECTION 409A COMPLIANCE.** All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the date of termination of employment and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Sections 8.1 and 11.4 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

19. **280G MODIFIED CUTBACK**.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar ($1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in a manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 19, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

IN WITNESS WHEREOF, the undersigned have executed this Employment Agreement.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: */s/ Yuval Cohen, Ph.D.*
Name: Yuval Cohen, Ph.D.
Title: Chief Executive Officer
Dated: 4/17/2020

By: */s/ Craig Millian*
Craig Millian
Dated: 4/20/2020
Address:

Schedule A

Executive Statement Regarding Prior Inventions

Except as set forth below, the Executive acknowledges that at this time he does not have any right, title or interest in or to any Prior Inventions (as defined in Section 7.8 of this Agreement) except those (if any) listed below:

[List any applicable Prior Inventions or write "None".] None

[If you need more space please attach a separate continuation sheet]

The Executive certifies that the foregoing is true, accurate and complete.

The Executive's Name: Craig Millian

Date: 4/20/2020

Signature: */s/ Craig Millian*

Exhibit 10.5

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement"), effective as of April 11, 2020 (the "**Effective Date**"), is between Corbus Pharmaceuticals Holdings, Inc. (the "**Company**") and Robert Discordia (the "**Executive**").

WITNESSETH:

WHEREAS, the Executive has been employed by the Company as its Chief Operating Officer pursuant to the terms of an employment agreement effective April 11, 2020 (the "**Prior 2020 Employment Agreement**");

WHEREAS, the Company desires to continue to employ the Executive as its Chief Operating Officer, and the Executive desires to accept such continued employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall amend, restate and replace the Prior 2020 Employment Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. **EMPLOYMENT**. Subject to the terms and conditions set forth herein, the Company hereby employs the Executive, and the Executive hereby accepts such employment by the Company commencing on the Effective Date.

2. **SCOPE OF EMPLOYMENT**. During the term of this Agreement, Executive shall hold the position of Chief Operating Officer and shall have those duties and responsibilities customarily associated with the title of Chief Operating Officer plus any additional duties as may reasonably be assigned to him from time to time by the Company. The Executive shall report directly to the Chief Executive Officer and work closely with other members of the management team. The Executive will devote his full time and best efforts to the business and affairs of the Company. The Executive shall be subject to and comply with the Company's policies, procedures and approval practices as generally in effect at any time and from time to time.

3. **PREVIOUS OBLIGATIONS**. The Executive represents that his employment by the Company and the performance of his duties on behalf of the Company does not, and shall not, breach any agreement that obligates the Executive to keep in confidence any trade secrets or confidential or proprietary information of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Executive shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

4. **COMPENSATION**. As full compensation for all services to be rendered by Executive during the term of this Agreement, the Company will compensate the Executive as follows.

4.1 **Base Salary**. The Company shall pay the Executive a base salary (the "**Base Salary**") at the annualized rate of $400,000, which shall be subject to customary withholdings and authorized deductions and shall be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base Salary shall be subject to review on at least an annual basis. The foregoing annualized rate will be effective for fiscal year 2020 and may be reevaluated by the Company's Board of Directors for fiscal year 2021.

4.2 **Annual Bonus**.

(a) The Executive will be eligible to participate in an annual executive bonus plan pursuant to which he may earn a bonus ("**Bonus**") equal to up to 40% of his Base Salary (such maximum bonus may be referred to as the "**Target Bonus**").

(b) Prior to the commencement of each calendar year the Company's Board of Directors (the "**Board**") will establish and approve the Target Bonus for such calendar year. Achievement of the Target Bonus will be based on the Executive meeting individual objectives and the Company meeting Company-wide objectives (collectively, the "**Performance Criteria**").

(c) The Board may, in its discretion, grant the Executive a Bonus in excess of the Target Bonus if the Performance Criteria are exceeded.

(d) Following the close of each calendar year but in no event later than January 30th, the Board will meet and determine the extent to which the Performance Criteria have been achieved for such year and the amount of the Bonus. Based on that determination, payment of the Bonus (if any) shall be made by March 15th.

(e) Notwithstanding the foregoing to the contrary (including all Performance Criteria being met), payment of the Bonus shall be at the sole and absolute discretion of the Board, based on, among other things, the financial condition of the Company.

