

**This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, as amended, but is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.**

**SUBJECT TO COMPLETION, DATED DECEMBER 17, 2020**

**PRELIMINARY PROSPECTUS SUPPLEMENT**  
(To Prospectus Dated October 7, 2019)



**Units  
Each Unit Consisting of  
Share of Common Stock and  
Shares of Series D Preferred Stock**

We are offering units, consisting of \_\_\_\_\_ share of our common stock and \_\_\_\_\_ shares of our Voting Series D convertible preferred stock ("Series D Preferred Stock"), pursuant to this prospectus supplement and accompanying prospectus. The shares of our common stock and the shares of our Series D Preferred Stock are immediately separable and will be issued separately in this offering, but must be purchased together in this offering.

We do not currently have a sufficient number of authorized shares of common stock to cover the shares issuable upon conversion of the Series D Preferred Stock being offered by this prospectus supplement. As a result, the Series D Preferred Stock will not be convertible prior to the date on which we receive the approval of our stockholders of an amendment to our Restated and Amended Articles of Incorporation to increase the number of authorized shares of common stock to a total of 325 million shares (the "Charter Amendment") and such Charter Amendment is effective. On or after the effective date of the Charter Amendment, each whole share of Series D Preferred Stock issued in this offering will initially be convertible into \_\_\_\_\_ shares of our common stock at any time at the option of the holder subject to certain ownership limitations set forth in this prospectus supplement. We expect to hold a special meeting of our stockholders to vote on the Charter Amendment in the first calendar quarter of 2021. While our board of directors has unanimously recommended that our stockholders approve the Charter Amendment and all current directors and executive officers are supportive of the Charter Amendment, we cannot assure you that we will be able to obtain requisite stockholder approval of the Charter Amendment. In the event our stockholders do not approve the Charter Amendment, the shares of Series D Preferred Stock issued in this offering will not convert into shares of our common stock and may not have any value.

Our common stock is currently traded on the Nasdaq Capital Market under the symbol "VTGN." On December 16, 2020, the last reported sale price of our common stock was \$0.8342 per share. There is no established public trading market for our Series D Preferred Stock, and we do not expect a market to develop. In addition, we do not intend to apply for a listing of our Series D Preferred Stock on any national securities exchange.

**Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page S-5 of this prospectus supplement and in the accompanying prospectus, as well as those contained in the other documents incorporated by reference into this prospectus supplement and any related free writing prospectus. You should carefully read this entire prospectus supplement and the accompanying prospectus, including any information incorporated by reference, before deciding whether to purchase our securities.**

	<u>Per Share</u>	<u>Total</u>
Public Offering Price	\$	\$
Underwriting Discounts and Commissions <sup>(1)</sup>	\$	\$
Proceeds to VistaGen Therapeutics, Inc. before expenses	\$	\$

(1) See "Underwriting" for additional information regarding underwriting compensation.

**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.**

Delivery of securities being offered pursuant to this prospectus supplement and accompanying prospectus will be made on or about \_\_\_\_\_, 2020, subject to the satisfaction of certain closing conditions.

*Joint Book-Running Managers*

**Jefferies**

**William Blair**

The date of this prospectus supplement is December \_\_\_\_\_, 2020

# VISTAGEN THERAPEUTICS, INC.

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We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. We are not making offers to sell the securities in any jurisdiction in which an offer or solicitation is not authorized or permitted or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. The information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering speaks only as of the date of this document, unless the information specifically indicates that another date applies. Neither the delivery of this prospectus supplement, the accompanying prospectus or any free writing prospectus that we have authorized for use in connection with this offering, nor any sale of securities made under these documents, will, under any circumstances, create any implication that there has been no change in our affairs since the date of this prospectus supplement, the accompanying prospectus or any free writing prospectus that we have authorized for use in connection with this offering, nor that the information contained or incorporated by reference is correct as of any time subsequent to the date of such information. You should assume that the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of the date of the documents containing the information, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

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## ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering and certain other matters relating to us and our business. The second part consists of the accompanying prospectus, which provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus, or any documents incorporated by reference, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus, including the documents incorporated by reference therein. Information in any document we subsequently file that is incorporated by reference shall modify or supersede the information in this prospectus supplement, the accompanying prospectus and documents incorporated by reference prior to such subsequent filing.

Unless the context otherwise requires, references in this prospectus supplement to “we”, “us” and “our” refer to VistaGen Therapeutics, Inc.

