UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

CORTEXYME, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

2836 (Primary Standard Industrial Classification Code Number)

90-1024039 (I.R.S. Employer Identification Number)

269 East Grand Ave. South San Francisco, CA 94080

(415) 910-5717 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

> Casey C. Lynch **President and Chief Executive Officer** Cortexyme, Inc. 269 East Grand Ave.

South San Francisco, CA 94080
(415) 910-5717
(Name, address including zip code, and telephone number including area code, of agent for service)

COPIES TO: Scott M. Iyama, Esq. Niki Fang, Esq. Orrick, Herrington & Sutcliffe LLP 1000 Marsh Road Menlo Park, CA 94025 (650) 614-7400

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

	If	any	of th	e sec	curitie	s bein	ıg re	gistered	d on	this	Form	are	to b	e offer	ed o	n a (delaye	d or	contin	iuous	basis	purs	uant t	o Rule	415	under	the S	Securitie	s Act	of 1933	3, ch	eck the	followir	ıg
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If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $\hfill\Box$ If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of

the earlier effective registration statement for the same offering. \Box

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 Securities Exchange Act of 1934. Large accelerated filer

X X Non-accelerated filer Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ⊠

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Share(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee(3)
Common Stock, par value \$0.001 per share	2,500,000	\$35.61	\$89.025.000.00	\$11,555.45

The shares will be offered for resale by selling stockholders pursuant to the prospectus contained herein.

- Pursuant to Rule 416(a) under the Securities Act this registration statement also covers any additional number of shares of common stock issuable upon stock splits, stock dividends or other distribution, recapitalization or similar events with respect to the shares of common stock being registered pursuant to this registration statemen
- Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based upon the average of the high and low prices per share of the Registrant's common stock as reported on the Nasdaq Global Select Market on April 3, 2020. (3)

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders named in this prospectus are not soliciting offers to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

Subject to completion, dated April 7, 2020

2,500,000 Shares



Common Stock

This prospectus relates to the resale, from time to time, of up to 2,500,000 shares of our common stock by the selling stockholders (which term, as used in this prospectus, includes pledgees, donees, transferees or other successors-in-interest) identified in this prospectus. The selling stockholders acquired the shares registered hereunder in a private placement pursuant to stock purchase agreements, dated as of February 5, 2020, by and between us and the selling stockholders.

We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of the shares.

We have agreed to bear all of the expenses incurred in connection with the registration of these shares. The selling stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers or dealer managers and similar expenses, if any, incurred for the sale of shares of our common stock.

The selling stockholders identified in this prospectus may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the methods of sale that may be used by the selling stockholders, see the section entitled "Plan of Distribution" on page 14. For a list of the selling stockholders, see the section entitled "Selling Stockholders" on page 12.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "CRTX." On April 6, 2020, the closing sale price of our common stock as reported on the Nasdaq Global Select Market was \$38.80. You are urged to obtain current market quotations for the common stock.

We are an "emerging growth company" under applicable Securities and Exchange Commission rules and, as such, have elected to comply with certain reduced public company disclosure requirements for this prospectus and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company."

Our business and investment in our common stock involve significant risks. These risks are described in the section titled "Risk Factors" beginning on page 5 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is

, 2020

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You should read this prospectus and the information and documents we have incorporated by reference into the prospectus carefully because these documents contain important information you should consider when making your investment decision. See "Where You Can Find Additional Information" and "Incorporation of Documents by Reference."

You should rely only on the information contained or incorporated by reference in this prospectus. We have not, and the selling stockholders have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities, and the selling stockholders are not soliciting offers to buy these securities, in any state where the offer or sale of these securities is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or of any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since such dates.

PROSPECTUS SUMMARY

This summary highlights, and is qualified in its entirety by, the more detailed information included elsewhere in this prospectus or incorporated by reference herein. This summary does not contain all of the information that you should consider before investing in our securities. You should read and carefully consider the entire prospectus, especially the "Risk Factors" section of this prospectus, as well as our consolidated financial statements, notes to the consolidated financial statements and the other information incorporated by reference into this prospectus, as well as the exhibits to the registration statement of which this prospectus is a part, before making an investment decision.

CORTEXYME, INC.