4.3 **Stock Option Grants.** During the Term (as defined below), subject to the terms of the Corbus Pharmaceuticals Holdings, Inc. 2014 Equity Compensation Plan (the "**2014 Plan**") or any successor equity compensation plan as may be in place from time to time and separate award agreements, the Executive also shall be eligible to receive from time to time additional stock options or other awards in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

4.4 **Benefits**. During his employment and subject to any contribution therefore generally required of employees of the Company, the Executive shall be entitled to participate in any and all employee benefit plans from time to time in effect for executive employees of the Company generally. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the Board or any administrative or other committee provided for in or contemplated by such plan. The Company may alter, modify, add to or delete its employee benefit plans at any time as it, in its sole judgment, deems appropriate.

4.5 **Vacations, Sick Time, Holidays, and Other Leave**. During the term of his employment, the Executive shall be entitled to paid time off, including vacation time, sick time, holidays, and other leave time, in accordance with the Company's policies in force in its Employee Handbook as of the Effective Date of this Agreement or as such policies may be modified from time to time by the Company.

4.6 **Changes to Compensation**. The Company may, at its sole discretion, change the terms and conditions of Executive's employment, including without limitation, the terms of the Executive's compensation (other than the terms and conditions of outstanding options or other awards under the 2014 Plan which shall continue to be governed by the applicable award agreements and the 2014 Plan). After completion of the Term (as defined below), the Company shall give the Executive at least 14 days' prior written notice of any changes to Executive's compensation.

5. **EXPENSES**. The Executive shall be entitled to reimbursement by the Company for all necessary and reasonable travel, entertainment and other business expenses incurred by him in connection with his duties hereunder. The Company shall reimburse the Executive for all such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies as in effect from time to time.

6. CONFIDENTIALITY.

6.1 **Definition**. During the term of his employment, the Executive will have access to the Company's confidential business information (the "**Confidential Information**"). Confidential Information means all trade secrets, know-how, show-how, theories, technical, operating, financial and other business information relating to the Company, its affiliates and each of their respective businesses or potential businesses, whether or not reduced to writing or other medium, and whether or not marked or labeled confidential, proprietary or the like, specifically including, without limitation, the following: inventions (including, without limitation, Work Product (as defined below)), designs, data, computer code, works of authorship, formulas, compounds, indications, techniques, ideas, discoveries, products and services under development, investor, customer and vendor information of any kind, marketing and business plans, pricing and profit margins, memoranda, notes, records, files, reports and other documentation, processes, business methods, improvements, modifications and creations, methodology, concepts, research, specifications, data processes, operations procedures, computer systems and software; provided, however, that Confidential Information shall not include information that is or becomes generally available to the public, unless such information has become generally available as a result of the Executive's direct or indirect act or omission or as a result of the disclosure by any other person in violation of any contractual, legal or fiduciary obligation.

6.2 **Use of Confidential Information**. Subject to the other provisions of this Agreement, the Executive shall use Confidential Information only in the performance of the Executive's duties for the Company. Subject to the other provisions of this Agreement, the Executive shall not use Confidential Information at any time (during or after the Executive's employment) for the Executive's personal benefit or in any manner adverse to the interests of the Company, its affiliates, or any of their respective investors and clients.

6.3 **Protection and Non-Disclosure of Confidential Information**. The Executive shall safeguard the Confidential Information by all reasonable steps and abide by all policies and procedures of the Company in effect from time to time regarding storage, copying, destroying, publication or posting, and handling of such Confidential Information, in whatever medium or format that Confidential Information takes. At all times during and after his employment by the Company, the Executive shall not disclose Confidential Information at any time except to persons or entities authorized by the Company to receive this information or as otherwise permitted by this Agreement. For the avoidance of doubt, the Executive is permitted, subject to the other provisions of this Agreement, to disclose Confidential Information to third parties with whom or which the Company has entered into confidentiality agreements. Notwithstanding the foregoing, nothing in this Agreement shall be construed to prevent disclosure of Confidential Information when required to do so by a court of law, a governmental agency, or an administrative or legislative body (each with jurisdiction to order the Executive to divulge, disclose or make accessible such information); provided that, the Executive shall give prompt written notice to the Company of such requirement and reasonably cooperate with any attempt by the Company and/or its affiliates to obtain a protective order or similar treatment. Notwithstanding the foregoing, nothing in this Agreement prohibits, limits, or otherwise interferes with the Executive's protected rights under federal, state or local law to, without notice to the Company, (i) communicate or file a charge with a government regulator; (ii) participate in an investigation or proceeding conducted by a government regulator; or (iii) receive an award paid by a government regulator for providing information.

