

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[Table of Contents](#)

As filed with the Securities and Exchange Commission on May 20, 2019

Registration No. 333-

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ContraVir Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	2834	46-2783806
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

**399 Thornall Street, First Floor
Edison, NJ 08837
(732) 902-4000**

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

**Robert Foster
Chief Executive Officer
ContraVir Pharmaceuticals, Inc.
399 Thornall Street, First Floor
Edison, NJ 08837
(732) 902-4000**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Jeffrey J. Fessler, Esq.
Sheppard, Mullin, Richter & Hampton LLP
30 Rockefeller Plaza
New York, NY 10112
Tel.: (212) 634-3067**

**Charles Phillips, Esq.
Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas
New York, New York 10105
(212) 370-1300**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date hereof.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

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.

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 earliest effective registration statement for the same offering.

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 earliest effective registration statement for the same offering.

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. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company
Emerging growth company

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Class A Units consisting of(3):		
(i) Common Stock, par value \$0.0001 per share		
(ii) Warrants to purchase Common Stock(4)		
Class B Units consisting of(3):		
(i) Series E Convertible Preferred Stock, par value \$0.0001 per share		
(ii) Warrants to purchase Common Stock(4)		
(iii) Common Stock issuable upon conversion of the Series E Convertible Preferred Stock(4)		
Common Stock issuable upon exercise of warrants(3)		
Placement Agent warrants to purchase Common Stock(4)		
Common Stock issuable upon exercise of placement agent warrants		
Total	\$15,000,000	1,818

- (1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) of the Securities Act of 1933, as amended.
- (2) Pursuant to Rule 416, the securities being registered hereunder include such indeterminate number of additional securities as may be issued after the date hereof as a result of stock splits, stock dividends or similar transactions.
- (3) The proposed maximum aggregate offering price of the Class A Units proposed to be sold in the offering will be reduced by \$1,000 for each Class B Unit offered and sold in the offering, and as such the proposed maximum aggregate offering price of the Class A Units and Class B Units (including the common stock issuable upon exercise of the warrants included in the Class B Units), if any, is \$15,000,000.
- (4) No fee pursuant to Rule 457(i) under the Securities Act of 1933, as amended.

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. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective.

SUBJECT TO COMPLETION

PRELIMINARY PROSPECTUS

DATED MAY 20, 2019

[] Class A Units Consisting of Common Stock and Warrants or
[] Class B Units Consisting of Series E Convertible Preferred Stock and Warrants
(and [] shares of Common Stock underlying shares of Series E Convertible
Preferred Stock and [] shares of Common Stock underlying Warrants)

We are offering [] Class A Units consisting of one share of our common stock and one warrant to purchase [] shares of our common stock, at an exercise price equal to \$ [] ([]% of the public offering price of the Class A Units per share of common stock), which warrants will be exercisable upon issuance and will expire five years from the date of issuance, at an assumed purchase price of \$ [] per Class A Unit, which was the closing price of our common stock on May [], 2019. Each warrant included in the Class A Units entitles its holder to purchase [] shares of common stock at an exercise price per share of \$ []. The shares of common stock and warrants that are part of a Class A Unit are immediately separable and will be issued separately in this offering.

We are also offering to those purchasers, if any, whose purchase of Class A Units in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, the opportunity, in lieu of purchasing Class A Units, to purchase Class B Units. Each Class B Unit will consist of one share of our Series E Convertible Preferred Stock ("Series E Preferred") with a stated value of \$1,000 and convertible into shares of our common stock at the public offering price of the Class A Units, together with the equivalent number of warrants as would have been issued to such purchaser of Class B Units if they had purchased Class A Units. For each Class B Unit we sell, the number of Class A Units we are offering will be decreased by \$1,000 divided by the Class A Unit public offering price. Because we will issue a common stock purchase warrant as part of each Class A Unit or Class B Unit, the total number of warrants sold in this offering will not change as a result of a change in the mix of the Class A Units and Class B Units sold. The shares of Series E Preferred and warrants that are part of a Class B Unit are immediately separable and will be issued separately in this offering. We are also offering the shares of common stock issuable upon exercise of the warrants and conversion of the Series E Preferred.

The number of shares of our common stock outstanding after this offering will fluctuate depending on how many Class B Units are sold in this offering and whether and to what extent holders of Series E Preferred shares convert their shares to common stock.

Our common stock is listed on the Nasdaq Capital Market under the symbol "CTRV." On May [], 2019, the last reported sale price of our common stock on the Nasdaq Capital Market was \$ [].

The final public offering price per Class A Unit will be determined through negotiation between us and the investors in this offering, and will take into account the recent market price of our common stock, the general condition of the securities market at the time of this offering, the history of, and the prospects for, the industry in which we compete, and our past and present operations and our prospects for future revenues. The recent market price used throughout this prospectus may not be indicative of the public offering price per Class A Unit. The public offering price of the Class B Units will be \$1,000 per unit.

Assuming an offering price of \$ [] per Class A Unit, the Series E Preferred included in the Class B Units will be convertible into an aggregate total of [] shares of common stock and the warrants included in the Class B Units will be exercisable for an aggregate total of [] shares of common stock.

There is no established trading market for the warrants or the Series E Preferred, and we do not expect an active trading market to develop. We do not intend to list the warrants or the Series E Preferred on any securities exchange or other trading market. Without an active trading market, the liquidity of the warrants and the Series E Preferred will be limited.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 9 of this prospectus, and under similar headings in any amendments or supplements to this prospectus.

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

	Per Class A Unit	Per Class B Unit	Total
Public offering price	\$	\$	\$
Placement agent fees and expenses(1)	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$

(1) Please refer to "Plan of Distribution" beginning on page 25 of this prospectus for additional information regarding placement agent compensation.

We have retained Roth Capital Partners as our lead placement agent and CIM Securities, LLC as co-placement agent to use their reasonable best efforts to solicit offers to purchase the securities in this offering. The placement agents have no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above.

The placement agents expect to deliver the securities to purchasers in the offering on or about _____, 2019.

Lead Placement Agent

Roth Capital Partners

Co-Placement Agent

Brookline Capital Markets

The date of this prospectus is _____, 2019.

TABLE OF CONTENTS

	<u>Page</u>
About this Prospectus	i
Prospectus Summary	1
The Offering	6
Risk Factors	9
Cautionary Statement Regarding Forward-Looking Statements	11
Use of Proceeds	13
Dilution	14
Capitalization	16
Description of Securities We Are Offering	18
Plan of Distribution	25
Legal Matters	28
Experts	28
Where You Can Find More Information	28
Incorporation of Certain Documents by Reference	28

You should rely only on the information contained in this prospectus or in any amended prospectus that we may authorize to be delivered or made available to you. We and the placement agents have not authorized anyone to provide you with different information. We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where such offers and sales are permitted. The information in this prospectus is accurate only as of its date, regardless of the time of its delivery or any sale of our securities.

Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of the prospectus outside the United States.

ABOUT THIS PROSPECTUS

In this prospectus, "ContraVir," "the Company," "we," "us," and "our" refer to ContraVir Pharmaceuticals, Inc., a Delaware corporation, and its subsidiaries, unless the context otherwise requires.

This prospectus describes the specific details regarding this offering and the terms and conditions of the units being offered hereby and the risks of investing in our securities. You should read this prospectus, any free writing prospectus and the additional information about us described in the section entitled "*Where You Can Find More Information*" before making your investment decision.

Neither we, nor any of our officers, directors, agents or representatives or placement agents, make any representation to you about the legality of an investment in our common stock. You should not interpret the contents of this prospectus or any free writing prospectus to be legal, business, investment or tax advice. You should consult with your own advisors for that type of advice and consult with them about the legal, tax, business, financial and other issues that you should consider before investing in our securities.

PROSPECTUS SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common shares. You should read this entire prospectus and the documents incorporated by reference into this prospectus carefully before making an investment decision. References in this prospectus to "we," "us," "our" and "Company" refer to ContraVir Pharmaceuticals, Inc.

Business Overview

We are a biopharmaceutical company headquartered in Edison, New Jersey, focused on the development of pleiotropic drug therapy for treatment of chronic liver disease. This therapeutic approach targets fibrosis and hepatocellular carcinoma ("HCC") associated with non-alcoholic steatohepatitis ("NASH"), viral hepatitis, and other liver diseases. Our cyclophilin inhibitor, CRV431, is being developed to offer benefits to address these multiple complex pathologies. CRV431 is a cyclophilin inhibitor that targets multiple biochemical pathways involved in the progression of liver disease. Preclinical studies with CRV431 in NASH models demonstrated consistent reductions in liver inflammation, fibrosis, and cancerous tumors. CRV431 additionally shows antiviral activity towards hepatitis B, C, and D viruses which also trigger liver disease.