## PROSPECTUS SUPPLEMENT SUMMARY

*This summary highlights selected information about our company, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus, in the documents we incorporate by reference and in any free writing prospectus that we have authorized for use in connection with this offering. This summary is not complete and does not contain all the information that you should consider before investing in our securities. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the "Risk Factors" contained in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein, the financial statements and the notes incorporated by reference in this prospectus supplement and the accompanying prospectus and the other information that we incorporated by reference herein, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q we file from time to time.*

### Business Overview

We are a clinical-stage biopharmaceutical company committed to developing and commercializing differentiated new generation medications that go beyond the current standard of care for anxiety, depression and other central nervous system ("CNS") disorders. Our pipeline includes three CNS product candidates, PH94B, PH10 and AV-101, each with a differentiated potential mechanism of action, favorable safety results observed in all clinical studies to date, and therapeutic potential in multiple CNS indications. We are currently preparing PH94B for a pivotal Phase 3 clinical study as a potential acute treatment of anxiety in adults with social anxiety disorder ("SAD"). We are also preparing PH94B for a small exploratory Phase 2A study in adult patients experiencing adjustment disorder with anxiety ("AjDA"). PH10 has completed a successful exploratory Phase 2A study for the treatment of major depressive disorder ("MDD"). We are currently preparing for the initiation of a Phase 2B clinical trial of PH10 as a potential stand-alone treatment for MDD. In several clinical studies, AV-101 was shown to be orally bioavailable and was well-tolerated. Based on successful preclinical studies involving AV-101 alone and in combination with probenecid, we are currently assessing the potential to pursue Phase 1B and subsequent Phase 2A clinical studies of AV-101, in combination with probenecid, for treatment of CNS indications involving the N-methyl-D-aspartate receptor ("NMDAR"). Additionally, our wholly owned subsidiary, VistaGen Therapeutics, Inc., d/b/a VistaStem, a California corporation ("VistaStem"), has pluripotent stem cell technology focused on assessing and developing small molecule new chemical entities ("NCEs") for our CNS pipeline, or for out-licensing, by utilizing CardioSafe 3D, VistaStem's customized human heart cell-based cardiac bioassay system. Our goal is to become a fully integrated biopharmaceutical company that develops and commercializes innovative CNS therapies for large and growing neuropsychiatry and neurology markets worldwide where current treatments are inadequate to meet the needs of millions of patients.

### Our Product Candidates

We believe that PH94B has the potential to be a novel, first-in-class neuroactive steroid nasal spray for use in a wide range of indications involving anxiety or phobia. Designed to be self-administered in microgram doses, PH94B is designed to not require systemic uptake and distribution to produce rapid-onset anti-anxiety effects. We are initially developing PH94B as a potential fast-acting, non-sedating, non-addictive, new generation acute treatment of anxiety in adults with SAD. With its rapid-onset pharmacology, potential lack of systemic exposure and favorable safety results, observed in clinical studies to date, we believe that PH94B also has potential to be developed as a novel treatment for a broad range of anxiety disorders, including AjDA, postpartum anxiety, post-traumatic stress disorder, preprocedural anxiety, panic and others.

PH10 is an innovative odorless investigational synthetic neuroactive nasal spray designed to have rapid onset and therapeutic potential in several neuropsychiatric indications involving depression. Following completion of a successful exploratory Phase 2A clinical study, we are preparing to initiate a Phase 2B clinical study of PH10 for the treatment for MDD. Designed to be self-administered in microgram doses, PH10 is designed to not require systemic uptake and distribution to produce rapid-onset antidepressant effects. With its rapid-onset pharmacology, potential lack of systemic exposure and favorable safety results, observed in clinical studies to date, we believe that PH10 has potential to be a novel treatment for multiple depression related disorders and suicidal ideation.

AV-101 (4-Cl-KYN) is a potentially novel, investigational prodrug designed to be orally administered and to target the NMDAR, an ionotropic glutamate receptor in the brain. Abnormal NMDAR function is associated with numerous CNS diseases and disorders. AV-101's active metabolite, 7-chloro-kynurenic acid, has been observed to be a potent and selective full antagonist of the glycine coagonist site of the NMDAR that inhibits the function of the NMDAR, but does not block the NMDAR like ketamine and other NMDAR antagonists. AV-101 has been observed in clinical trials to be orally bioavailable, well-tolerated and not cause dissociative or hallucinogenic psychological side effects or safety concerns similar to those that may be caused by other NMDAR antagonists. In light of these findings, we believe that AV-101 has potential to become an oral, new generation treatment for multiple large market CNS indications involving abnormal NDAR function and where current treatments are inadequate to meet high unmet patient needs. The U.S. Food and Drug Administration ("FDA") has granted Fast Track designation for development of AV-101 as both a potential adjunctive treatment for MDD and as a non-opioid treatment for neuropathic pain ("NP"). We are currently evaluating AV-101's therapeutic potential in combination with probenecid.