6.4 **Return of Confidential Information**. Upon request of the Company, the Executive will promptly (i) deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect Confidential Information (including all copies, reproductions, digests, abstracts, analyses, and notes) and (ii) destroy any intangible materials that evidence, contain or reflect Confidential Information on equipment or media not owned by the Company.

6.5 **Other Agreements**. The Executive shall execute and abide by all confidentiality agreements which the Company reasonably requests the Executive to sign or abide by, whether those agreements are for the benefit of the Company, an affiliate of the Company, or an actual or a potential client thereof.

6.6 **Defend Trade Secrets**. The Executive acknowledges that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret if (i) the Executive makes such disclosure in confidence to a federal, State, or local government official, either directly or indirectly, or to an attorney and such disclosure is made solely for the purpose of reporting or investigating a suspected violation of law, or (ii) the Executive makes such disclosure in a complaint or other document filed in a lawsuit or other proceeding if such filing is made under seal. Further, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the employer's trade secrets to the attorney and use the trade secret information in the court proceeding if the individual: (i) files any document containing the trade secret under seal; and (ii) does not disclose the trade secret, except pursuant to court order. Nothing contained herein will waive, limit or affect any rights of the Company under any applicable trade secrets laws, including Defend Trade Secrets Act of 2016, which will be enforceable separate and apart from this Agreement.

7. **ASSIGNMENT OF WORK PRODUCT**.

7.1 **Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Intellectual Property**" means collectively all Work Product and all Intellectual Property Rights relating to all Work Product.

"**Intellectual Property Rights**" means all copyrights, copyright registrations and copyright applications, trademarks, service marks, trade dress, trade names, trademark registrations and trademark applications, patents and patent applications, trade secret rights, and all other intellectual property rights and intellectual property interests existing, created or protectable under any intellectual property or other law of any nation.

"**Work Product**" means any and all inventions, discoveries, works of authorship, developments, improvements, formulas, compounds, indications, techniques, concepts, data and ideas (whether or not patentable or registerable under patent, copyright, or similar statute) made, conceived, prepared, created, discovered, or reduced to practice by the Executive, either alone or jointly with others, during the period of his employment, that (i) result or relate to work performed by the Executive for the Company, (ii) are made by use of the equipment, supplies, facilities or Confidential Information of the Company, or are made, conceived or completed, wholly or in part, during hours in which the Executive is working for the Company, or (iii) are related to the business of the Company or the actual or demonstrably anticipated business of the Company.

7.2 **Property of the Company**. All Intellectual Property is and will be the sole property of the Company.

7.3 **Copyrights; Assignment**. The Executive agrees that all copyrightable materials that fall within the definition of Work Product, will be, to the maximum extent permitted by law, works-made-for-hire for the Company under copyright law, and to the extent not works-made-for-hire, the Executive hereby irrevocably assigns to the Company, without royalty or further consideration to the Executive, all right, title, and interest he may have, or may acquire, in and to all Intellectual Property.

7.4 **Disclosure**. The Executive will promptly disclose in writing all Work Product to the Company. The Executive agrees to keep adequate and current written records of all such Work Product, in the form of notes, sketches, drawings, electronic records and/or other reports, which records are, and will remain, the sole property of the Company and will be available to the Company at all times.

7.5 **Execution of Documents**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will promptly sign and deliver to the Company any and all applications, assignments and other documents that the Company considers necessary or desirable in order to: (a) assign, apply for, obtain, and maintain any Intellectual Property Rights in the United States and for other countries relating to any Work Product, (b) assign and convey to the Company or its designee the sole and exclusive right, title, and interest in and to all Intellectual Property, (c) provide evidence regarding the Intellectual Property that the Company considers necessary or desirable, and (d) confirm the Company's ownership of the Intellectual Property, all without royalty or any other further consideration to the Executive.