We are a clinical stage biopharmaceutical company pioneering a novel disease-modifying therapeutic approach to treat what we believe to be a key underlying cause of Alzheimer's and other degenerative diseases. Our approach is based on the seminal discovery of the presence of *Porphyromonas gingivalis*, or *P. gingivalis*, and its secreted toxic virulence factor proteases, called gingipains, in the brains of greater than 90% of more than 100 Alzheimer's patients observed across multiple studies to date. Additionally, we have observed that *P. gingivalis* infection causes Alzheimer's pathology in animal models, and these effects have been successfully treated with a gingipain inhibitor in preclinical studies. Our proprietary lead drug candidate, COR388, is an orally-administered, brain-penetrating small molecule gingipain inhibitor. COR388 was well-tolerated with no concerning safety signals in our Phase 1a and Phase 1b clinical trials conducted to date, which enrolled a total of 67 subjects, including nine patients with mild to moderate Alzheimer's disease. We initiated a global Phase 2/3 clinical trial of COR388, called the GAIN trial, in mild to moderate Alzheimer's patients in April 2019 and expect top-line results by the end of 2021.

Recent Developments

On March 11, 2020, the World Health Organization declared the outbreak of a novel strain of coronavirus, COVID-19, a global pandemic, which continues to spread throughout the United States and around the world. Effective as of March 17, 2020, the health officers of all San Francisco Bay Area counties issued shelter-in-place orders, which directed all businesses in the San Francisco Bay Area to cease non-essential operations at physical locations in the counties, and these orders will continue to be in effect through May 3, 2020, unless extended, rescinded, or amended. In addition, effective as of March 19, 2020, the governor of California ordered the closure of all non-essential businesses in California until further notice. Similar orders have been issued in other state and local jurisdictions across the United States and in other countries. Because of the nature of our operations, we are currently considered to be an essential business so, to date, our operations have only been partially affected by this order. As we continue to actively advance all of our clinical programs, we are in close contact with our principal investigators and clinical sites, which are primarily located in the United States and Europe, and are assessing the impact of COVID-19 on our clinical trials, product candidate testing, expected timelines and costs on an ongoing basis. In light of recent developments relating to the COVID-19 global pandemic, the focus of healthcare providers and hospitals is the prioritization of healthcare resources toward fighting the virus. In addition, in response to the spread of COVID-19, we have closed our principal executive office, although our administrative employees continue to work from home, and we have revised the schedule and limited the number of staff in our laboratory. This partial disruption, although temporary, may impact our operations and overall business by delaying the progress of our research and development programs, including our planned preclinical studies and clinical trials. The impact of COVID-19 is evolving rapidly and its future effects are uncertain. Given the uncertainty of the situation, the duration of the disruption and related financial impact cannot be reasonably estimated at this time. We will continue to evaluate the impact of the COVID-19 pandemic on our business and expect to reevaluate the timing of our anticipated preclinical and clinical objectives as we learn more and the impact of COVID-19 on our industry becomes more clear.

Corporate Information

We were incorporated in Delaware on June 20, 2012. Our principal executive offices are located at 269 East Grand Avenue, South San Francisco, CA 94080. Our telephone number at that location is (415) 910-5717. Our corporate website address is www.cortexyme.com. Information contained on, or that may be accessed through, our website is not incorporated by reference into this prospectus and should not be considered a part of this prospectus

Cortexyme is a registered trademark of Cortexyme, Inc. All other brand names or trademarks appearing in this prospectus and the information incorporated herein by reference are the property of their respective holders. Solely for convenience, the trademarks and trade names in this prospectus and the information incorporated herein by reference are referred to without the ® and TM symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting requirements that are otherwise applicable generally to public companies. These reduced reporting requirements include, but are not limited to:

- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal control over financial reporting;
- · reduced disclosure about our executive compensation arrangements; and
- an exemption from the requirements to obtain a non-binding advisory vote on executive compensation or a stockholder approval of any golden parachute arrangements.

We will remain an emerging growth company until the earlier of (1) December 31, 2024, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th and (4) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have chosen to irrevocably "opt out" of the extended transition periods available under the JOBS Act for complying with new or revised accounting standards, but we currently intend to take advantage of the other exemptions discussed above. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

THE OFFERING

Common stock offered by selling stockholders 2,500,000 shares.

Use of proceeds We will not receive any proceeds from the sale of shares in this offering.

Risk factors You should read the "Risk Factors" section included in this prospectus or incorporated by

reference into this prospectus for a discussion of factors to consider carefully before

deciding to invest in shares of our common stock.

Nasdaq Global Select Market symbol "CRTX."