VistaStem is applying pluripotent stem cell (hPSC) technology and CardioSafe 3D, our customized cardiac bioassay system, to discover and develop novel, investigational small molecule NCEs for our CNS pipeline or for out-licensing.

Our product candidates are protected through a combination of patents, trade secrets, and proprietary know-how. If approved, they may also be eligible for periods of regulatory exclusivity. Our intellectual property portfolio includes issued U.S. and foreign patents, as well as U.S. and foreign patent applications.

Our condensed consolidated financial statements incorporated by reference in this prospectus supplement also include the accounts of VistaStem and VistaStem's two wholly owned inactive subsidiaries, Artemis Neuroscience, Inc., a Maryland corporation, and VistaStem Canada, Inc., a corporation organized under the laws of Ontario, Canada.

## **Recent Developments**

### *Conversion of Series B Preferred Stock*

On December 3, 2020, a holder of 28,571 shares of our 10% Convertible Series B preferred stock ("Series B Preferred") converted such shares into an equal number of shares of our common stock pursuant to the terms of the Series B Preferred. In connection with the conversion, we issued 160,062 of our common stock in payment of approximately \$124,600 of accrued dividends on the Series B Preferred converted.

### *Warrant Exercises*

On December 9, 2020, holders of outstanding warrants to purchase an aggregate of 477,986 shares of our registered common stock at \$0.50 per share exercised such warrants and we received cash proceeds of \$239,000.

### *Nasdaq Compliance*

On January 31, 2020, we were notified by the Nasdaq Stock Market, LLC ("Nasdaq") that we were not in compliance with the minimum bid price requirements set forth in Nasdaq Listing Rule 5550(a)(2) (the "Bid Price Rule") for continued listing on the Nasdaq Capital Market. The Bid Price Rule requires listed securities to maintain a minimum bid price of \$1.00 per share, and Nasdaq Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business days. The notification provided that we had 180 calendar days, or until July 29, 2020, to regain compliance with the Bid Price Rule. To regain compliance, the bid price of our common stock must have a closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days.

On April 17, 2020, in response to the extraordinary market conditions caused by the COVID-19 pandemic, Nasdaq instituted a longer period of time for companies such as ours to regain compliance with certain continued listing requirements, including the Bid Price Rule. As a result, we were granted until October 12, 2020 to regain compliance with the Bid Price Rule. We did not regain compliance with the Bid Price Rule by October 12, 2020; however, we notified Nasdaq in writing of our intent to cure the deficiency during a second compliance period. On October 13, 2020, Nasdaq notified us that based on our satisfaction of the remaining Nasdaq Capital Market listing requirements and our statement of intent to cure the bid price deficiency, Nasdaq had granted us a second 180-day compliance period, or through April 12, 2021, in which to regain compliance. If we fail to regain compliance during the second 180-day period, then Nasdaq will notify us of its determination to delist our common stock, at which point we will have an opportunity to appeal the delisting determination to a hearings panel.

On March 30, 2020, we received a letter from the Listing Qualifications Staff of Nasdaq notifying us that the listing of our shares of common stock was not in compliance with Nasdaq Listing Rule 5550(b)(2) (the "MVLS Rule") for continued listing on the Nasdaq Capital Market, as the market value of our listed securities was less than \$35 million for the previous 30 consecutive business days.

To regain compliance with the MVLS Rule, the market value of our listed securities must be \$35 million or more for a minimum of 10 consecutive business days. Between July 20, 2020 and August 2, 2020, the market value of our listed securities was above \$35 million. As a result, on August 3, 2020 we received a letter from Nasdaq's Listing Qualifications Staff advising that we had regained compliance with the MVLS Rule.

Please see "Risk Factors" below for additional disclosure regarding our compliance with Nasdaq Listing Qualifications.

## **Corporate Information**

VistaGen Therapeutics, Inc., a Nevada corporation, is the parent of VistaGen Therapeutics, Inc. (d/b/a VistaStem Therapeutics, Inc.), a wholly owned California corporation founded in 1998. Our principal executive offices are located at 343 Allerton Avenue, South San Francisco, California 94080, and our telephone number is (650) 577-3600. Our website address is [www.vistagen.com](http://www.vistagen.com). The information contained on our website is not part of this prospectus supplement or the accompanying prospectus. We have included our website address as a factual reference and do not intend it to be an active link to our website.