NASH is the form of liver disease that is triggered by what has come to be known as the "Western diet", characterized especially by high-fat, high-sugar, and processed foods. Among the effects of a prolonged Western diet is fat accumulation in liver cells (steatosis) which is described as non-alcoholic fatty liver disease ("NAFLD") and can predispose cells to injury. NAFLD may evolve into NASH when the fatty liver begins to progress through stages of cell injury, inflammation, fibrosis, and carcinogenesis. People who develop NASH often have additional predisposing conditions such as diabetes and hypertension, but the exact biochemical events that trigger and maintain the progression are not well known. Many people in the early stages of disease do not have significant symptoms and therefore do not know that they have it. NASH becomes evident and a major concern when the liver becomes fibrotic and puts the individual at increased risk of developing cirrhosis and other complications. Individuals with advanced liver fibrosis have significantly higher risk of developing liver cancer, although cancer may also arise in some patients before significant hepatitis or fibrosis. NASH is increasing worldwide at an alarming rate due to the spread of the Western diet, obesity, and other related conditions. Approximately 4-5% of the global population is estimated to have NASH, and that proportion is higher in the USA. It is predicted that NASH will become the leading reason for individuals requiring a liver transplant in the USA as early as 2020. Considering the serious outcomes linked to advancing NASH, the economic and social burden of the disease is enormous. There are no simple blood tests to diagnose or track the progression of NASH, and no drugs are approved to specifically treat the disease.

HCC is the major type of liver cancer, accounting for 85-90% of all cases. NASH, hepatitis virus infection, and alcohol consumption all are major causes of HCC. Globally, over 700,000 people die each year from liver cancer which is second only to lung cancer among all cancer-related deaths. The high mortality is due to the fact that only around half of all people who develop HCC (in developed countries) receive the diagnosis early enough to have an opportunity for therapeutic intervention. Additionally, recurrence rates are high, and current treatment options remain limited.

HCC is a type of cancer in which the tissue microenvironment plays a major role in its development. In most cases HCC is preceded by significant, long-term damage to liver cells, inflammation and fibrosis. One-third of people with cirrhosis, a very advanced stage of liver disease, will eventually progress to HCC. The chronic injury to the liver leads to many genetic mutations that eventually lead to transformation of cells and formation of tumors. The noxious tissue microenvironment also promotes cancer by altering the function of immune cells and endothelial cells

which form tumor-supporting blood vessels. These various events underscore the importance of halting liver injury and scarring as early and effectively as possible to prevent cancer development.

Viral hepatitis may be linked to one or more viruses including hepatitis A, B, C, D, or E. Hepatitis B virus ("HBV") is one of many hepatitis viruses that selectively infect human liver cells and can establish persistent infections under certain conditions. Chronic infections, especially by HBV, HCV, and HDV, cause progressive liver inflammation, fibrosis, cirrhosis, and cancer. Collectively, these infections represent one of the 3 major triggers of progressive liver disease (NAFLD/NASH and alcohol being the others).

An HBV vaccine is available that, if administered *prior* to HBV infection, assists the body in neutralizing the virus and blocking infection. However, vaccination is not efficacious for people who are already infected with HBV, and the vaccine has not been historically available to everyone. As a result, an estimated 240 million people worldwide have chronic HBV infection. Anti-HBV medications are used widely by chronically infected individuals but usually are only effective in decreasing viral replication and viremia (virus in the blood), and NOT in eradicating HBV from the liver. This is because HBV, unlike HCV, has evolved clever ways of persisting in liver cells and evading the immune system. Thus, despite vaccines and anti-viral medications, chronic HBV infection remains a huge global health problem. Chronic HBV infection is the leading cause of hepatocellular carcinoma, which kills around 350,000 people per year. A similar number of people die each year from cirrhosis and other complications arising from HBV.

We are developing CRV431 as our lead molecule. CRV431 is a cyclophilin inhibitor that targets specific isomerases that play an important role in protein folding in health and in disease. To date, *in vitro* and/or *in vivo* studies have demonstrated reductions in HBV DNA, HBsAg, HBeAg, inhibition of virus uptake (NTCP transport inhibition), and stimulation of innate immunity. Importantly, *in vivo* studies in a NASH model of fibrosis and HCC have repeatedly demonstrated CRV431 reduces fibrosis scores and overall liver tumor burden. Hence, CRV431 is a pleiotropic molecule that may not only treat liver disease, but may also serve to reduce important risk factors (e.g., HBV) for developing the disease. We have completed a phase 1 study with CRV431 demonstrating safety, tolerability, and pharmacokinetics (PK).

CRV431

CRV431 is a novel drug candidate designed to target a class of proteins called cyclophilins, of which there are many isoforms. Cyclophilins play a role in health and in the pathogenesis of certain diseases, and are known as peptidyl prolyl isomerases. The isomerase activity plays an important role in a number of biological processes including, for example, folding of proteins to confer certain 3-dimensional configurations. Additionally, specific host cyclophilins (e.g., cyclophilin A, B, C, D) play a role in the pathogenesis of many diseases, including liver disease and viral hepatitis.

Cyclophilins are pleiotropic enzymes that play a role in injury and steatosis through mechanisms including cell death occurring through mitochondrial pore permeability (cyclophilin D). Inhibition of cyclophilin D, therefore, may play an important role in protection from cell death. Cyclophilin A binding to CD147 is known to play a role in inflammation, cyclophilin B plays a role in fibrosis through collagen production, and cyclophilins also play a role in cirrhosis and cancer (e.g., cell proliferation and metastasis). Cyclophilin inhibition with CRV431, therefore, may play an important role in reducing liver disease.

Important risk factors for development of liver disease include viral hepatitis (HBV, HCV, HDV), alcohol, and non-alcoholic fatty liver disease and the more aggressive form called non-alcoholic steatohepatitis. The life cycle of certain viruses, including for example, HBV, HIV, and hepatitis C virus ("HCV") infections are dependent on host proteins (cyclophilins) for the role they play in the virus life cycle and propagation of the virus. CRV431 has been developed to inhibit the role of host cyclophilins

and therefore interfere in viral propagation. CRV431 does not directly target the virus and, as such, should be less susceptible to drug resistance, borne from viral mutations.

Thus far, *in vitro* testing of CRV431 has been conducted in-house and in collaboration with external groups including for example, the Scripps Research Institute (Scripps). Data in various cell lines of either transfected or infected HBV demonstrates nanomolar efficacy (EC50 values) and micromolar toxicity (CC50 values). The selective index ("SI"), therefore, is wide and suggests that CRV431 presents a viable clinical drug candidate for the treatment of viral infections, including HBV. Additional testing in a transgenic mouse model of HBV indicated that CRV431 reduced HBV DNA in the liver and HBsAg in serum. CRV431 is orally active and appears to be well tolerated.

We have conducted three separate studies of CRV431 in a mouse NASH model. This model utilized streptozotocin in combination with a high fat diet to create the model. Mice developed NASH, with fibrosis occurring in eight to twelve weeks. By approximately 20 weeks of age, mice began to develop hepatocellular carcinoma (HCC).

In our first study, conducted by an independent laboratory in Japan, non-alcoholic fatty liver disease (NAFLD) activity scores (NAS) were assessed. NAS, a composite score of steatosis, inflammation, and ballooning of the liver, was determined when either five or 20 mg/kg once daily treatment with CRV431 was administered by oral gavage. In this first study, CRV431 was administered for only three weeks which did not result in a statistically significant decline. In a second independent study conducted at Scripps Research Institute, CRV431 was administered for six weeks at a dose of 50 mg/kg/day orally. A third study conducted at Scripps wherein CRV431 was administered for 11 weeks demonstrated a statistically significant decline in NAFLD activity scores, whereas the six-week study did not.

These same three studies also examined fibrosis scores, as measured by Sirius red staining for collagen. Except for the lowest dose tested in Japan, which was only 5 mg/kg/day of CRV431, all three studies demonstrated that CRV431 resulted in a statistically significant reduction of fibrosis, compared to vehicle control, whether the study drug was given for 3, 6, or 11-weeks once daily by oral gavage. Reductions in fibrosis scores were observed at both 20 and 50 mg/kg/day.

In longer-term experiments in the NASH mouse model, CRV431 dosing began on week 20, for a period of 10 weeks. Hepatocellular carcinoma (HCC) begins to develop at about 20 weeks in this model. CRV431 was administered by oral gavage at 50 mg/kg/day. Our results indicated that CRV431 significantly ($p=0.02$) reduced tumor burden (number and size of nodules) compared with vehicle control mice. This score reflected a tumor burden reduction of about 52%. Altogether, the most robust and consistent CRV431 effects in the NASH model were reductions in fibrosis and cancerous nodules.

Our Phase 1 single ascending dose study was performed in healthy volunteers administered CRV431 orally at doses of 75, 225, 375, and 525 mg. This study design was a randomized, partially blinded, placebo-controlled trial to evaluate the safety, tolerability, and PK of CRV. A total of 6 subjects were given CRV431 in each of the four dosing cohorts. An additional 2 subjects were given placebo in each of these cohorts, so that a total of 24 subjects received CRV431 and a total of 8 subjects received placebo.

The T_{max} occurred generally at about one hour. As expected, corresponding C_{max} values increased with increasing dose. Systemic exposures, as determined by AUC were linear ($r^2 = 0.914$) up to 375 mg, but AUCs did not appreciably change from 375 mg to 525 mg. Terminal elimination half-life was approximately 100 hours.

In the Phase 1 study of CRV431, there were no severe adverse events (SAEs). The adverse events (AEs) reported were mild to moderate in nature and were almost all not related to study drug. There were no Grade 3 or 4 lab abnormalities, and all vital signs and ECGs remained normal.