DESCRIPTION OF PRIVATE PLACEMENT WITH THE SELLING STOCKHOLDERS

On February 5, 2020, we entered into stock purchase agreements with the selling stockholders whereby, on February 10, 2020, we issued and sold in a private placement an aggregate of 2,500,000 shares of our common stock at a purchase price of \$50.00 per share for gross proceeds of \$125.0 million. For a detailed description of the transactions contemplated by the stock purchase agreements with the selling stockholders and the securities issued pursuant thereto, see the section captioned "Selling Stockholders" in this prospectus. We filed the registration statement on Form S-1, of which this prospectus forms a part, to fulfill our contractual obligations under the stock purchase agreements to provide for the resale by the selling stockholders of the shares of common stock offered hereby.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you decide to invest in our common stock, you should carefully consider the risks described in the section captioned "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019, and in our subsequent filings we make with the Securities and Exchange Commission, or SEC, from time to time, which are incorporated by reference herein in their entirety, together with the other information in this prospectus and documents incorporated by reference in this prospectus. The risks described in our Annual Report on Form 10-K for the year ended December 31, 2019, and in our other filings incorporated by reference herein are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. If any of the risks described in our most recent Annual Report on Form 10-K and the other filings incorporated by reference herein occurs, our business, financial condition, results of operations and future growth prospects could be harmed. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this report, including statements regarding our future results of operations and financial position, business strategy, product candidates, planned preclinical studies and clinical trials, research and development costs, regulatory approvals, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "predict," "project," "should," "target," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements contained in this prospectus and incorporated by reference herein include, among other things, statements about:

- our financial performance;
- the sufficiency of our existing cash and cash equivalents to fund our future operating expenses and capital expenditure requirements;
- · our ability to obtain funding for our operations, including funding necessary to develop and commercialize our drug candidates;
- the ability of our clinical trials to demonstrate safety and efficacy of our drug candidates, and other positive results;
- the success, cost and timing of our development activities, preclinical studies and clinical trials;
- the timing and focus of our future clinical trials, and the reporting of data from those trials;
- our plans relating to commercializing our drug candidates, if approved;
- our plans and ability to establish sales, marketing and distribution infrastructure to commercialize any drug candidates for which we obtain approval;
- our ability to attract and retain key scientific and clinical personnel;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our reliance on third parties to conduct clinical trials of our drug candidates, and for the manufacture of our drug candidates for preclinical studies and clinical trials;
- our ability to expand our drug candidates into additional indications and patient populations;
- the success of competing therapies that are or may become available;
- the beneficial characteristics, safety and efficacy of our drug candidate;
- regulatory developments in the United States and other jurisdictions;
- our ability to obtain and maintain regulatory approval of our drug candidates, and any related restrictions, limitations and/or warnings in the label of any approved drug candidate;
- our plans relating to the further development and manufacturing of our drug candidates, including additional indications for which we may pursue;
- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;

- the scope of protection we are able to establish and maintain for intellectual property rights covering our drug candidates and technology;
- · potential claims relating to our intellectual property;
- · our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and
- other risks and uncertainties, including those listed under the caption "Risk Factors" in our most recent Annual Report on Form 10-K, and other filings we make with the SEC.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus and incorporated by reference herein, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus, the documents incorporated by reference in this prospectus and the documents that we have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus and incorporated by reference herein are made as of the date hereof, and we do not assume any obligation to update any forward-looking statements except as required by applicable law.

This prospectus includes and incorporates by reference certain estimates, projections and other information concerning our industry, our business and the markets for our product candidates. We obtained the industry, market and similar data set forth in this report from our own internal estimates and research and from academic and industry research, publications, surveys and studies conducted by third parties, including governmental agencies. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. While we believe that the data we use from third parties are reliable, we have not separately verified these data. Further, while we believe our internal research is reliable, such research has not been verified by any third party. You are cautioned not to give undue weight to any such information, projections and estimates.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus is a part to permit holders of the shares of our common stock described in the section entitled "Selling Stockholders" to resell such shares. We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of shares by the selling stockholders.

The selling stockholders will pay any discounts, commissions, fees of underwriters, selling brokers or dealer managers and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, printing fees, Nasdaq listing fees and expenses of our counsel and our accountants.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of each transaction since January 1, 2017 and each currently proposed transaction in which:

- · we have been or are to be a participant;
- the amount involved exceeds \$120,000; and
- any of our directors, executive officers, or beneficial owners of more than 5% of our capital stock, or any immediate family member of or person sharing the household with any of these individuals, had or will have a direct or indirect material interest.

Series B Convertible Promissory Notes

From February 2017 through January 2018, we entered into convertible note purchase agreements pursuant to which we issued \$8.0 million in aggregate principal amount of convertible promissory notes, which we refer to as the Series B Convertible Promissory Notes. The Series B Convertible Promissory Notes accrued interest at a rate of 8% per year. The aggregate principal amount and accrued interest on the Series B Convertible Promissory Notes converted into shares of our Series B redeemable convertible preferred stock at a conversion price of \$9.6122 per share, minus a discount, upon the closing of the initial tranche of our Series B redeemable convertible preferred stock financing in May 2018.

The following table summarizes the Series B Convertible Promissory Note purchased by holders of more than 5% of our capital stock, and the conversion of such Series B Convertible Promissory Notes and accrued interest thereon into shares of our Series B redeemable convertible preferred stock.