## THE OFFERING

### Units Offered by Us

We are offering \_\_\_\_\_ units. Each unit will consist of \_\_\_\_\_ share of our common stock and \_\_\_\_\_ shares of our Series D Preferred Stock. The units will not be certificated and the shares of our common stock and the shares of our Series D Preferred Stock are immediately separable and will be issued separately in this offering.

This prospectus supplement also relates to the offering of shares of our common stock issuable upon conversion of our Series D Preferred Stock. Such conversion is contingent upon the approval and effectiveness of the Charter Amendment.

### Series D Convertible Preferred Stock Conversion

The shares of our Series D Preferred Stock are convertible on a \_\_\_\_\_-to-\_\_\_\_\_ basis into shares of our common stock at any time at the option of the holder; provided, that such conversion is contingent upon the approval and effectiveness of the Charter Amendment; and provided, further, that the holder will be prohibited from converting Series D Preferred Stock into shares of our common stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 9.99% of the total number of shares of our common stock then issued and outstanding. See “Description of the Securities We are Offering—Series D Preferred Stock—Conversion.”

### Liquidation Preference

Prior to approval and effectiveness of the Charter Amendment, in the event of our liquidation, dissolution, or winding up, holders of our Series D Preferred Stock will receive a payment equal to \$0.001 per share of Series D Preferred Stock before any proceeds are distributed to the holders of our common stock. On and after the approval and effectiveness of the Charter Amendment, the Series D Preferred Stock will have no liquidation preference. See “Description of the Securities We are Offering—Series D Preferred Stock—Liquidation Preference.”

### Voting Rights

Prior to approval and effectiveness of the Charter Amendment, shares of Series D Preferred Stock will vote on an as-converted-to-common-stock basis as a single class with our shares of common stock. On and after approval and effectiveness of the Charter Amendment, shares of our Series D Preferred Stock will generally have no voting rights, except to the extent expressly provided in our articles of incorporation or as otherwise required by law.

However, for so long as shares of Series D Preferred Stock are outstanding, the affirmative consent of holders of a majority of the outstanding Series D Preferred Stock will be required before we can (i) amend, alter, modify or repeal (whether by merger, consolidation or otherwise) the certificate of designations relating to our Series D Preferred Stock, our articles of incorporation or our bylaws in any manner that adversely affects the rights, preferences, privileges or the restrictions provided for the benefit of, the Series D Preferred Stock; (ii) issue further shares of Series D Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series D Preferred Stock; or (iii) enter into any agreement to do any of the foregoing that is not expressly made conditional on obtaining the affirmative vote or written consent of the requisite holders. See “Description of the Securities We are Offering—Series D Preferred Stock—Voting Rights.”

### Common Stock to be Outstanding Immediately After this Offering

\_\_\_\_\_ shares.

### Use of Proceeds

We currently intend to use the net proceeds from the offering for research, development and manufacturing and regulatory expenses associated with continuing development of PH94B, PH10, AV-101, and potential drug candidates to expand our CNS pipeline and for other working capital and general corporate purposes. See “Use of Proceeds on page S-12.”

### Risk Factors

Investing in our securities involves a high degree of risk. For a discussion of factors that you should consider before buying our securities, see the information under “Risk Factors” beginning on page S-5 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement.

### Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “VTGN.” Our Series D Preferred is not and will not be listed on a national securities exchange.

The number of shares of our common stock that are and will be outstanding immediately before and after this offering as shown above is based on 73,998,057 shares outstanding as of September 30, 2020. The number of shares outstanding as of September 30, 2020, as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares of our Series A Preferred Stock held by one institutional investor and one accredited individual investor;
- 1,160,240 shares of common stock reserved for issuance upon conversion of 1,160,240 shares of our Series B 10% Convertible Preferred Stock, held by two institutional investors, and shares of our common stock which may be issued in payment of accrued dividends upon conversion of the Series B 10% Convertible Preferred Stock;
- 2,318,012 shares of common stock reserved for issuance upon conversion of 2,318,012 shares of our Series C Convertible Preferred Stock held by one institutional investor;
- 25,761,834 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$1.53 per share;
- 12,068,088 shares of common stock reserved for issuance upon exercise of outstanding stock options under our 2019 Omnibus Equity Incentive Plan and our 2016 Equity Incentive Plan, with a weighted average exercise price of \$1.20 per share;
- 4,665,162 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan; and
- 971,875 shares of common stock reserved for future issuance in connection with the 2019 Employee Stock Purchase Plan (“ESPP”).