On May 10, 2018, we submitted an Investigational New Drug Application ("IND") to the U.S. Food and Drug Administration ("FDA") to support initiation of our CRV431 HBV clinical development program in the United States and received approval in June 2018. We completed the first segment of our Phase 1 clinical activities for CRV431 in October 2018 wherein we reached a major clinical milestone of positive data from a Phase I trial of CRV431 in humans. This achievement triggered the first milestone payment, as stated in the Merger Agreement for the acquisition of Ciclofilin Pharmaceuticals, Inc. ("Ciclofilin") and we paid a related milestone payment of \$1,000,000 and issued 100,737 shares of our common stock with a fair value of \$55,398, representing 2.5% of our issued and outstanding common stock as of June, 2016, to the Ciclofilin shareholders.

Risks Associated with our Business

Our business is subject to numerous risks and uncertainties, including those highlighted and incorporated by reference in the section entitled "Risk Factors" immediately following this prospectus summary. These risks include, but are not limited to, the following:

- Our product candidate, CRV431, is in the early stages of clinical development and its commercial viability remains subject to the successful outcome of current and future clinical trials, regulatory approvals and the risks generally inherent in the development of pharmaceutical product candidates. If we are unable to successfully advance or develop or partner our product candidate, we may be delayed or precluded further development or regulatory approval.
- We have incurred losses since inception, anticipate that we will incur continued losses for the foreseeable future and our independent registered public accounting firm's report, incorporated by reference herein, includes an explanatory paragraph that expresses substantial doubt about our ability to continue as a going concern, indicating the possibility that we may not be able to operate in the future.
- We will require substantial additional funding which may not be available to us on acceptable terms, or at all. If we fail to raise the necessary additional capital, we may be unable to complete the development and commercialization of our product candidate, or continue our development programs.
- If we fail to comply with the continued listing requirements of the Nasdaq Capital Market LLC ("Nasdaq"), our common stock may be delisted and the price of our common stock and our ability to access the capital markets could be negatively impacted.
- Our product candidate and any future product candidates may exhibit undesirable side effects when used alone or in combination with other approved pharmaceutical products or investigational new drugs, which may delay or preclude further development or regulatory approval, or limit their use if approved.
- If the results of preclinical studies or clinical trials for our product candidate, including those that are subject to existing or future license or collaboration agreements, are unfavorable or delayed, we could be delayed or precluded from the further development or commercialization of our product candidate, which could materially harm our business.
- Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.
- The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidate, our business will be substantially harmed.

- We currently have no sales and marketing organization. If we are unable to establish a direct sales force in the United States to promote our products, the commercial opportunity for our products may be diminished.
- We may not be able to manufacture our product candidate in commercial quantities, which would prevent us from commercializing our product candidate.
- Our product candidate, if approved for sale, may not gain acceptance among physicians, patients and the medical community, thereby limiting our potential to generate revenues.
- You will experience immediate and substantial dilution in the book value per share of the common stock you purchase.
- Management will have broad discretion as to the use of proceeds from this offering and might not use them effectively.

Corporate History and Information

We were incorporated in Delaware on May 15, 2013 for the purpose of holding certain FV-100 assets of Synergy Pharmaceuticals Inc., or Synergy. We were a majority-owned subsidiary of Synergy Pharmaceuticals Inc. (Synergy) until February 18, 2014, the date Synergy completed the spinout of our shares of common stock. Our principal executive offices are located at 399 Thomall Street, First Floor, Edison, New Jersey 08837. Our telephone number is (732) 902-4000 and our website address is www.contravir.com. The information on our website is not a part of, and should not be construed as being incorporated by reference into, this registration statement or the accompanying prospectus.

Implications of Being an Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, for as long as we continue to be an "emerging growth company," we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, which would occur if the market value of our common shares that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period.

The Offering

Class A Units offered	[] Class A Units, with each Class A Unit consisting of one share of our common stock and a warrant to purchase shares of our common stock at an exercise price equal to \$ (% of the public offering price of the Class A Units). The Class A Units will not be certificated and the shares of common stock and warrants that are part of such units will be immediately separable and will be issued separately in this offering.
Public offering price per Class A Unit	[\$] per Class A Unit.
Class B Units offered	[] Class B Units are also being offered to those purchasers, if any, whose purchase of Class A Units in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering. Each Class B Unit will consist of one share of our Series E Preferred, with a stated value of \$1,000 and convertible into shares of our common stock, at the public offering price of the Class A Units, together with the equivalent number of warrants as would have been issued to such purchaser if they had purchased Class A Units. For each Class B Unit we sell, the number of Class A Units we are offering will be decreased by \$1,000 divided by the Class A Unit offering price. Because we will issue a common stock purchase warrant as part of each Class A Unit or Class B Unit, the number of warrants sold in this offering will not change as a result of a change in the mix of the Class A Units and Class B Units sold. The Class B Units will not be certificated and the shares of Series E Preferred and warrants that are part of such units are immediately separable and will be issued separately in this offering.
Public offering price per Class B Unit	\$1,000 per Class B Unit.
Warrants	Each warrant included in the Units will have an exercise price equal to \$ per share of common stock (% of the public offering price of the Class A Units), will be exercisable upon issuance, and will expire five (5) years from the date of issuance. Each warrant entitles the holder to purchase shares of common stock at an exercise price of \$[] per share, subject to adjustment, through its expiration five (5) years from the date of issuance.
Common stock to be outstanding immediately after this offering(1)	[] shares (on an as-converted to common stock basis with respect to any shares of Series E Preferred sold).

Series E Convertible Preferred Stock	The Series E Preferred will be convertible into shares of our common stock at any time, subject to beneficial ownership limitations, at the option of the holder, at a conversion price equal to the public offering price of the Class A Units. See "Description of Securities We Are Offering" for a discussion of the terms of the Series E Preferred.
Use of proceeds	We intend to use the net proceeds from this offering to repay certain indebtedness, to fund our research and development activities and for general corporate purposes, including working capital. See "Use of Proceeds" on page [14].
Risk factors	This investment involves a high degree of risk. You should read the description of risks set forth under "Risk Factors" beginning on page 10 of this prospectus and the risk factors included in our Form 10-K for the year ended December 31, 2018 and in our Form 10-Qs for subsequent quarterly periods , which are incorporated by reference into this prospectus, for a discussion of factors to consider before deciding to purchase our securities.
Nasdaq Capital Market Trading Symbol of Common Stock	"CTRV" There is no established public trading market for the warrants or Series E Preferred, and we do not expect an active trading market to develop. We do not intend to list the warrants or the Series E Preferred on any securities exchange or other trading market. Without an active trading market, the liquidity of the warrants and the Series E Preferred will be limited.
Lock-up	We and our directors and executive officers have agreed with the placement agents not to offer for sale, issue, sell, contract to sell, pledge or otherwise dispose of any of our common stock or securities convertible into common stock for a period of 90 days commencing on the date of this prospectus in the case of our directors and executive officers and for a period of days commencing on the date of this prospectus in the case of us. See "Plan of Distribution" beginning on page [26].
Registered Securities	This prospectus also relates to the offering of the shares issuable upon conversion of the Series E Preferred and upon exercise of the warrants included in the Units.

-
- (1) Based on 20,790,029 shares of common stock outstanding as of March 31, 2019 and excludes:
- 630,936 shares of our common stock issuable upon exercise of outstanding options at a weighted average price of \$10.63 per share;
 - 7,839,180 shares of our common stock issuable upon exercise of outstanding warrants with a weighted-average exercise price of \$4.38 per share;
 - 1,304,058 shares of our common stock issued to Iliad Research and Trading, L.P. ("Iliad") upon a redemption equalling \$200,000 (including interest thereon) of the outstanding balance of the

convertible promissory note issued by the Company to Iliad in May 2018 (the "Iliad Note") on April 2, 2019 and April 3, 2019;

- 222,867 shares of our common stock issuable upon conversion of outstanding shares of Series A Convertible Preferred Stock;
- 1,243,872 shares of our common stock issuable upon conversion of outstanding shares of Series C Convertible Preferred Stock;
- 706,564 shares of our common stock that are reserved for equity awards that may be granted under our equity incentive plans;
- 17,833,334 shares of our common stock issued in a financing completed in April 2019 (the "April 2019 Financing") comprised of 13,491,666 shares of our common stock and 4,341,668 common stock equivalents subsequently issued upon conversion of 521 Series D Preferred Stock;
- 18,546,667 warrants issued in the April 2019 financing of which 1,400,000 warrants were exercised into our common stock resulting in 17,146,667 shares of our common stock issuable upon exercise of warrants issued in the April 2019 Financing, with an exercise price of \$0.12 per share;
- [] shares of our common stock issuable upon exercise of the warrants offered hereby; and
- [] shares of our common stock issuable upon exercise of the warrant to be issued to the placement agents in connection with this offering.

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the risk factors contained in our periodic reports filed with the SEC, including our [Annual Report on Form 10-K for the year ended December 31, 2018](#) and all of our [quarterly reports on Form 10-Q](#), which are incorporated by reference into this prospectus. Before deciding to invest in our securities, you should carefully consider these risks, as well as other information we include or incorporate by reference in this prospectus.

If any of the events described in these risk factors actually occurs, or if additional risks and uncertainties that are not presently known to us or that we currently deem immaterial later materialize, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our securities could decline, and you may lose all or part of your investment in our securities. The risks discussed below include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary Statement Regarding Forward-Looking Statements".

Risks Related to this Offering

Management will have broad discretion as to the use of proceeds from this offering and might not use them effectively.