Name of Stockholder	Series B Convertible Promissory Notes Principal Amount and Interest(\$)	Shares of Series B Redeemable Convertible Preferred Stock
Blue Devil Trust Date 12/03/2010(1)	1,105,777.10	143,798
Entities affiliated with Pfizer Inc.	1,658,665.65	215,697
Takeda Ventures, Inc.	1,658,665.65	215,697
Pierre R. and Christine E. Lamond and affiliated entities(2)(4)	1,105,777.10	143,798

(1) Mr. David A. Lamond, a member of our board of directors, is the trustee of the Blue Devil Trust dated 12/03/2010.

Sale of Series B Redeemable Convertible Preferred Stock

Between May 2018 and July 2018, we sold an aggregate of 9,152,108 shares of our Series B redeemable convertible preferred stock at a purchase price of \$9.6122 per share for an aggregate purchase price of \$85.8 million. This included the conversion of the Series B convertible promissory notes with an aggregate conversion amount of approximately \$8.8 million. Each share of our Series B redeemable convertible preferred stock was converted into one share of our common stock upon the closing of our initial public offering in accordance with our amended and restated certificate of incorporation. The purchasers of our Series B preferred stock are entitled to specified registration rights, subject to certain limitations.

The following table summarizes the Series B redeemable convertible preferred stock purchased by our directors, executive officers and beneficial holders of more than 5% of our capital stock. The terms of these purchases were the same for all purchasers of our Series B redeemable convertible preferred stock.

Name of Stockholder	Shares of Series B Redeemable Convertible Preferred	Aggregate Purchase
Blue Devil Trust dated 12/03/2010(2)	Stock 924.056	Price(\$)(1) 8,605,776.61
Entities affiliated with Pfizer Inc.	839,902	7,658,662.43
Takeda Ventures, Inc.	319,731	2,658,663.94
Pierre R. and Christine E. Lamond and affiliated entities	924,055	8,605,776.61
SMALLCAP World Fund, Inc.	1,560,515	14,999,999.01

- (1) A portion of the consideration paid for the shares of Series B redeemable convertible preferred stock issued in the initial closing was funded through the conversion of the aggregate principal amount and accrued interest under the Series B Convertible Promissory Notes. See "Series B Convertible Promissory Notes" above.
- (2) Mr. David A. Lamond, a member of our board of directors, is the trustee of the Blue Devil Trust dated 12/03/2010.

Initial Public Offering

On May 13, 2019, Kevin Young, a member of our board of directors purchased 30,000 shares of our common stock at the initial public offering price of \$17.00 per share for an aggregate purchase price of \$510,000 in our directed share program in connection with our initial public offering.

On May 13, 2019, entities affiliated with Pfizer Inc., a beneficial holder of more than 5% of our capital stock, and SMALLCAP World Fund, Inc., a beneficial holder of more than 5% of our capital stock purchased 50,000 shares and 650,000 shares, respectively, of our common stock at the initial offering price of \$17.00 per share for an aggregate purchase price of \$850,000 and \$11,050,000 in our IPO on the same terms as the other purchasers in the initial public offering.

Private Placement

On February 10, 2020, we issued and sold shares of common stock at a purchase price of \$50.00 per share in a private placement. In the private placement, we issued and sold 30,000 shares of common stock for an aggregate purchase price of \$1,500,000 to an entity affiliated with David A. Lamond, a member of our board of directors, and 76,528 shares of common stock for an aggregate purchase price of \$3,826,400 to SMALLCAP World Fund, Inc., a beneficial holder of more than 5% of our capital stock, on the same terms as other purchasers in the private placement. The purchasers of the common stock are entitled to specified resale registration rights.

Investors' Rights, Voting, and Right of First Refusal Agreements

In connection with our preferred stock financings, we entered into investors' rights, voting, and right of first refusal and co-sale agreements containing registration rights, voting rights, and rights of first refusal, among other things, with certain holders of our preferred stock and certain holders of our common stock. The parties to these agreements include Blue Devil Trust dated 12/03/2010, entities affiliated with Pfizer Inc., Takeda Ventures, Inc., Pierre R. and Christine E. Lamond and affiliated entities and SMALLCAP World Fund, Inc., each of which owned more than 5% of our outstanding capital stock, entities affiliated with Casey Lynch, our President and Chief Executive Officer and entities affiliated with Stephen S. Dominy, our Chief Scientific Officer and director.