7.6 **Assistance to the Company**. Whenever requested by the Company, both during the period of the Executive's employment and thereafter, the Executive will assist the Company in assigning, obtaining, maintaining, defending, registering and from time to time enforcing, in any and all countries, the Company's right to the Intellectual Property. This assistance may include, without limitation, testifying in a suit or other proceeding. If the Company requires assistance from the Executive after termination of his employment, other than assistance as set forth in Section 7.5, the Executive will be compensated for time actually spent in providing assistance at an hourly rate equivalent to his compensation at the time his employment was terminated together with his reasonable, actual out-of-pocket expenses incurred in providing such assistance, to the extent permitted by applicable law and/or court rules.

7.7 **Power of Attorney**. For use in the case that the Company cannot obtain the Executive's signature on any document that the Company considers necessary or desirable in order to assign, apply for, prosecute, obtain, or enforce any Intellectual Property, whether due to the Executive's non-cooperation, unavailability, or any other reason, the Executive hereby irrevocably designates and appoints the Company and each of its duly authorized officers and agents as his agent and attorney-in-fact to act for, and on the Executive's behalf, to execute and file any such document and to do all other lawfully permitted acts to further the assignment, transfer to the Company, application, registration, prosecution, issuance, and enforcement of all Intellectual Property, with the same force and effect as if executed and delivered by the Executive.

7.8 **Prior Inventions**. The Executive represents that any inventions, prior works of authorship, discoveries, concepts or ideas, if any, to which the Executive presently has any right, title or interest, and which were previously conceived either wholly or in part by the Executive, and that the Executive desires to exclude from the operation of this Agreement are identified on Schedule A of this Agreement (each a "**Prior Invention**"). The Executive represents that the list contained in Schedule A is complete to the best of his knowledge. If during the Executive's retention with the Company, the Executive incorporates a Prior Invention into a Company product, process or service or its use, the Executive shall be deemed to have automatically granted to the Company a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, display, perform sell and otherwise use such Prior Invention as part of or in connection with any Company product, process or service. The Executive shall not incorporate a Prior Invention into a Company product, process or service or its use without the Company's prior written consent.

8. NON-COMPETITION; NON-SOLICITATION.

8.1 **Non-competition**. To protect the Company's legitimate interests in, among other things, the Company's Confidential Information, trade secrets, and goodwill, during the Employment Period and the Non-Competition Restricted Period (as defined below), the Executive shall not, in any geographic location where within the two years prior to cessation of employment with the Company the Executive provided services to the Company or had a material presence or influence, directly or indirectly, whether as a partner, principal, shareholder, licensor, licensee, employee, officer, director, manager, agent, representative, advisor, promoter, associate, investor, or otherwise, assist in or engage in providing any services that the Executive provided to the Company during the prior two years, to a Competitive Business (as defined below). The geographic limitation as set forth in this Section 8.1 does not apply during the Employment Period, during which there is no geographic limitation to the restrictions as set forth in this Section 8.1.

In furtherance of the foregoing, the Company will provide the Executive with the following:

(a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason, during the Term (as defined below) other than during the Change in Control Period (as defined in subsection 8.1(b)), the Company shall pay to the Executive an amount equal to twelve months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment.

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined in Section 11.4) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 8.1(a) above, the Company shall pay to the Executive an amount equal to eighteen (18) months of his then current Base Salary under Section 4.1 above (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the date of termination of employment. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 8.1(a), such payments or benefits shall be taken into account for purposes of this subsection 8.1(b).

The Executive has the right to consult with counsel prior to signing this Agreement, including this Section 8.1. This Section 8.1 shall not be effective until after ten (10) business days from the date the Executive received notice of this Section 8.1, but in no case earlier than the Effective Date of this Agreement.

The Executive shall not provide any services to any other person, company, entity or firm while the Executive is employed by the Company without the Company's written consent and may not do anything that may result in an actual or perceived conflict of interest to the Company.

During the Non-Competition Restricted Period, the Executive shall, upon the Company's request, honestly, accurately, and completely provide the Company with the name of any prospective new employer or hiring entity that follows the Executive's separation from the Company. During the Employment Period, the Non-Competition Restricted Period, and the Non-Solicitation Restricted Period (defined below), the Executive shall, upon the Company's request, provide a copy of this Agreement to any person, company, entity or firm.

8.2 **Certain Definitions**. The following capitalized terms shall have the meanings assigned to them below:

"**Competitive Business**" means any business that is developing or has developed a cannabinoid agonist for the treatment of scleroderma, cystic fibrosis or other inflammatory or fibrotic diseases.