Our management will have broad discretion as to the application of the net proceeds from this offering and our stockholders will not have the opportunity as part of their investment decisions to assess whether the net proceeds are being used appropriately. You might not agree with our decisions, and our use of the proceeds might not yield any return on your investment. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our failure to apply the net proceeds of this offering effectively could compromise our ability to pursue our growth strategy and we might not be able to yield a significant return, if any, in our investment of these net proceeds. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

You will experience immediate and substantial dilution in the book value per share of the common stock you purchase.

Because the offering price per share of our common stock being offered will be higher than the book value per share of our common stock, you may suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. For a further description of the dilution that investors in this offering will experience, see "Dilution".

In addition, investors in this offering will be subject to increased dilution upon the exercise of outstanding stock options or warrants or conversion of outstanding preferred stock.

If we fail to comply with the continued listing requirements of the Nasdaq Capital Market LLC ("Nasdaq"), our common stock may be delisted and the price of our common stock and our ability to access the capital markets could be negatively impacted.

On August 29, 2018, we received a written notice (the "Notice") from the Nasdaq Stock Market LLC ("Nasdaq") that we were not in compliance with Nasdaq Listing Rule 5550(a)(2), (the "Rule") as the minimum bid price of our common stock had been below \$1.00 per share for 30 consecutive business days. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we had until February 25, 2019, to regain compliance with the minimum bid price requirement. On February 27, 2019, we received a letter from NASDAQ indicating that, based upon our continued non-compliance with the minimum bid price requirement as well as the fact that we have not yet held an annual meeting of shareholders within twelve months of the end of our fiscal year end, our common stock

[Table of Contents](#)

would be subject to delisting unless we timely request a hearing before a Nasdaq Hearings Panel (the "Panel"). Additionally, on March 18, 2019, we received an additional letter from NASDAQ notifying us that we failed to comply with the minimum \$2.5 million stockholders' equity requirement for continued listing under Nasdaq Listing Rule 5550(b) (the "Stockholders' Equity Rule"). Nasdaq indicated that this matter served as an additional basis for delisting our securities from Nasdaq and that the Panel will consider this matter. We requested a hearing before the Panel, which was held on April 11, 2019. On May 3, 2019, the Panel notified us that they have accepted our compliance plan and granted us an extension until August 26, 2019 to regain compliance with the above noted criteria. While the Panel has accepted our compliance plan, there can be no assurance that we will be able to evidence compliance with such plan within the period of time that the Panel granted us to do so.

A delisting of our common stock from The Nasdaq Capital Market could materially reduce the liquidity of our common stock and result in a corresponding material reduction in the price of our common stock. In addition, delisting could harm our ability to raise capital through alternative financing sources on terms acceptable to us, or at all, and may result in the potential loss of confidence by investors, employees and fewer business development opportunities.

The warrants are speculative in nature.

The warrants do not confer any rights of common stock ownership on its holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price (subject to adjustment therein) for a limited period of time. Specifically, for a period of five years commencing upon the date of issuance, holders of the warrants may exercise their right to acquire the common stock and pay an exercise price equal to \$ (% of the offering price per Class A Unit). Moreover, the market value of the warrants is uncertain and the warrants will not be listed or quoted for trading on any market or exchange. There can be no assurance that the market price of the common stock will ever equal or exceed the exercise price of the warrants, and consequently, whether it will ever be profitable for holders of the warrants to exercise the warrants.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common stock and sellers remain willing to sell the shares. All of the shares of common stock issued in the offering will be freely tradable without restriction or further registration under the Securities Act.

There is no public market for the warrants or the Series E Preferred.

There is no established public trading market for the warrants or the Series E Preferred offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants or the Series E Preferred on any national securities exchange or other nationally recognized trading system, including the Nasdaq Capital Market. Without an active market, the liquidity of the warrants and the Series E Preferred will be limited.

We have not paid dividends in the past and have no immediate plans to pay dividends.

We plan to reinvest all of our earnings, to the extent we have earnings, in order to further develop our product candidate and to cover operating costs. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on the common stock we are offering.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements, which reflect our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described under the section entitled "Risk Factors."

These statements are not guarantees of future performance and involve risks and uncertainties that are difficult to predict or are beyond our control. A number of important factors could cause actual outcomes and results to differ materially from those expressed in these forward-looking statements. Consequently, readers should not place undue reliance on such forward-looking statements. In addition, these forward-looking statements relate to the date on which they are made.

The forward-looking statements reflect our current expectations and are based on information currently available to us and on assumptions we believe to be reasonable. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause our actual results, activities, performance or achievements to be materially different from that expressed or implied by such forward-looking statements. These forward-looking statements include, but are not limited to:

- Market conditions;
- Our capital position;
- Our ability to compete with larger, better financed pharmaceutical companies;
- Our uncertainty of developing marketable products;
- Our ability to develop and commercialize our products;
- Our ability to obtain regulatory approvals;
- Our ability to maintain and protect intellectual property rights;
- The inability to raise additional future financing and lack of financial and other resources;
- Our ability to control product development costs;
- We may not be able to attract and retain key employees;
- We may not be able to compete effectively;
- We may not be able enter into new strategic collaborations;
- Changes in government regulation affecting product candidates could increase our development costs;
- Our involvement in patent and other intellectual property litigation could be expensive and could divert management's attention;
- The possibility that there will be no market acceptance for our products; and
- Changes in third-party reimbursement policies could adversely affect potential future sales of any of our products that are approved for marketing.

Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. The forward-looking information contained herein is made as of the date of this prospectus and, other than

[Table of Contents](#)

as required by law, we do not assume any obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise.

You should also read the matters described in "Risk Factors" and the other cautionary statements made in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus. The forward-looking statements in this prospectus may not prove to be accurate and therefore you are encouraged not to place undue reliance on forward-looking statements. You should read this prospectus completely.

This prospectus also includes estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

USE OF PROCEEDS

We estimate that the net proceeds of this offering will be approximately \$[] million, from the sale of our securities in this offering after deducting the placement agent fees and estimated offering expenses payable by us. The public offering price per unit will be negotiated between us and the investors based on market conditions at the time of pricing, and may represent a discount to the current market price of our common stock. This amount excludes the proceeds, if any, from the exercise of warrants in this offering. If all of the warrants sold in this offering were to be exercised in cash at an assumed exercise price of \$[] per share, we would receive additional net proceeds of approximately \$[] million. We cannot predict when or if these warrants will be exercised. It is possible that these warrants may expire and may never be exercised.

We anticipate that approximately \$1.25 million of the net proceeds from the offering will be used to repay a promissory note issued in March 2019. The promissory note bears no interest per annum and matures on June 30, 2019.

We intend to use the remainder of the proceeds from this offering to fund our research and development activities and for general corporate purposes, including working capital. We may use the net proceeds from this offering to fund possible acquisitions of other companies, products or technologies, though no such acquisitions are currently contemplated.

This expected use of our net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our drug candidate development, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our drug candidate, and any unforeseen cash needs.

As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business.

DILUTION

If you purchase securities in this offering, your interest will be diluted to the extent of the difference between the public offering price and the net tangible book value per share of our common stock after this offering. Our net tangible book value as of March 31, 2019 was \$(4.4) million or \$(0.21) per share of common stock (based upon 20,790,029 outstanding shares of common stock). "Net tangible book value" is total assets minus the sum of liabilities and intangible assets. "Net tangible book value per share" is net tangible book value divided by the total number of shares of common stock outstanding.

On a pro forma basis, to give effect to (i) the redemption of principal and interest expense on investor notes issued to Iliad on April 2, 2019 and April 3, 2019 such redemption consisting of issuances of 1,304,058 shares of common stock for a total value of \$200,000, (ii) the issuance of 17.8 million shares of common stock issued in the April 2019 Financing for total net proceeds of \$1.9 million, net of placement fees and expenses and (iii) the issuance of 1.4 million shares of common stock relating to the exercise of warrants in April 2019, our pro forma net tangible book value as of March 31, 2019 would have been \$(2.1) million or \$(0.05) per share of our common stock. After giving effect to the sale by us in this offering of [] Class A Units at an assumed public offering price of \$[] per Class A Unit (the closing price of our common stock as quoted on the Nasdaq Capital Market on May [], 2019) or up to [] Class B Units at a public offering price of \$1,000 per Class B Unit, and assuming all Series E Preferred Shares included in the Class B units were converted to common stock, and after deducting the estimated placement agent fees and expenses and estimated offering expenses payable by us and the payment of \$ of the net proceeds of this offering to repay certain indebtedness as described under "Use of Proceeds", our pro forma, as adjusted net tangible book value as of March 31, 2019 would have been approximately \$[], or \$[] per share of common stock. This amount represents an immediate increase in net tangible book value of \$[] per share to existing stockholders and an immediate dilution of \$[] per share to purchasers in this offering.