These stockholder agreements terminated upon the closing of our initial public offering, except for the registration rights granted under our investors' rights agreement.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and officers. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Review, Approval or Ratification of Transactions with Related Parties

Our written related party transactions policy states that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of our common stock and any members of the immediate family of and any entity affiliated with any of the foregoing persons are not permitted to enter into a material related party transaction with us without the review and approval of our audit committee (or a committee composed solely of independent directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest). The policy provides that any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of our common stock or with any of their immediate family members or affiliates in which the amount involved exceeds \$120,000 must be presented to our audit committee (or a committee (or a comflict of interest) for review, consideration and approval. In approving or rejecting any such proposal, our audit committee (or a committee composed solely of independent directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest) considers the relevant facts and circumstances available and deemed relevant to the committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

SELLING STOCKHOLDERS

On February 5, 2020, we entered into stock purchase agreements with the selling stockholders, pursuant to which we issued and sold in a private placement an aggregate of 2,500,000 shares of our common stock at a purchase price of \$50.00 per share for gross proceeds of \$125.0 million. Pursuant to the stock purchase agreements, we agreed to file a registration statement with the SEC covering the resale of the shares of common stock sold in the private placement and to keep such registration statement effective at all times until (1) the shares may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 under the Securities Act or (2) February 10, 2023, whichever is the earliest to occur.

We are registering the resale of the above-referenced shares to permit each of the selling stockholders identified below, or their pledgees, donees, transferees or other successors-in-interest, to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" in this prospectus (as may be supplemented and amended). This prospectus covers the sale or other disposition by the selling stockholders of up to the total number of shares of Common Stock that have been issued to the selling stockholders pursuant to the stock purchase agreements.

We do not know when or in what amounts the selling stockholders may sell or otherwise dispose of the shares of common stock covered hereby. The selling stockholders might not sell or dispose of any or all of the shares covered by this prospectus or may sell or dispose of some or all of the shares other than pursuant to this prospectus. Because the selling stockholders may or may not sell or otherwise dispose of some or all of the shares covered by this prospectus, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that all of the shares of common stock covered by this prospectus will be sold by the selling stockholders and that the selling stockholders do not acquire additional shares of our common stock. In addition, the selling stockholders listed in the table below may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, shares of our common stock in transactions exempt from the registration requirements of the Securities Act after the date on which they provided the information set forth on the table below.

The information in the table below is based on 29,404,540 shares of our common stock outstanding as of March 31, 2020 and was prepared based on information supplied to us by the selling stockholders. Beneficial ownership is determined in accordance with Section 13(d) of the Exchange Act, and generally includes voting or investment power with respect to securities and includes any securities that grant the selling stockholder the right to acquire shares of our common stock within 60 days of March 31, 2020.

None of the selling stockholders except David Lamond, a member of our board of directors and the trustee of Blue Devil Trust Dated 12/03/2010, has held any position or office, or has otherwise had a material relationship, with us or any of our subsidiaries within the past three years.

	Shares of Ostock Ben Owned Prior	eficially	Number of Shares of Common Stock Being	Shares of O Stock to be I Owned Afte	Beneficially
Name of Selling Stockholder	Number	Percentage	Offered	Number	Percentage
Blue Devil Trust dated 12/03/2010 (1)	1,955,165	6.6%	30,000	1,925,165	6.5%
Entities advised by Capital Research and Management Company (2)	5,779,965	19.7%	2,250,000,	3,529,965	12.0%
Entities affiliated with Citadel Enterprise Americas LLC(3)	235,446	*	220,000	15,446	*

^{*} Represents beneficial ownership of less than one percent of the outstanding shares of our common stock.