Unless otherwise indicated, this prospectus supplement reflects and assumes (i) no exercise and/or conversion of any derivative securities that were outstanding as of September 30, 2020; (ii) no issuance of any derivative securities subsequent to September 30, 2020; and (iii) no conversion of the shares of Series D Preferred Stock issued in this offering.

## RISK FACTORS

*Our Annual Report on Form 10-K for the fiscal year ended March 31, 2020 and our Quarterly Reports on Form 10-Q for the quarters ended June 30, 2020 and September 30, 2020, each of which is incorporated by reference into this prospectus supplement, as well as our other filings with the SEC, include material risk factors relating to our business. Those risks and uncertainties and the risks and uncertainties described below are not the only risks and uncertainties that we face. Additional risks and uncertainties that are not presently known to us or that we currently deem immaterial or that are not specific to us, such as general economic conditions, may also materially and adversely affect our business and operations. If any of those risks and uncertainties or the risks and uncertainties described below actually occurs, our business, financial condition or results of operations could be harmed substantially. In such a case, you may lose all or part of your investment. You should carefully consider the risks and uncertainties described below and those risks and uncertainties incorporated by reference into this prospectus supplement, as well as the other information included in this prospectus supplement, before making an investment decision with respect to our common stock.*

### **Risk Related to this Offering**

***The COVID-19 pandemic has adversely impacted, and may continue to adversely impact our business.***

Beginning in late 2019, a new strain of coronavirus (“COVID-19”) spread across the world, and the outbreak has since been declared a pandemic by the World Health Organization. The U.S. Secretary of Health and Human Services has also declared a public health emergency in the United States in response to the outbreak. Considerable uncertainty still surrounds COVID-19 and its potential effects, and the extent of and effectiveness of responses taken on international, national and local levels. Measures taken to limit the impact of COVID-19, including shelter-in-place orders, social distancing measures, travel bans and restrictions, and business and government shutdowns have already resulted in significant negative economic impacts on a global basis.

As the COVID-19 pandemic continues to rapidly evolve, we cannot at this time accurately predict the effects of these conditions on our operations. Uncertainties remain as to the duration of the pandemic, the success of treatments and vaccines designed to combat the pandemic, and the length and scope of the travel restrictions and business closures imposed by the governments of impacted countries and localities. The continued COVID-19 pandemic, or another highly transmissible and pathogenic infectious disease, may lead to the implementation of further responses, including additional travel restrictions, government-imposed quarantines or stay-at-home orders, and other public health safety measures, which may result in further disruptions to our business and operations. The COVID-19 pandemic has impacted our business and may continue to do so as the pandemic persists. Additionally, future outbreaks may have several adverse effects on our business, results of operations and financial condition.

- ***Delayed product development:*** We have faced, and may continue to face, delays and other disruptions to our ongoing clinical development programs for PH94B, PH10 and AV-101 due to the ongoing COVID-19 pandemic. In addition, regulatory oversight and actions regarding our products may be disrupted or delayed in regions impacted by COVID-19, including the United States and elsewhere, which may impact review and approval timelines for products in development. Although we remain invested in continuing our clinical development programs for our current product candidates, our research and development efforts may be impacted if our employees, our contract research organizations (“CROs”) and our third-party contract manufacturer(s) (“CMOs”) are advised to continue to work remotely as part of social distancing measures. Additionally, social distancing measures, stay-at-home orders and other governmental restrictions designed to combat the COVID-19 pandemic may impair our ability to conduct our planned pivotal Phase 3 clinical study for PH94B in a timely manner.
- ***Negative impacts on our suppliers and employees:*** COVID-19 has impacted and COVID-19 or another highly transmissible and pathogenic infectious disease may impact the health of our employees, contractors or suppliers, reduce the availability of our workforce or those of companies with which we do business, divert our attention toward succession planning, or create disruptions in our supply or distribution networks. Since the beginning of the COVID-19 pandemic, we have experienced delays of the delivery of supplies of active pharmaceutical product (“API”) required to continue development of PH94B and PH10. Although our supply of raw materials and API remains sufficiently operational, we may experience adverse effects of such events, which may result in a significant, material disruption to clinical development programs, and our operations. Additionally, having shifted to remote working arrangements, we also face a heightened risk of cybersecurity attacks or data security incidents and are more dependent on internet and telecommunications access and capabilities.