The following table illustrates the dilution:

Assumed public offering price per Class A Unit	\$
Net tangible book value per share as of March 31, 2019	\$ (0.21)
Increase in net tangible book value per share attributable to convertible debt redemption, warrant exercise and April 2019 Financing	\$ 0.16
Pro forma net tangible book value per share as of March 31, 2019	\$ (0.05)
Increase in net tangible book value per share attributable to this offering	\$
Pro forma, as adjusted net tangible book value per share after this offering	\$
Dilution per share to new investors	\$

The dilution information set forth in the table above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The above table is based on 20,790,029 shares of common stock outstanding as of March 31, 2019 and excludes:

- 630,936 shares of our common stock issuable upon exercise of outstanding options at a weighted average price of \$10.63 per share;

Table of Contents

- 7,839,180 shares of our common stock issuable upon exercise of outstanding warrants with a weighted-average exercise price of \$4.38 per share;
- 1,304,058 shares of our common stock issued to Iliad Research and Trading, L.P. ("Iliad") upon a redemption equalling \$200,000 (including interest thereon) of the outstanding balance of the convertible promissory note issued by the Company to Iliad in May 2018 (the "Iliad Note") on April 2, 2019 and April 3, 2019;
- 222,867 shares of our common stock issuable upon conversion of outstanding shares of Series A Convertible Preferred Stock;
- 1,243,872 shares of our common stock issuable upon conversion of outstanding shares of Series C Convertible Preferred Stock;
- 706,564 shares of our common stock that are reserved for equity awards that may be granted under our equity incentive plans;
- 17,833,334 shares of our common stock issued in the April 2019 Financing comprised of 13,491,666 shares of our common stock and 4,341,668 common stock equivalents subsequently issued upon conversion of 521 Series D Preferred Stock;
- 18,546,667 warrants issued in the April 2019 financing of which 1,400,000 warrants were exercised into our common stock resulting in 17,146,667 shares of our common stock issuable upon exercise of warrants issued in the April 2019 Financing, with an exercise price of \$0.12 per share;
- [] shares of our common stock issuable upon exercise of the warrants offered hereby; and
- [] shares of our common stock issuable upon exercise of the warrant to be issued to the placement agents in connection with this offering.

If we issue any additional shares in connection with outstanding options or warrants or issue shares upon conversion of outstanding preferred stock, there will be additional dilution.

CAPITALIZATION

The following table sets forth our cash and our capitalization as of March 31, 2019 on:

- an actual basis;
- a pro forma basis, to give effect to (i) the redemption of principal and interest expense on investor notes issued to Iliad on April 2, 2019 and April 3, 2019 such redemption consisting of issuances of 1,304,058 shares of common stock for a total value of \$200,000, (ii) the issuance of 17.8 million shares of common stock in the April 2019 Financing for total net proceeds of \$1.9 million, net of placement agent fees and expenses, and (iii) the issuance of 1.4 million shares of common stock relating to the exercise of warrants in April 2019; and
- a pro forma, as adjusted basis giving further effect to the sale by us in this offering of [] Class A Units, at the assumed public offering price of \$[] per Class A Unit or up to [] Class B Units, at the public offering price of \$1,000 per Class B Unit, assuming conversion of all Series E Preferred Shares included in the Class B Units, after deducting placement agent fees and expenses and commissions and estimated offering expenses payable by us and the payment of \$ million of the net proceeds of this offering to repay certain indebtedness, as described under "Use of Proceeds".

	As of March 31, 2019		
	Actual	Pro Forma	Pro Forma, as adjusted
Cash	\$ 1,682,606	\$ 3,765,806	
Convertible debt(1)	\$ 1,070,000	875,788	
Debt, net of discount	832,903	832,903	
Operating lease liability	733,374	733,374	
Stockholders' equity:			
Preferred Stock, stated value \$10.00 per share; 85,581 shares of Series A			
Convertible Preferred Stock issued and outstanding	855,808	855,808	
Preferred Stock, stated value \$1,000; 1,928 shares of Series C Convertible			
Preferred Stock issued and outstanding	908,632	908,632	
Common Stock, par value \$0.0001; 120,000,000 shares authorized; 20,790,029 shares issued and outstanding, actual; [] shares issued and outstanding pro forma, as adjusted	2,079	4,132	
Additional paid-in capital	77,326,583	79,607,730	
Accumulated deficit	(78,447,643)	(78,453,431)	
Total stockholders' equity	645,459	2,922,871	
Total capitalization	3,281,736	5,364,936	

- (1) Convertible debt on a pro forma basis and pro forma, as adjusted, basis is not reflective of its fair value. The total outstanding principal balance of the convertible debt as of May 15, 2019 is \$932,229.

The above table is based on 20,790,029 shares of common stock outstanding as of March 31, 2019 and excludes:

- 630,936 shares of our common stock issuable upon exercise of outstanding options at a weighted average price of \$10.63 per share;

[Table of Contents](#)

- 7,839,180 shares of our common stock issuable upon exercise of outstanding warrants with a weighted-average exercise price of \$4.38 per share;
- 1,304,058 shares of our common stock issued to Iliad Research and Trading, L.P. ("Iliad") upon a redemption equalling \$200,000 (including interest thereon) of the outstanding balance of the convertible promissory note issued by the Company to Iliad in May 2018 (the "Iliad Note") on April 2, 2019 and April 3, 2019;
- 222,867 shares of our common stock issuable upon conversion of outstanding shares of Series A Convertible Preferred Stock;
- 1,243,872 shares of our common stock issuable upon conversion of outstanding shares of Series C Convertible Preferred Stock;
- 706,564 shares of our common stock that are reserved for equity awards that may be granted under our equity incentive plans;
- 17,833,334 shares of our common stock in the April 2019 Financing comprised of 13,491,666 shares of our common stock and 4,341,668 common stock equivalents subsequently issued upon conversion of 521 Series D Preferred Stock;
- 18,546,667 warrants issued in the April 2019 financing of which 1,400,000 warrants were exercised into our common stock resulting in 17,146,667 shares of our common stock issuable upon exercise of warrants issued in the April 2019 Financing, with an exercise price of \$0.12 per share;
- [] shares of our common stock issuable upon exercise of the warrants offered hereby; and
- [] shares of our common stock issuable upon exercise of the warrant to be issued to the placement agents in connection with this offering.

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering up to [] Class A Units consisting of one share of our common stock and one warrant to purchase shares of our common stock, at an exercise price equal to \$ (% of the public offering price of the Class A Units), which warrants will be exercisable upon issuance and will expire five (5) years from date of issuance. The share of common stock and warrant that are part of a Class A Unit are immediately separable and will be issued separately in this offering.

We are also offering to those purchasers, if any, whose purchase of Class A Units in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock immediately following the consummation of this offering, the opportunity, in lieu of purchasing Class A Units, to purchase Class B Units. Each Class B Unit will consist of one share of our newly designated Series E Preferred with a stated value of \$1,000 and convertible into shares of our common stock at the public offering price of the Class A Units, together with the equivalent number of warrants as would have been issued to such purchaser of Class B Units if they had purchased Class A Units. For each Class B Unit we sell, the number of Class A Units we are offering will be decreased by \$1,000 divided by the Class A Unit public offering price. The shares of Series E Preferred and warrants that are part of a Class B Unit are immediately separable and will be issued separately in this offering. We are also offering the shares of common stock issuable upon exercise of the warrants and conversion of the Series E Preferred.

General

We are authorized to issue up to 120,000,000 shares of common stock, \$0.0001 par value per share, and 20,000,000 shares of preferred stock, \$0.0001 par value per share.

As of March 31, 2019, there were 20,790,029 shares of our common stock issued and outstanding, 85,581 shares of Series A convertible preferred stock outstanding, and 1,928 shares of Series C convertible preferred stock outstanding.

Common Stock

Holders of common stock are entitled to receive ratably dividends out of funds legally available, if and when declared from time to time by our Board. We have never paid any cash dividends on our common stock and our Board does not anticipate that we will pay cash dividends in the foreseeable future. The future payment of dividends, if any, on our common stock is within the discretion of the Board and will depend upon earnings, capital requirements, financial condition and other relevant factors. Holders of common stock are entitled to one vote for each share held on each matter to be voted on by stockholders. There is no cumulative voting in the election of directors. In the event of liquidation, dissolution or winding up of the affairs of us, holders of common stock are to share in all assets remaining after the payment of liabilities and any preferential distributions payable to preferred stockholders, if any. The holders of common stock have no preemptive or conversion rights and are not subject to further calls or assessments. There are no redemption or sinking fund provisions applicable to the common stock. The rights of the holders of the common stock are subject to any rights that may be fixed for holders of preferred stock, if any. All of the outstanding shares of common stock are fully paid and non-assessable.

Preferred Stock

The following is a summary of the material terms of our Series A Convertible Preferred Stock, Series C Convertible Preferred Stock, Series D Convertible Preferred Stock and the Series E Preferred. This summary is not complete. The following summary is qualified in its entirety by reference to the Certificate of Designation of the Series A Convertible Preferred Stock, the Certificate of Designation of the Series C Convertible Preferred Stock, the Certificate of Designation of the Series C Convertible Preferred Stock and

[Table of Contents](#)

the form of Certificate of Designation of Series E Preferred Stock, each of which has been or will be filed as an exhibit to the registration statement of which this prospectus is a part.

Series A Preferred Stock

On October 14, 2014, we filed a Certificate of Designation, Preference and Rights of Series A Convertible Preferred Stock (the "Series A Preferred Stock") with the Secretary of State of the State of Delaware. The number of shares of Series A Preferred Stock designated is 1,250,000 and each share of Series A Preferred Stock has a stated value equal to \$10.00 (the "Series A Stated Value").