- (1) Consists of (i) 301,829 shares of common stock held of record by David A. Lamond and (ii) 1,653,336 shares of common stock held of record by Blue Devil Trust dated 12/03/2010. Mr. Lamond is the trustee of the Blue Devil Trust dated 12/03/2010 and holds sole voting and dispositive power with respect to the shares held of record by Blue Devil Trust dated 12/03/2010. The principal business address for Mr. Lamond is c/o Cortexyme, Inc., 269 East Grand Avenue, South San Francisco, CA 94080.
- Consists of (i) 1,081,672 shares of common stock held by American Funds Fundamental Investors ("FI"), (ii) 1,353,528 shares of common stock held by The Growth Fund of America ("GFA"), (iii) 2,327,830 shares of common stock held by SMALLCAP World Fund, Inc. ("SCWF"), (iv) 1,007,021 shares of common stock held by American Funds Insurance Series - Asset Allocation Fund ("VIAA" and, together with FI, GFA and SCWF, the "CRMC Stockholders"), (v) 8,539 shares of common stock held by Capital Group Growth Fund of America Trust (US) ("TGFA") and (vi) 1,375 shares of common stock held by Capital Group Fundamental Investors Trust (US) ("TFI" and, together with TGFA, the "CB&T Stockholders"). Capital Bank and Trust Company ("CB&T") is the discretionary trustee for each CB&T Stockholder, and Capital Research and Management Company ("CRMC") has been retained by CB&T as investment adviser to each CB&T Stockholder. CRMC, Capital World Investors ("CWI") and/or Capital Research Global Investors ("CRGI") may be deemed to be the beneficial owner of the shares of common stock held by the CRMC Stockholders; however, each of CRMC, CWI and CRGI expressly disclaims that it is the beneficial owner of such securities. CB&T, CRMC and/or CWI may be deemed to be the beneficial owner of the shares of common stock held by the CB&T Stockholders; however, each of CB&T, CRMC and CWI expressly disclaims that it is the beneficial owner of such securities. Brady L. Enright, Mark L. Casey, Julian N. Abdey, Gregory D. Johnson, Michael T. Kerr, Dina N. Perry and Paul Benjamin, as portfolio managers, have voting and investment powers over the shares held by FI. Christopher D. Buchbinder, Mark L. Casey, Barry S. Crosthwaite, J. Blair Frank, Joanna F. Jonsson, Carl M. Kawaja, Michael T. Kerr, Donald D. O'Neal, Anne-Marie Peterson, Andraz Razen, Martin Romo, Lawrence R. Solomon, James Terrile and Alan J. Wilson, as portfolio managers, have voting and investment powers over the shares held by GFA. Julian N. Abdey, Michael Beckwith, Noriko H. Chen, Peter Eliot, Brady L. Enright, Bradford F. Freer, Leo Hee, Roz Hongsaranagon, Claudia P. Huntington, Jonathan Knowles, Harold H. La, Dimitrije Mitrinovic, Aidan O'Connell, Andraz Razen, Gregory W. Wendt and Dylan Yolles, as portfolio managers, have voting and investment powers over the shares held by SCWF. Alan N. Berro, David A. Daigle, Peter Eliot, Jeffrey T. Lager, Jin Lee, James R. Mulally and John R. Queen, as portfolio managers, have voting and investment powers over the shares held by VIAA. Christopher D. Buchbinder, Mark L. Casey, Barry S. Crosthwaite, J. Blair Frank, Joanna F. Jonsson, Carl M. Kawaja, Michael T. Kerr, Donald D. O'Neal, Anne-Marie Peterson, Andraz Razen, Martin Romo, Lawrence R. Solomon, James Terrile and Alan J. Wilson, as portfolio managers, have voting and investment powers over the shares held by TGFA. Brady L. Enright, Mark L. Casey, Julian N. Abdey, Gregory D. Johnson, Michael T. Kerr, Dina N. Perry and Paul Benjamin, as portfolio managers, have voting and investment powers over the shares held by TFI. The address for each of the CRMC Stockholders and CB&T Stockholders is c/o Capital Research and Management Company, 333 S. Hope St., 50th Floor, Los Angeles, California 90071. Each of the CRMC Stockholders and CB&T Stockholders acquired the securities being registered hereby in the ordinary course of its business.
- (3) Consists of (i) 53,998 shares of common stock held by Citadel Global Equities Master Fund Ltd and (ii) 181,448 shares of common stock held by Citadel Multi-Strategy Equities master Fund Ltd. Citadel Advisors LLC., ("CAL"), is a registered investment adviser and acts as investment adviser to certain partnerships and affiliated entities on whose behalf these shares were purchased. CAL is an affiliate of a broker-dealer. CAL acquired the shares being registered hereunder in the ordinary course of business, and at the time of the acquisition of the shares described herein, CAL did not have any arrangements or understandings with any person to distribute such securities. CAL holds the voting and dispositive power with respect to the shares held by Citadel Global Equities Master Fund Ltd and Citadel Multi-Strategy Equities master Fund Ltd. Citadel Advisors Holdings LP ("CAH") is the sole member of CAL. Citadel GP LLC is the general partner of CAH. Kenneth Griffin ("Griffin") is the President and Chief Executive Officer of and sole member of Citadel GP LLC. Citadel GP LLC and Griffin may be deemed to be the beneficial owners of the stock through their control of CAL and/or certain other affiliated entities. The principal business address for CAL is c/o Citadel Enterprise Americas LLC, 131 South Dearborn Street, Chicago, Illinois 60603.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of our common stock or interests in shares of our common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of our common stock or interests in shares of our common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicit purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of our common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of our common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of our common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of our common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of our common stock offered by them will be the purchase price of our common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of our common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule. The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of our common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus. Selling stockholders may sell the shares of common stock in compliance with the provisions of Rule 144 under the Securities Act, if available, or pursuant to other available exemptions from the registration requirements of the Securities Act.