COVID-19 has also created significant disruption to and volatility in national, regional and local economies and markets. Uncertainties related to, and perceived or experienced negative effects from, COVID-19 may cause significant volatility or decline in the trading price of our securities, capital markets conditions and general economic conditions. Our future results of operations and liquidity could be adversely impacted by supply chain disruptions and operational challenges faced by our CROs, CMOs and other contractors. The continued COVID-19 pandemic, or another significant outbreak of contagious disease in the human population, could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in a further economic downturn or a global recession. Such events may limit or restrict our ability to access capital on favorable terms, or at all, lead to consolidation that negatively impacts our business, weaken demand, increase competition, cause us to reduce our capital spend further, or otherwise disrupt our business or make it more difficult to implement our strategic plans.

***We may be required to raise additional financing by issuing new securities with terms or rights superior to those of our existing securityholders, which could adversely affect the market price of shares of our common stock and our business.***

We will require additional financing to fund future operations, including our research and development activities for our product candidates. We may not be able to obtain financing on favorable terms, if at all. If we raise additional funds by issuing equity securities, the percentage ownership of our current stockholders will be reduced, and the holders of the new equity securities may have rights superior to those of our existing security holders, which could adversely affect the market price of our common stock and the voting power of shares of our common stock. If we raise additional funds by issuing debt securities, the holders of these debt securities would similarly have some rights senior to those of our existing securityholders, and the terms of these debt securities could impose restrictions on operations and create a significant interest expense for us, which could have a materially adverse effect on our business.

***If you purchase securities sold in this offering, you will experience immediate and substantial dilution in your investment as a result of this offering. In addition, we may issue additional equity or equity-linked securities in the future, which may result in additional dilution to you.***

The combined public offering price per share being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Based on the public offering price of \$            per unit and our net tangible book value as of September 30, 2020 of approximately \$0.06 per share, if you purchase securities in this offering, you will suffer immediate and substantial dilution of approximately \$            per share, representing the difference between the public offering price per unit and the net tangible book value per share of our common stock as of September 30, 2020 after giving effect to this offering. See the section titled “*Dilution*” below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

In addition, we expect that significant additional capital will be needed in the future to continue our planned operations. To the extent that we raise additional capital by issuing equity securities, including securities exercisable for or convertible into shares of our common stock, such as the shares of our Series D Preferred Stock, our existing shareholders’ ownership may experience substantial dilution, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common shareholder.

***Sales of a substantial number of shares of our common stock, or the perception that such sales may occur, may adversely impact the price of our common stock.***

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception that such sales may occur, may adversely impact the price of our common stock, even if there is no relationship between such sales and the performance of our business. As of September 30, 2020, we had 73,998,057 shares of common stock outstanding, as well as outstanding options to purchase an aggregate of 12,068,088 shares of our common stock at a weighted average exercise price of \$1.20 per share, up to 4,228,252 shares of common stock issuable upon conversion of outstanding shares of our preferred stock, up to 3,936,498 shares of common stock reserved for issuance as payment of accrued dividends on outstanding shares of our Series B 10% Convertible Preferred Stock, and outstanding warrants to purchase up to an aggregate of 25,761,834 shares of our common stock at a weighted average exercise price of \$1.53 per share. The exercise and/or conversion of such outstanding derivative securities may result in further dilution of your investment.

***Our management will have broad discretion in the use of the net proceeds from this offering and may allocate such net proceeds in ways that you and other stockholders may not approve.***

Our management will have broad discretion in the use of the net proceeds from this offering, including for any of the purposes described in the section titled *Use of Proceeds*, and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. 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. The failure of our management to use these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government. These investments may not yield a favorable return to our stockholders.

***There is no public market for the Series D Preferred Stock being offered in this offering.***

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

***The Series D Preferred Stock included in this offering may not have any value.***

We do not currently have a sufficient number of authorized shares of common stock to cover the shares issuable upon conversion of the Series D Preferred Stock being offered by this prospectus supplement. As a result, before any conversion of the Series D Preferred Stock, we need to receive stockholder approval of an amendment to our Restated and Amended Articles of Incorporation to increase the number of authorized shares of common stock to a total of 325 million shares (the “Charter Amendment”) at a special meeting of stockholders expected to take place during the first calendar quarter of 2021. While our board of directors has unanimously recommended that stockholders approve the Charter Amendment and all current directors and executive officers are supportive of the Charter Amendment, we cannot assure you that we will be able to obtain requisite stockholder approval of the Charter Amendment. The Series D Preferred Stock will convert into shares of our common stock on the date that we publicly announce through the filing of a Current Report on Form 8-K that the Charter Amendment has been approved by our stockholders and has become effective.