Voting Rights. Except as otherwise provided therein and as otherwise prohibited by law, the Series A Preferred Stock shall have voting rights on an as converted basis. So long as any shares of Series A Preferred Stock are outstanding, the Company shall not, without the affirmative vote of the Holders of the shares of the Series A Preferred Stock then outstanding, (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock or alter or amend the Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Series A Liquidation (as defined below) senior to or otherwise pari passu with the Series A Preferred Stock, or (c) enter into any agreement with respect to the foregoing.

Liquidation. Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary (a "Series A Liquidation"), the holders shall be entitled to receive out of the assets of the Company, whether such assets are capital or surplus, for each share of Series A Preferred Stock an amount equal to 100% of the Series A Stated Value per share plus any other fees or liquidated damages owing thereon before any distribution or payment shall be made to the holders of any junior securities, and if the assets of the Company shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the holders shall be distributed among the holders ratably in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full.

Conversions at Option of Holder. Each share of Series A Preferred Stock shall be convertible into that number of shares of Common Stock determined by dividing the Series A Stated Value of such share of Series A Preferred Stock by \$3.84 (the "Series A Conversion Price"), at the option of the holder, at any time and from time to time from and after October 14, 2014.

Subsequent Equity Sales. If, at any time while this Series A Preferred Stock is outstanding, the Company sells or grants any option to purchase or sells or grants any right to reprice its securities, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition) any common stock or common stock equivalents entitling any person to acquire shares of common stock (a "Series A Subsequent Financing") at an effective price per share that is lower than the then Series A Conversion Price (such lower price, the "Series A Base Conversion Price" and such issuances collectively, a "Series A Dilutive Issuance") (if the holder of the common stock or common stock equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of common stock at an effective price per share that is lower than the Series A Conversion Price, such issuance shall be deemed to have occurred for less than the Series A Conversion Price on such date of the Series A Dilutive Issuance), the Series A Conversion Price then in effect shall be reduced to the Series A Base Conversion Price. The holder's rights under this section shall terminate upon the Company completing a Series A Subsequent Financing at an effective price per share equal to or greater than the Series A Conversion Price then in effect which results in minimum gross proceeds to the Company of \$20 million.

[Table of Contents](#)

Registration Rights. In the event we close a Series A Subsequent Financing of common or preferred stock, which does not include any warrants or convertible securities, at an effective price per share that is lower than 160% ("Series A Premium Price") of the then Series A Conversion Price (the "Series A Registration Price") and the purchasers of the securities in the Series A Subsequent Financing are given registration rights for such securities or such securities are issued on a registered basis, the holders shall receive at such time (i) equivalent registration rights for the Series A Preferred Stock and the shares issuable upon conversion of the Series A Preferred Stock in the event purchasers of the securities in the Series A Subsequent Financing receive registration rights or (ii) demand registration rights in the event purchasers of the securities in the Series A Subsequent Financing receive registered shares. In the event, the Series A Subsequent Financing includes warrants or other convertible securities, the Series A Premium Price shall increase by 1% for every 1% of warrant or other convertible security coverage in the Subsequent Financing. The holder's rights under this section shall terminate upon us completing a Series A Subsequent Financing at an effective price per share equal to or greater than the Series A Registration Price which results in minimum gross proceeds to us of \$20 million.

Series C Convertible Preferred Stock

On July 2, 2018, we filed a Certificate of Designation, Preference and Rights of Series C Convertible Preferred Stock (the "Series C Convertible Preferred Stock") with the Secretary of State of the State of Delaware. The number of shares of Series C Convertible Preferred Stock designated is 11,000.

Conversion. Each share of Series C Convertible Preferred Stock is convertible by the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Series C Convertible Preferred Stock by a conversion price of \$1.55 per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series C Convertible Preferred Stock will not have the right to convert any portion of the Series C Convertible Preferred Stock to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

Fundamental Transactions. In the event we effect certain mergers, consolidations, sales of substantially all of our assets, tender or exchange offers, reclassifications or share exchanges in which our common stock is effectively converted into or exchanged for other securities, cash or property, we consummate a business combination in which another person acquires 50% of the outstanding shares of our common stock, or any person or group becomes the beneficial owner of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock, then, upon any subsequent conversion of the Series C Convertible Preferred Stock, the holders of the Series C Convertible Preferred Stock will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon conversion in full of the Series C Convertible Preferred Stock.

Dividends. Holders of Series C Convertible Preferred Stock shall be entitled to receive dividends (on an as-if-converted-to-common-stock basis) in the same form as dividends actually paid on shares of the common stock when, as and if such dividends are paid on shares of common stock.

Voting Rights. Except as otherwise provided in the certificate of designation or as otherwise required by law, the Series C Convertible Preferred Stock has no voting rights.

[Table of Contents](#)

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Series C Convertible Preferred Stock will be entitled to receive out of our assets, whether capital or surplus, the same amount that a holder of common stock would receive if the Series C Preferred Stock were fully converted.

Redemption Rights. We are not obligated to redeem or repurchase any shares of Series C Convertible Preferred Stock. Shares of Series C Convertible Preferred Stock are not otherwise entitled to any redemption rights, or mandatory sinking fund or analogous provisions.

D Convertible Preferred Stock

On April 26, 2019, we filed a Certificate of Designation, Preference and Rights of Series D Convertible Preferred Stock (the "Series D Preferred ") with the Secretary of State of the State of Delaware. The number of shares of Series D Preferred Stock, or Series D Preferred, designated is 521.

Conversion. Each share of Series D Preferred is convertible by the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Series D Preferred by a conversion price of \$0.12 per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series D Preferred will not have the right to convert any portion of the Series D Preferred to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

Fundamental Transactions. In the event we effect certain mergers, consolidations, sales of substantially all of our assets, tender or exchange offers, reclassifications or share exchanges in which our common stock is effectively converted into or exchanged for other securities, cash or property, we consummate a business combination in which another person acquires 50% of the outstanding shares of our common stock, or any person or group becomes the beneficial owner of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock, then, upon any subsequent conversion of the Series D Preferred, the holders of the Series D Preferred will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon conversion in full of the Series D Preferred.

Dividends. Holders of Series D Preferred shall be entitled to receive dividends (on an as-if-converted-to-common-stock basis) in the same form as dividends actually paid on shares of the common stock when, as and if such dividends are paid on shares of common stock.

Voting Rights. Except as otherwise provided in the certificate of designation or as otherwise required by law, the Series D Preferred has no voting rights.

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Series D Preferred will be entitled to receive out of our assets, whether capital or surplus, the same amount that a holder of common stock would receive if the Series D Preferred were fully converted.

Redemption Rights. We are not obligated to redeem or repurchase any shares of Series D Preferred. Shares of Series D Preferred are not otherwise entitled to any redemption rights, or mandatory sinking fund or analogous provisions.

[Table of Contents](#)

Series E Convertible Preferred Stock

On [], we filed a Certificate of Designation, Preference and Rights of Series E Convertible Preferred Stock (the "Series E Preferred ") with the Secretary of State of the State of Delaware. The number of shares of Series E Preferred designated is [].

Conversion. Each share of Series E Preferred is convertible by the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Series E Preferred by a conversion price of \$[] per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series E Preferred will not have the right to convert any portion of the Series E Preferred to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

Fundamental Transactions. In the event we effect certain mergers, consolidations, sales of substantially all of our assets, tender or exchange offers, reclassifications or share exchanges in which our common stock is effectively converted into or exchanged for other securities, cash or property, we consummate a business combination in which another person acquires 50% of the outstanding shares of our common stock, or any person or group becomes the beneficial owner of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock, then, upon any subsequent conversion of the Series E Preferred, the holders of the Series E Preferred will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon conversion in full of the Series E Preferred.

Dividends. Holders of Series E Preferred shall be entitled to receive dividends (on an as-if-converted-to-common-stock basis) in the same form as dividends actually paid on shares of the common stock when, as and if such dividends are paid on shares of common stock.

Voting Rights. Except as otherwise provided in the certificate of designation or as otherwise required by law, the Series E Preferred has no voting rights.

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Series E Preferred will be entitled to receive out of our assets, whether capital or surplus, the same amount that a holder of common stock would receive if the Series E Preferred were fully converted.

Redemption Rights. We are not obligated to redeem or repurchase any shares of Series E Preferred. Shares of Series E Preferred are not otherwise entitled to any redemption rights, or mandatory sinking fund or analogous provisions.

Warrants

As of May 15, 2019, we had outstanding warrants to purchase an aggregate of 24,985,847 shares of our common stock at an average weighted exercise price of \$1.46 per share.

Warrants to be issued in this offering

The following is a summary of the material terms of the warrants. This summary is not complete and is qualified in its entirety by reference to the warrants, the form of which will be filed as an exhibit to the registration statement of which this prospectus is a part.

[Table of Contents](#)

Exercisability. Each warrant will be exercisable at any time and will expire five years from the date of issuance. The warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and payment in full for the number of shares of our common stock purchased upon such exercise, except in the case of a cashless exercise as discussed below.

The number of shares of common stock issuable upon exercise of the warrants is subject to adjustment in certain circumstances, including a stock split of, stock dividend on, or a subdivision, combination or recapitalization of the common stock.