In order to comply with the securities laws of some states, if applicable, our common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states our common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. The foregoing may affect the marketability of the common stock. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We shall use reasonable efforts to keep the registration statement of which this prospectus constitutes a part effective at all times until (1) the shares may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 under the Securities Act, or (2) February 10, 2023, whichever is the earliest to occur.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Orrick, Herrington & Sutcliffe LLP, Menlo Park, California.

EXPERTS

The financial statements as of December 31, 2019 and 2018 and for the years then ended incorporated by reference in this prospectus have been so incorporated in in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other documents with the SEC. Our SEC filings are available to the public over the internet at the SEC's website at http://www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at http://www.cortexyme.com. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits contained in or incorporated by reference into the registration statement for further information about us and our securities. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with it, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. This prospectus incorporates by reference the documents listed below (File No. 001-38890) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the sale of all the shares covered by this prospectus, other than the portions of those documents not deemed to be filed.

- Our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 16, 2020;
- Our Current Report on Form 8-K filed with the SEC on February 6, 2020;
- The description of our common stock contained in our Registration Statement on Form 8-A filed on May 1, 2019, including any amendments or reports filed for the purpose of updating such description; and
- Any other filings we make pursuant to the Exchange Act after the date of filing the initial registration statement and prior to effectiveness of the registration statement.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

Cortexyme, Inc Attention: Chris Lowe, Chief Financial Officer 269 East Grand Avenue South San Francisco, CA 94080 (415) 910-5717

2,500,000 Shares



Common Stock

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by us (except any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

	Amount
SEC registration fee	\$ 11,555
Accounting fees and expenses	18,300
Legal fees and expenses	100,000
Miscellaneous fees and expenses	10,000
Total expenses	\$ 139,855

Item 14. Indemnification of Directors and Officers.

We have entered into indemnification agreements with each of our current directors and executive officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We also intend to enter into indemnification agreements with our future directors and executive officers.

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the registrant. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Our amended and restated bylaws provide for indemnification by the registrant of its directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions, or (iv) for any transaction from which the director derived an improper personal benefit. Our amended and restated certificate of incorporation provides for such limitation of liability.

We maintain standard policies of insurance under which coverage is provided (a) to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, and (b) to us with respect to payments we may make to our officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

Insofar as the foregoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act, we have been informed that, in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

Since April 1, 2017, the Registrant issued and sold the following unregistered securities:

- (1) From April 1, 2017 through May 9, 2019 (the date of the filing of our registration statement on Form S-8), we granted 2,101,593 stock options to purchase shares of our common stock to our employees, directors and consultants at a weighted average exercise price of \$4.08 per share under our 2014 Stock Plan, or 2014 Plan. We also issued and sold an aggregate of 209,586 shares of our common stock to our employees, directors and consultants at a weighted average exercise price of \$0.42 per share pursuant to restricted stock issuances and exercises of options granted under our 2014 Plan.
- (2) From April 1, 2017 through January 2018, we issued and sold subordinated convertible promissory notes in an aggregate principal amount of \$400,000 at face value.
- (3) From May 2018 through July 2018, we issued and sold an aggregate of 9,152,108 shares of our Series B convertible preferred stock at a purchase price of \$9.6122 per share, for aggregate consideration of approximately \$85.8 million.
- (4) On February 10, 2020, we issued and sold 2,500,000 shares of our common stock at a purchase price of \$50.00 per share for aggregate consideration of \$125.0 million.

The stock options and the common stock issuable upon the exercise of such options described in paragraph (1) of this Item 15 were issued under the 2014 Plan in reliance on the exemption provided by Rule 701 promulgated under the Securities Act. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

The offer, sale, and issuance of the securities described in paragraphs (2), (3), (4) and (5) and of this Item 15 were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act and/or Rule 506(b) of Regulation D promulgated under Section 4(a)(2) of the Securities Act. The recipients of the securities in these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the securities issued in these transactions. The recipients of the securities in these transactions were accredited investors as defined in Rule 501 of Regulation D promulgated under the Securities Act.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

The following is a list of exhibits filed as part of this registration statement on Form S-1.