The holders of the Series D Preferred Stock will initially be entitled to certain rights, including the right to receive a preferential payment equal to \$0.001 per share before any proceeds are distributed to the holders of our common stock in the event of our liquidation, dissolution or winding up or a deemed liquidation event. Upon the approval of the Charter Amendment, these rights will terminate.

In the event our stockholders do not approve the Charter Amendment, the Series D Preferred Stock will not convert and may not have any value.

***Because we have no current plans to pay cash dividends on our common stock for the foreseeable future, you may not receive any return on investment unless you sell your common stock for a price greater than that which you paid for it.***

We intend to retain future earnings, if any, for future operations and expansion of our business and have no current plans to pay any cash dividends for the foreseeable future. The declaration, amount and payment of any future dividends on shares of common stock will be at the sole discretion of our Board of Directors. Our Board of Directors may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax and regulatory restrictions, implications on the payment of dividends by us to our stockholders or by our subsidiaries to us and such other factors as our Board of Directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants in connection with any indebtedness we or our subsidiaries may incur. As a result, you may not receive any return on an investment in our common stock unless you sell our common stock for a price greater than that which you paid for it.

***Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.***

As of March 31, 2020, we had U.S. federal and state net operating loss carryforwards of approximately \$125.1 million and \$64.1 million, respectively, and U.S. federal and state tax credit carryforwards of approximately \$2.1 and \$1.2 million, respectively, and we have generated significant losses and credits after March 31, 2020. Under legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act of 2017 (the “Tax Act”), as modified by the Coronavirus Aid, Relief, and Economic Security Act, federal net operating loss carryforwards generated in taxable years beginning after December 31, 2017 may be carried forward indefinitely but, in the case of taxable years beginning after December 31, 2020, may only be used to offset 80% of our taxable income annually. Similar rules may apply under state tax laws that may suspend or otherwise limit utilization of net operating losses, which could accelerate or permanently increase state taxes owed. For example, California enacted A.B. 85 which imposes limits on the usability of California net operating losses and certain tax credits in taxable years beginning after 2019 and before 2023. In addition, our ability to utilize our federal net operating loss and tax credit carryforwards may be limited under Sections 382 and 383 of the Code. The limitations apply if we experience an “ownership change,” which is generally defined as a greater than 50 percentage point change (by value) in the ownership of our equity by certain stockholders over a rolling three-year period. We have not assessed whether such an ownership change has previously occurred nor whether this offering will give rise to an ownership change. If we have experienced an ownership change at any time since our incorporation, we may already be subject to limitations on our ability to utilize all or a portion of our existing net operating losses and other tax attributes to offset taxable income. In addition, future changes in our stock ownership (including as a result of this offering), which may be outside of our control, may trigger an ownership change and, consequently, the limitations under Sections 382 and 383 of the Code. Similar provisions of state tax law may also apply to limit the use of our state net operating loss and tax credit carryforwards. As a result, if or when we earn net taxable income, our ability to use our pre-change net operating loss carryforwards and other tax attributes to offset such taxable income may be subject to limitations, which could adversely affect our future cash flows.

***If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.***

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. We currently have research coverage by two securities and industry analysts. If one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

***The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on Nasdaq.***

Market conditions may result in volatility in the level of, and fluctuations in, market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. A weak global economy or other circumstances, such as changes in tariffs and trade, could also contribute to extreme volatility of the markets, which may have an effect on the market price of our common stock.

***If we fail to comply with the continued listing requirements of the Nasdaq Capital Market, 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 January 31, 2020, we were notified by Nasdaq that we were not in compliance with the Bid Price Rule. The Bid Price Rule requires listed securities to maintain a minimum bid price of \$1.00 per share, and Nasdaq Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business days. The notification provided that we had 180 calendar days, or until July 29, 2020, to regain compliance with the Bid Price Rule. To regain compliance, the bid price of our common stock must have a closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days.

On April 17, 2020, in response to the extraordinary market conditions caused by the COVID-19 pandemic, Nasdaq instituted a longer period of time for companies such as ours to regain compliance with certain continued listing requirements, including the Bid Price Rule. As a result, we were granted until October 12, 2020 to regain compliance with the Bid Price Rule. We did not regain compliance with the Bid Price Rule by October 12, 2020; however, we notified Nasdaq in writing of our intent to cure the deficiency during a second compliance period. On October 13, 2020, Nasdaq notified us that based on our satisfaction of the remaining Nasdaq Capital Market listing requirements and our statement of intent to cure the bid price deficiency, Nasdaq had granted us a second 180-day compliance period, or through April 12, 2021, in which to regain compliance. If we fail to regain compliance during the second 180-day period, then Nasdaq will notify us of its determination to delist our common stock, at which point we will have an opportunity to appeal the delisting determination to a hearings panel.