Cashless Exercise. If at the time of exercise there is no effective registration statement registering, or the prospectus contained therein is not available for issuance of, the shares issuable upon exercise of the warrant, the holder may only exercise the warrant on a cashless basis. When exercised on a cashless basis, a portion of the warrant is cancelled in payment of the purchase price payable in respect of the number of shares of our common stock purchasable upon such exercise.

Exercise Price. Each warrant represents the right to purchase _____ shares of common stock at an exercise price of \$[] per share. In addition, the exercise price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of the warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of the warrant, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the warrant.

Transferability. Subject to applicable laws and restrictions, a holder may transfer a warrant upon surrender of the warrant to us with a completed and signed assignment in the form attached to the warrant. The transferring holder will be responsible for any tax that liability that may arise as a result of the transfer.

Rights as Stockholder. Except as set forth in the warrant, the holder of a warrant, solely in such holder's capacity as a holder of a warrant, will not be entitled to vote, to receive dividends, or to any of the other rights of our stockholders.

Fundamental Transactions. In the event we effect certain mergers, consolidations, sales of substantially all of our assets, tender or exchange offers, reclassifications or share exchanges in which our common stock is effectively converted into or exchanged for other securities, cash or property, we consummate a business combination in which another person acquires 50% of the outstanding shares of our common stock, or any person or group becomes the beneficial owner of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock, then, upon any subsequent exercise of the warrants, the holders of the warrants will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon exercise of the warrants. Notwithstanding the foregoing, in the event of a fundamental transaction (other than certain fundamental transactions where the Company remains the surviving company) as described above, the holder may, subject to certain conditions, require the Company or a successor entity to purchase the warrant from the holder by paying to the holder an amount in cash equal to the Black-Scholes value of the remaining unexercised portion of the warrant on the effective date of such change of control; provided, however, that, if the change of control is not within the Company's control, including not approved by the Company's board of directors, the holder will only be entitled to receive from the

[Table of Contents](#)

Company or any successor entity, as of the date of consummation of such change of control, the same type or form of consideration (and in the same proportion), at the Black-Scholes value of the unexercised portion of the warrant, that is being offered and paid to the holders of our common stock in connection with the change of control, whether that consideration is in the form of cash, stock or any combination thereof, or whether the holders of common stock are given the choice to receive from among alternative forms of consideration in connection with the change of control.

Amendments and Waivers. The provisions of each warrant may be modified or amended or the provisions thereof waived with the written consent of us and the holder.

PLAN OF DISTRIBUTION

Pursuant to a placement agency agreement, we have engaged Roth Capital Partners, LLC ("Roth") and CIM Securities, LLC ("CIM") to act as our placement agents to solicit offers to purchase the securities offered by this prospectus. The placement agents are not purchasing or selling any securities, nor are they required to arrange for the purchase and sale of any specific number or dollar amount of securities, other than to use their "reasonable best efforts" to arrange for the sale of the securities by us. Therefore, we may not sell the entire amount of securities being offered. There is no minimum amount of proceeds that is a condition to closing of this offering. We will enter into a securities purchase agreement directly with institutional investors, at the investors' option, who purchase our securities in this offering. Investors who do not enter into a securities purchase agreement shall rely solely on this prospectus in connection with the purchase of our securities in this offering. The placement agents may engage one or more subagents or selected dealers in connection with this offering.

The placement agency agreement provides that the placement agents' obligations are subject to conditions contained in the placement agency agreement.

Upon the closing of this offering, we will pay the placement agents a cash transaction fee equal to 7% of the aggregate gross cash proceeds to us from the sale of the securities in the offering and we will reimburse Roth for its out-of-pocket expenses incurred in connection with this offering, including the fees and expenses of the counsel for the placement agents, up to \$, subject to compliance with FINRA Rule 5110(f)(2)(D)(i). In addition, we have agreed to issue to the placement agents warrants to purchase up to shares (representing 4% of the aggregate number of shares sold in this offering, including the shares of common stock issuable upon conversion of the Series E Preferred and upon exercise of the warrants issued to investors in this offering), at an exercise price of \$ per share (representing 100% of the public offering price for a share of common stock to be sold in this offering). The placement agent warrants will be exercisable immediately and for five years from the effective date of the registration statement of which this prospectus forms a part. Pursuant to FINRA Rule 5110(g), the placement agent warrants and any shares issued upon exercise of the placement agent warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the placement agents or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

The following table shows the per Unit and total placement agent fees we will pay in connection with the sale of the securities in this offering, reflecting the purchase of all of the securities we are offering.

Per Class A Unit	\$
Per Class B Unit	\$
Total	\$

[Table of Contents](#)

We estimate the total expenses of this offering, which will be payable by us, excluding the placement agent fees, will be approximately \$[]. After deducting the fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$[] million.

Other Relationships

Roth and CIM may, from time to time, engage in transactions with or perform services for us in the ordinary course of its business and may continue to receive compensation from us for such services.

Determination of Offering Price

The public offering prices of the Class A Units and Class B Units are \$[] and \$[], respectively. The conversion price per share of the Series E Preferred Stock is equal to \$[], the public offering price of the Class A Units, and the exercise price per share of the Warrants is \$[], % of the public offering price of the Class A Units. The public offering prices of the Units, the conversion price and other terms of the Series E Preferred Stock and the exercise price and other terms of the Warrants were negotiated between us and the investors, based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the Units we are offering, the conversion price and other terms of the Series E Preferred Stock and the exercise price and other terms of the Warrants include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

Lock-up Agreements

Our officers and directors have agreed with the placement agents to be subject to a lock-up period of [90] days following the date of this prospectus. This means that, during the applicable lock-up period, such persons may not offer for sale, contract to sell, sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate or otherwise dispose of, directly or indirectly, any shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. Roth may, in its sole discretion and without notice, waive the terms of any of these lock-up agreements. We will also agree, in the securities purchase agreement, to a lock-up restriction on the issuance and sale of our securities for [] days following the closing date of the offering, subject to certain exempt issuances.

Indemnification

We have agreed to indemnify the placement agents against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the placement agents may be required to make with respect to any of these liabilities.

Transfer Agent, Registrar and Warrant Agent

Philadelphia Stock Transfer, Inc. is the transfer agent and registrar for our common stock.

Stock Market Listing

Our common stock trades on The Nasdaq Capital Market under the symbol "CTRV".

We do not intend to apply to list the Series E Preferred Stock or the Warrants we are offering on The Nasdaq Capital Market.

Regulation M

The placement agents may be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act and any fees received by them and any profit realized on the sale of the securities by them while acting as principal may be deemed to be underwriting discounts or commissions under the Securities Act. The placement agents will be required to comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the placement agents acting as principal. Under these rules and regulations, the placement agents may not (i) engage in any stabilization activity in connection with our securities; or (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby will be passed upon for us by Sheppard, Mullin, Richter & Hampton LLP, New York, New York. Ellenoff, Grossman & Schole LLP, New York, New York has acted as counsel for the placement agents in connection with certain legal matters related to this offering.

EXPERTS

The consolidated financial statements as of December 31, 2018 and December 31, 2017 and for the year ended December 31, 2018, the six month transition period ended December 31, 2017 and the year ended June 30, 2017, incorporated by reference in this Prospectus have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern), incorporated by reference herein, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus, which constitutes a part of the registration statement on Form S-1 that we have filed with the SEC under the Securities Act, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, you should refer to the registration statement and the exhibits filed as part of that document. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at <http://www.sec.gov>. We also maintain a website at <http://www.contravir.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-1 under the Securities Act with the SEC with respect to the securities being offered pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where You Can Find More Information". We are incorporating by reference the documents listed below, which we have already filed with the SEC, and all documents subsequently filed by us pursuant to Sections 13(a), 13(c),

[Table of Contents](#)

14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions:

1. [The Company's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 14, 2019;](#)
2. [The Company Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the SEC on May 15, 2019;](#)
3. [The Company's Definitive Proxy Statement filed on April 2, 2019;](#)
4. The Company's Current Reports on Form 8-K filed on [January 16, 2019](#), [March 4, 2019](#), [March 19, 2019](#), [April 5, 2019](#), [May 2, 2019](#), [May 5, 2019](#) and [May 8, 2019](#); and
5. [The description of the Company's common stock contained in the registration statement on Form 8-A filed with the Commission on February 24, 2015 pursuant to Section 12 of the Exchange Act of 1934, as amended \(the "Exchange Act"\), including any amendment or report filed for the purpose of updating that description.](#)

We also incorporate by reference all documents (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are subsequently filed by us with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering of the securities made by this prospectus (including documents filed after the date of the initial Registration Statement of which this prospectus is a part and prior to the effectiveness of the Registration Statement). These documents include periodic reports, such as [Annual Reports on Form 10-K](#), [Quarterly Reports on Form 10-Q](#) and [Current Reports on Form 8-K](#), as well as proxy statements.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent that a statement contained in this prospectus or any subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement

You may request, and we will provide you with, a copy of these filings, at no cost, by calling us at (732) 902-4000 or by writing to us at the following address:

ContraVir Pharmaceuticals, Inc.
399 Thomall Street, First Floor
Edison, New Jersey, 08837
Attn.: Secretary

[] Class A Units Consisting of Common Stock and Warrants or
[] Class B Units Consisting of Series E Convertible Preferred Stock and Warrants (and []
shares of common stock underlying shares of Series E Convertible Preferred Stock and [] shares of
common stock underlying Warrants)

PROSPECTUS

Lead Placement Agent

Roth Capital Partners

Co-Placement Agent

Brookline Capital Markets, a division of CIM Securities, LLC

, 2019

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table provides information regarding the various actual and anticipated expenses (other than placement agent fees and expenses) payable by us in connection with the issuance and distribution of the securities being registered hereby. All amounts shown are estimates except the SEC registration fee.