"**Employment Period**" means the period commencing on the Effective Date and continuing through and including the date of cessation of the Executive's employment with the Company.

"**Non-Competition Restricted Period**" means the 6 months from the date of cessation of the Executive's employment with the Company.

"Non-Solicitation Restricted Period" means the 12 months from the date of cessation of the Executive's employment with the Company.

8.3 **Non-Solicitation**. During the Employment Period and the Non-Solicitation Restricted Period, the Executive shall not, directly or indirectly, whether on behalf of himself or anyone else: (i) induce or attempt to induce a business associate of the Company to refrain from doing business with the Company; or (ii) solicit any of the employees of the Company to leave the employ of the Company or hire anyone who is an employee of the Company or has worked for the Company during the previous 12 months. The Non-Solicitation Restricted Period shall be extended by the length of any period during which the Executive is in breach of the terms and conditions of this Section 8.3.

8.4 **Separate Covenants**. The Executive acknowledges and agrees that the covenants set forth in this Section 8 are an essential element of this Agreement and the transactions contemplated hereby and that, but for the agreement of the Executive to comply with such covenants, the Company would not have entered into this Agreement.

8.5 **Blue Pencil Provision**. The parties hereby expressly agree that the duration, scope and geographic area of restriction set forth in this Section 8 are reasonable and necessary to protect the legitimate business interests of the Company. If any provision of this Agreement should be found by any court of competent jurisdiction to be unenforceable for any reason, including but not limited to being too broad as to duration, scope, or area of restriction, then, and in that event, such provision will nonetheless remain valid and fully effective, but will be considered to be amended so that the duration, scope, and/or area of restriction set forth will be changed to be the maximum duration, scope, or area of restriction, as the case may be, that would be found enforceable by such court.

9. **INJUNCTIVE RELIEF**. The Executive acknowledges that the Company shall not have an adequate remedy in the event that the Executive breaches Section 6, 7, 8 or 12 of this Agreement and that the Company will suffer irreparable damage and injury in such event. The Executive agrees that the Company, in addition to any other available rights and remedies, shall be entitled to seek an injunction (without the necessity of posting a bond) restraining the Executive from committing or continuing any violation of Section 6, 7, 8 or 12 of this Agreement.

10. **TERM; TERMINATION**

10.1. **Term**. Unless earlier terminated in accordance with the provisions of this Section 10, the term of this Agreement shall continue for a period of (2) years from the Effective Date (the "**Term**"). If the Company continues to employ the Executive after the expiration of the Term without a written extension of the term, such employment shall continue on an AT-WILL basis and the Company shall have the right to terminate the Executive's employment for any reason or no reason, with or without written notice.

10.2. **Death.** Upon the death of the Executive, the Executive's employment with the Company shall terminate.

10.3. **Disability.** If the Executive is unable to perform the essential functions of the Executive's employment with the Company for more than twelve weeks (unless a longer period is required by state or federal law), the Company shall have the right to terminate the Executive's employment upon prior written notice.

10.4 **Termination by the Executive.** The Executive may terminate this Agreement and his employment hereunder with or without Good Reason (as defined below) upon 30 days prior written notice to the Company.

10.5 **Termination by the Company.** The Company may terminate this Agreement and the Executive's employment hereunder (i) without Cause immediately upon written notice to the Executive or (ii) immediately for Cause.

10.6 **Certain Definitions.** The following capitalized terms shall have the meanings assigned to them below:

"**Cause**" means: (i) the Executive's chronic failure to perform those material duties assigned to him pursuant to Section 2 above to the reasonable satisfaction of the Board after written notice thereof and a reasonable opportunity to respond and/or cure of not less than 30 days; (ii) the Executive's gross negligence or misconduct (including but not limited to acts of fraud or theft or the violation of applicable laws) in connection with the performance of his duties; (iii) the Executive's material breach of Section 6, 7 or 8 above; (iv) the Executive's commission of an act of moral turpitude; (v) the Executive being dependent on or addicted to alcohol or drugs; or (vi) the Executive's conviction of or plea of nolo contendere to a felony.

"**Good Reason**" means the voluntary termination by the Executive within thirty (30) days following: (i) a requirement that the Executive physically relocates to another office that is more than 75 miles from the office location that the Executive reported to on the Effective Date; (ii) a reduction in the Executive's rate of compensation, potential incentive compensation, or general benefits (other than general changes, in each case, affecting all similarly situated employees to substantially the same extent); or (iii) a material adverse change in the Executive's job description or a significant reduction of the scope of the Executive's authority or responsibilities.