			Incorporated b			Filed or
Exhibit No.	Exhibit title	<u>Form</u>	File No.	Exhibit No.	Filing date	furnished herewith
3.1	Amended and Restated Certificate of Incorporation	8-K	001-38890	3.1	5/13/2019	
3.2	Amended and Restated Bylaws	8-K	001-38890	3.2	5/13/2019	
4.1	Specimen Stock Certificate	S-1/A	333-230853	4.1	4/29/2019	
4.2	Amended and Restated Investors' Rights Agreement, dated May 23, 2018, by and among the Registrant and certain of its stockholders.	S-1	333-230853	4.2	4/12/2019	
4.3	Form of Stock Purchase Agreement	8-K	001-38890	4.1	2/6/2020	
5.1	Opinion of Orrick, Herrington & Sutcliffe LLP					X
10.1	Sub-Sublease Agreement by and between Cortexyme, Inc. and Verily Life Sciences LLC, dated June 18, 2018.	S-1	333-230853	10.1	4/12/2019	
10.2	Amendment No. 1 to Sub-Sublease by and between Cortexyme, Inc. and Verily Life Sciences LLC dated April 2, 2019.	10-Q	001-38890	10.1	8/9/2019	
10.3	Form of Indemnification Agreement between Cortexyme, Inc. and each of its officers and directors.	S-1/A	333-230853	10.2	4/29/2019	
10.4	2014 Stock Plan, as amended as of November 28, 2018, and related forms of stock award agreements.	S-1	333-230853	10.3	4/12/2019	
10.5	2019 Equity Incentive Plan and forms of stock award agreements thereunder.	S-1/A	333-230853	10.4	4/29/2019	
10.6	2019 Employee Stock Purchase Plan.	S-1/A	333-230853	10.5	4/29/2019	
10.7	Executive Incentive Bonus Plan.	S-1	333-230853	10.6	4/12/2019	
23.1	Consent of Independent Registered Public Accounting Firm					X
24.1	Power of Attorney (included on the signature page)					X

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

Item 17. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, *however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this Registration Statement.

- That, for the purposes of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to

Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions described herein, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Francisco, State of California on April 7, 2020.

CORTEXYME, INC.

By: /s/ Casey C. Lynch

Casey C. Lynch

President, Chief Executive Officer and Chairman

SIGNATURES AND POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Casey C. Lynch and Christopher Lowe, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Casey C. Lynch Casey C. Lynch	President, Chief Executive Officer and Chairman (principal executive officer)	April 7, 2020
/s/ Christopher Lowe Christopher Lowe	Chief Financial Officer (principal financial and accounting officer)	April 7, 2020
/s/ Stephen S. Dominy, M.D. Stephen S. Dominy, M.D.	Director	April 7, 2020
/s/ David A. Lamond David A. Lamond	Director	April 7, 2020
/s/ Margaret McLoughlin, Ph. D. Margaret McLoughlin, Ph. D	Director	April 7, 2020
/s/ Una Ryan, OBE, Ph.D. Una Ryan, OBE, Ph.D.	Director	April 7, 2020
/s/ Christopher J. Senner Christopher J. Senner	Director	April 7, 2020
/s/ Kevin Young, CBE Kevin Young, CBE	Director	April 7, 2020



Orrick, Herrington & Sutcliffe LLP 1000 Marsh Road Menlo Park, CA 94025-1015

+1 650 614 7400

orrick.com

April 7, 2020

Cortexyme, Inc. 269 East Grand Avenue South San Francisco, CA 94080

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We are acting as counsel to Cortexyme, Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-1 filed by the Company with the Securities and Exchange Commission (the "Commission") on April 7, 2020, as amended (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the resale from time to time, pursuant to Rule 415 promulgated under the Securities Act by the selling stockholders (the "Selling Stockholders") identified in the Registration Statement of up to 2,500,000 shares of common stock, par value \$0.001 per share (the "Shares"), which Shares were issued to the Selling Stockholders pursuant to certain stock purchase agreements by and between the Company and the Selling Stockholders dated February 5, 2020.

In connection with rendering the opinion set forth below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of instruments, documents and records which we deemed relevant and necessary for the purpose of rendering our opinion set forth below. In such examination, we have assumed the following: (a) the authenticity of original documents and the genuineness of all signatures, (b) the conformity to the originals of all documents submitted to us as copies, (c) the representations of officers and employees are correct as to questions of fact and (d) the Registration Statement has been declared effective pursuant to the Securities Act.

Our opinion herein is limited to the General Corporation Law of the State of Delaware.

Based upon the foregoing, we are of the opinion that the Shares to be sold by the Selling Stockholders have been duly authorized by the Company and are validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement, and we further consent to the use of our name under the caption "Legal matters" in the Registration Statement and the prospectus that forms a part thereof. In giving these consents, we do not thereby admit that we

Cortexyme, Inc. April 7, 2020 Page 2

are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission promulgated thereunder, nor do we thereby admit that we are "experts" within the meaning of such term as used in the Securities Act with respect to any part of the Registration Statement, including this opinion letter as an exhibit or otherwise.

Very truly yours,

/s/ Orrick, Herrington & Sutcliffe LLP

ORRICK, HERRINGTON & SUTCLIFFE LLP

Consent of Independent Registered Public Accounting Firm

Cortexyme, Inc. South San Francisco, California

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 16, 2020, relating to the financial statements of Cortexyme, Inc., which is incorporated by reference in that Prospectus.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP San Jose, California

April 7, 2020