<u>Item</u>	<u>Amount</u>
SEC registration fee	\$
FINRA filing fee	
Printing and engraving expenses	
Legal fees and expenses	
Accounting fees and expenses	
Transfer agents' fees and expenses	
Miscellaneous costs	
Total	\$

Item 14. Indemnification of Directors and Officers

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties as directors and our amended and restated certificate of incorporation includes such an exculpation provision. Our certificate of incorporation and by-laws include provisions that indemnify, to the fullest extent allowable under the DGCL, the personal liability of directors or officers for monetary damages for actions taken as a director or officer of us, or for serving at our request as a director or officer or another position at another corporation or enterprise, as the case may be. Our certificate of incorporation and by-laws also provide that we must indemnify and advance reasonable expenses to our directors and officers, subject to our receipt of an undertaking from the indemnified party as may be required under the DGCL. Our certificate of incorporation expressly authorizes us to carry directors' and officers' insurance to protect us, our directors, officers and certain employees for some liabilities. The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and by-laws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against our directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. However, these provisions do not limit or eliminate our rights, or those of any stockholder, to seek non-monetary relief such as injunction or rescission in the event of a breach of a director's duty of care. The provisions do not alter the liability of directors under the federal securities laws. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. There is currently no pending material litigation or proceeding against any of our directors, officers or employees for which indemnification is sought.

Item 15. Recent Sales of Unregistered Securities

The Company has sold the securities described below within the past three years which were not registered under the Securities Act. All of the sales listed below were made pursuant to an exemption from registration afforded by Section 4(a)(2) of the Securities Act and Regulation D thereunder.

[Table of Contents](#)

On March 13, 2019, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with an accredited investor (the "Investor"). Pursuant to the Securities Purchase Agreement, the Company issued to the Investor in a private placement (the "Private Placement") (i) 3,320,000 shares of Company common stock and (ii) an unsecured \$1.25 million aggregate principal amount debenture.

On May 8, 2018, the Company entered into a securities purchase agreement (the "Securities Purchase Agreement") with Iliad Research and Trading, L.P. ("IRT"), pursuant to which the Company issued to IRT a secured convertible promissory note (the "Note") in the aggregate principal amount of \$3,325,000 for an aggregate purchase price of \$2,000,000 cash and \$1,000,000 aggregate principal amount of investor notes (the "Investor Notes") payable to the Company in four tranches of \$250,000 upon request by the Company. Closing occurred on May 9, 2018.

Item 16. Exhibits and Financial Statement Schedules

- (a) *Exhibits.* See Exhibit Index set forth on page II-3 to this Registration Statement.
- (b) *Financial Statements.* Incorporated by reference into this registration statement.

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;

- (ii) to reflect in the prospectus any facts or events arising after the effective date of the 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 the Registration Statement. Notwithstanding the foregoing, any increase or decrease in 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

- (iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

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

- (2) that, for the purpose of determining any liability under the Securities Act, each such 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 that 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.

[Table of Contents](#)

(4) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned 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 Section 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 the 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 foregoing provisions, 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 Act and will be governed by the final adjudication of such issue.

(d) The undersigned Registrant hereby undertakes that:

(1) for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus 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.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
1.1**	Form of Placement Agency Agreement
3.1(a)	Certificate of Incorporation of ContraVir Pharmaceuticals, Inc. (filed as Exhibit 3.1 to the Company's registration statement on Form 10-12G which was filed with the Securities and Exchange Commission on August 8, 2013 and incorporated herein by reference).
3.1(b)	Certificate of Designation, Preferences and Rights of the Series A Convertible Preferred Stock of ContraVir Pharmaceuticals, Inc. filed with the Secretary of State of the State of Delaware on October 14, 2014 (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 14, 2014 and incorporated herein by reference).
3.1(c)	Certificate of Designation, Preferences and Rights of the Series B Convertible Preferred Stock of ContraVir Pharmaceuticals, Inc. filed with the Secretary of State of the State of Delaware on December 18, 2014 (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 18, 2014 and incorporated herein by reference).
3.1(d)	Form of Certificate of Designation of Preference, Rights and Limitations of Series C Convertible Preferred Stock filed with the Secretary of State of the State of Delaware on July 2, 2018 (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 5, 2018 and incorporated herein by reference).
3.1(e)	Certificate of Designation of Preference, Rights and Limitations of Series D Convertible Preferred Stock (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 8, 2019 and incorporated herein by reference)
3.1(f)**	Form of Certificate of Designation of Preference, Rights and Limitations of Series E Convertible Preferred Stock
3.2	By-Laws of ContraVir Pharmaceuticals, Inc. (filed as Exhibit 3.2 to the Company's registration statement on Form 10-12G which was filed with the Securities and Exchange Commission on August 8, 2013 and incorporated herein by reference).
4.1**	Form of Warrant
4.2	Secured Convertible Promissory Note, dated May 8, 2018, by and between ContraVir Pharmaceuticals, Inc. and Iliad Research and Trading, L.P. (filed as Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018 and incorporated herein by reference.)
4.3	Warrant Agency Agreement, dated as of July 2, 2018, by and between the Company and Philadelphia Stock Transfer, Inc. (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 5, 2018 and incorporated herein by reference).
4.4	Form of Unsecured Debenture issued to the Investor thereto, dated March 14, 2019 (filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 19, 2019 and incorporated herein by reference).
5.1**	Opinion of Sheppard, Mullin, Richter & Hampton LLP

Table of Contents

<u>Exhibit Number</u>	<u>Exhibit Description</u>
10.1	<u>Amended and Restated Executive Agreement, dated May 25, 2017, between ContraVir Pharmaceuticals, Inc. and James Sapirstein (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 25, 2017 and incorporated herein by reference.)</u>
10.2	<u>Executive Agreement, dated April 1, 2016, between ContraVir Pharmaceuticals, Inc. and John Cavan (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 31, 2016 and incorporated herein by reference.)</u>
10.3	<u>License Agreement effective as of December 2014 by and between Chimerix, Inc. and ContraVir Pharmaceuticals, Inc. (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on February 12, 2015 and incorporated herein by reference).†</u>
10.4	<u>2013 Equity Incentive Plan (filed as Exhibit 10.1 to the Company's Form S-8 filed with the Securities and Exchange Commission on May 4, 2015 and incorporated herein by reference.)</u>
10.5	<u>Executive Agreement, dated June 1, 2016, between ContraVir Pharmaceuticals, Inc. and Dr. Robert Foster (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 13, 2016 and incorporated herein by reference.)</u>
10.6	<u>Securities Purchase Agreement, dated May 8, 2018, by and between ContraVir Pharmaceuticals, Inc. and Iliad Research and Trading, L.P. (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018 and incorporated herein by reference.)</u>
10.7	<u>Security Agreement, dated May 8, 2018, by and between ContraVir Pharmaceuticals, Inc. and Iliad Research and Trading, L.P. (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018 and incorporated herein by reference.)</u>
10.8	<u>Settlement Agreement and General Release between ContraVir Pharmaceuticals, Inc. and Theresa Matkovits dated as of October 15, 2018 (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2018 and incorporated herein by reference.).</u>
10.9	<u>Separation Agreement and General Release between ContraVir Pharmaceuticals, Inc. and James Sapirstein dated as of October 18, 2018 (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2018 and incorporated herein by reference.).</u>
10.10	<u>Form of Securities Purchase Agreement, dated March 13, 2019, by and among the Company and the Investor thereto (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 19, 2019 and incorporated herein by reference.)</u>
10.11	<u>Form of Securities Purchase Agreement by and among the Company and the Investor thereto (filed as Exhibit 10.10 to the Company's Registration Statement on Form S-1/A filed with the Securities and Exchange Commission on April 18, 2019 and incorporated herein by reference.)</u>
10.12**	Form of Securities Purchase Agreement

[Table of Contents](#)

<u>Exhibit Number</u>	<u>Exhibit Description</u>
23.1*	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm
23.2**	Consent of Sheppard, Mullin, Richter & Hampton, LLP (Filed as part of Exhibit 5.1 to this Registration Statement on Form S-1)
24*	Power of Attorney (included on signature page hereto)

* Filed herewith

** To be filed by amendment

[Table of Contents](#)

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ THOMAS H. ADAMS</u> Thomas H. Adams	Director	May 20, 2019
<u>/s/ JOHN BRANCACCIO</u> John Brancaccio	Director	May 20, 2019
<u>/s/ ARNOLD LIPPA</u> Arnold Lippa	Director	May 20, 2019

[QuickLinks](#) -- Click here to rapidly navigate through this document

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

ContraVir Pharmaceuticals, Inc.
Edison, New Jersey

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 13, 2019, relating to the consolidated financial statements of ContraVir Pharmaceuticals, Inc., which is incorporated by reference in that Prospectus. Our report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

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

/s/ BDO USA, LLP
Woodbridge, New Jersey

May 17, 2019

QuickLinks

[Exhibit 23.1](#)

[Consent of Independent Registered Public Accounting Firm](#)