11. EFFECT OF TERMINATION

11.1 **Payments Upon Termination**. In the event that the Executive's employment with the Company is terminated for any reason, the Executive shall have the right to receive (i) the compensation and reimbursable expenses then accrued and/or earned and unpaid under Sections 4.1 and 5 of this Agreement through the date of termination, (ii) payment for unused vacation days accrued through the date of termination and (iii) any benefits required by the Consolidated Omnibus Budget Reconciliation Act of 1985.

11.2 **No Other Payments or Benefits**. The Executive acknowledges and agrees that upon the termination of his employment, no other benefits, compensation or remuneration of any kind is owed by the Company to the Executive other than as set forth in Sections 8.1 and 11 or as set forth in the agreements pertaining to stock options granted to the Executive by the Company.

11.3 **Survival**. Notwithstanding anything to the contrary set forth herein, Sections 6, 7, 8, 9 and 11-19 of this Agreement and any remedies for the breach thereof, shall survive the termination of this Agreement under the terms hereof. Termination of this Agreement shall not relieve or release either party from any rights, liabilities or obligations which it/he has accrued prior to the effective date of such termination.

11.4 **Additional Payments**. (a) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Good Reason during the Term other than during the Change in Control Period (as defined in subsection 11.4(b)), (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of twelve months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), and (B) if the Executive is entitled to a Bonus, subject to the Board's discretion and approval as set forth in Section 4.2 above, the Company shall pay such Bonus in accordance with the terms of the applicable plan and on the same basis as other participants in the plan except that the Bonus amount shall be prorated (based on the percentage of days the Executive was employed relative to the total number of days in the bonus earning period).

(b) Subject to Sections 11.5 and 11.6, in the event that the Executive's employment is terminated by the Company without Cause or by the Executive for Good Reason, during the Term and within the 3 months immediately preceding or the 12 months immediately following a Change in Control (as defined below) (each, the "**Change in Control Period**"), then in lieu of the payments set forth in subsection 11.4(a) above, the Company shall (A) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company shall reimburse the Executive for the cost of health insurance under COBRA for a period of eighteen (18) months; provided, however, that if and to the extent that the Company may not provide such COBRA reimbursement without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner, provided that the cost of doing so does not exceed the cost that the Company would have incurred had the COBRA reimbursement been provided in the manner described above or cause a violation of Section 409A (as defined below), (B) pay the current year Bonus at the Target Bonus level, which payment shall be made by March 15th of the following calendar year, and (C) fully accelerate vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards upon the later of (x) the Change in Control or (y) the Executive's termination of employment with the Company. For avoidance of doubt, if such termination precedes a Change in Control and any payments or benefits have commenced pursuant to subsection 11.4(a), such payments or benefits shall be taken into account for purposes of this subsection 11.4(b).
As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

11.5 **Release Agreement**. In order to receive the payments and benefits set forth in Sections 8.1 and 11.4, as applicable, (collectively referred to herein as the "**Severance Payments**"), the Executive must timely execute (and not revoke) a separation agreement and general release (the "**Release Agreement**") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion and which form will include a non-compete provision. If the Executive is eligible for Severance Payments pursuant to Sections 8.1 and 11.4, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the date of termination of employment. The Severance Payments are subject to the Executive's execution and delivery of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

11.6 **Post-Termination Breach**. Notwithstanding anything to the contrary contained in this Agreement, the Company's obligation to provide the Severance Payments will immediately cease if the Executive breaches any of the provisions of Sections 6, 7 or 8, the Release Agreement or any other Agreement the Executive has with the Company.

12. **RETURN OF COMPANY PROPERTY; EXIT INTERVIEW**. Upon termination of the Executive's employment with the Company for any reason, the Executive will promptly:

(a) Deliver to the Company all documents and other tangible media in the Executive's possession or control that evidence, contain or reflect (A) Confidential Information or (B) Work Product, in each case whether prepared by the Executive or otherwise coming into the Executive's possession or control;

(b) Destroy any intangible materials that evidence, contain or reflect Confidential Information or Work Product on equipment or media not owned by the Company, unless otherwise directed by the Company; and

(c) Return to the Company all equipment, files, software programs and other personal property belonging to the Company.

Upon termination of the Executive's employment with the Company for any reason, the Executive will attend an exit interview with a representative of the Company to review the Executive's continuing obligations under this Agreement.

13. **ENTIRE AGREEMENT**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all contemporaneous and prior agreements and understandings between them as to such subject matter. Not in limitation of the foregoing, this Agreement supersedes the Prior 2020 Employment Agreement. Except as otherwise expressly provided herein, this Agreement may not be amended except by an instrument in writing executed by the Company and the Executive. Subject to the other provisions of this Agreement, any subsequent change or changes in the Executive's duties, salary, or compensation will not affect the validity or scope of this Agreement, including the validity or scope of Section 8.

14. **ASSIGNMENT**. The Executive shall not be permitted to assign this Agreement or any rights or obligations hereunder without the prior written consent of the Company.

15. **GOVERNING LAW; JURISDICTION**. This Agreement shall be construed and enforced in accordance with and governed by the laws of the Commonwealth of Massachusetts without giving effect to the principles of conflicts of laws thereof. The parties hereby consent and submit to the exclusive jurisdiction and venue of the courts located in Suffolk County, Massachusetts in connection with any actions or proceedings brought against either of them (or each of them) arising out of or relating to this Agreement.

16. **MISCELLANEOUS**. No waiver by either party of any term or condition of this Agreement, whether by conduct or otherwise, in any one or more instance, shall be deemed a continuing waiver of any such term or condition, or a waiver of any other term or condition of this Agreement. Headings set forth in this Agreement are solely for the convenience of the parties and have no legal effect. If any provision of this Agreement shall be found to be invalid by any court having competent jurisdiction, the invalidity of such provision shall not affect the validity of the remaining provisions hereof. This Agreement shall be (i) binding upon, and will inure to the benefit of, the parties and their permitted respective successors and assigns, (ii) construed without presumption of any rule requiring construction to be made against the party causing it to be drafted and (iii) executed in any number of counterparts, each of which will for all purposes be deemed to be an original, and all of which are identical.

17. **TAX WITHHOLDING**. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

18. **SECTION 409A COMPLIANCE.** All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the date of termination of employment and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Sections 8.1 and 11.4 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

19. **280G MODIFIED CUTBACK**.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar ($1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in a manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 19, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

IN WITNESS WHEREOF, the undersigned have executed this Employment Agreement.

CORBUS PHARMACEUTICALS HOLDINGS, INC.

By: */s/ Yuval Cohen, Ph.D.*
Name: Yuval Cohen, Ph.D.
Title: Chief Executive Officer
Dated: 4/17/2020

By: */s/ Robert Discordia*
Robert Discordia
Dated: 4/20/2020
Address:

Schedule A

Executive Statement Regarding Prior Inventions

Except as set forth below, the Executive acknowledges that at this time he does not have any right, title or interest in or to any Prior Inventions (as defined in Section 7.8 of this Agreement) except those (if any) listed below:

[List any applicable Prior Inventions or write "None".] None

[If you need more space please attach a separate continuation sheet]

The Executive certifies that the foregoing is true, accurate and complete.

The Executive's Name:	Robert Discordia
Date:	4/20/2020
Signature:	*/s/ Robert Discordia*

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 March 31, 2020 of Corbus Pharmaceuticals Holdings, Inc.;

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

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

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

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

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: May 11, 2020

/s/ Yuval Cohen

Yuval Cohen
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT

TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sean M. Moran, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the period ended March 31, 2020 of Corbus Pharmaceuticals Holdings, Inc.;

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

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

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

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

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: May 11, 2020

/s/ Sean Moran

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

Exhibit 32.1

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

This Certification is being filed pursuant to 18 U.S.C. Section 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002. This Certification is included solely for the purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act and is not intended to be used for any other purpose. In connection with the accompanying Quarterly Report on Form 10-Q of Corbus Pharmaceuticals Holdings, Inc. for the quarter ended March 31, 2020, 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: May 11, 2020

Exhibit 32.2

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

This Certification is being filed pursuant to 18 U.S.C. Section 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002. This Certification is included solely for the purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act and is not intended to be used for any other purpose. In connection with the accompanying Quarterly Report on Form 10-Q of Corbus Pharmaceuticals Holdings, Inc. for the quarter ended March 31, 2020, 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: May 11, 2020