Additionally, on March 30, 2020, we received a letter from the Listing Qualifications Staff of Nasdaq notifying us that the listing of our shares of common stock was not in compliance with the MVLS Rule for continued listing on the Nasdaq Capital Market, as the market value of our listed securities was less than \$35 million for the previous 30 consecutive business days.

To regain compliance with the MVLS Rule, the market value of our listed securities must be \$35 million or more for a minimum of 10 consecutive business days. Between July 20, 2020 and August 2, 2020, the market value of our listed securities was above \$35 million. As a result, on August 3, 2020 we received a letter from Nasdaq's Listing Qualifications Staff advising that we had regained compliance with the MVLS Rule.

No assurance can be given that we will meet applicable Nasdaq continued listing standards or that future noncompliance will not occur. Failure to meet applicable Nasdaq continued listing standards could result in a delisting of our common stock from The Nasdaq Capital Market, which could materially reduce the liquidity of our common stock and result in a corresponding material reduction in the price of our common stock. Your ability to sell or purchase our common stock when you wish to do so would also be impaired. 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 inability to advance our drug development programs, potential loss of confidence by investors and employees, and fewer business development opportunities.

***We have identified material weaknesses in our internal control over financial reporting, and our business and stock price may be adversely affected if we do not adequately address those weaknesses or if we have other material weaknesses or significant deficiencies in our internal control over financial reporting.***

We have identified material weaknesses in our internal control over financial reporting. In particular, we concluded that (i) the size of our staff does not permit appropriate segregation of duties to (a) permit appropriate review of accounting transactions and/or accounting treatment by multiple qualified individuals and (b) prevent one individual from overriding the internal control system by initiating, authorizing and completing all transactions; and (ii) we utilize accounting software that does not prevent erroneous or unauthorized changes to previous reporting periods and/or can be adjusted so as to not provide an adequate auditing trail of entries made in the accounting software.

The existence of one or more material weaknesses or significant deficiencies could result in errors in our financial statements, and substantial costs and resources may be required to rectify any internal control deficiencies. If we cannot produce reliable financial reports, investors could lose confidence in our reported financial information causing our stock price to decline, we may be unable to obtain additional financing to operate and expand our business and our business and financial condition could be harmed.

***We require additional financing to execute our business plan and continue to operate as a going concern.***

Our audited consolidated financial statements for the year ended March 31, 2020 incorporated by reference into this prospectus supplement were prepared assuming we will continue to operate as a going concern, although we and our auditors have indicated that our continuing losses and negative cash flows from operations raise substantial doubt about our ability to continue as such. Because we continue to experience net operating losses, our ability to continue as a going concern is subject to our ability to obtain necessary funding from outside sources, including obtaining additional funding from this offering as well as future sales of our securities or potentially obtaining loans and grant awards from financial institutions and/or government agencies where possible. Our continued net operating losses increase the difficulty in completing such sales or securing alternative sources of funding, and there can be no assurances that we will be able to obtain any future funding on favorable terms or at all. If we are unable to obtain sufficient financing from the sale of our securities or from alternative sources, we may be required to reduce, defer, or discontinue certain or all of our research and development activities or we may not be able to continue as a going concern.

At September 30, 2020, we had cash and cash equivalents of approximately \$15.4 million. We do not believe this amount, plus the proceeds to date from subsequent sales of our securities, is sufficient to enable us to fund our planned operations for at least the twelve months following the issuance of the financial statements incorporated by reference into this prospectus supplement. We expect to seek additional capital to produce PH94B study material, conduct the PH94B pivotal Phase 3 clinical trials, produce additional AV-101 study material for future nonclinical and clinical studies, conduct AV-101 Phase 3-enabling toxicology studies, conduct pivotal Phase 3 clinical studies of AV-101 in MDD, conduct AV-101 Phase 2 studies in LID, MDD, NP and SI, produce PH10 study material and conduct a Phase 2b clinical trial of PH10 in MDD, acquire or license and conduct research and development of additional product candidates and to fund our internal operations.

Further, we have no current source of revenue to sustain our present activities, and we do not expect to generate revenue until, and unless, we (i) out-license or sell a product candidate to a third-party, (ii) enter into additional license arrangements involving our stem cell technology, or (iii) obtain approval from the FDA or other regulatory authorities and successfully commercialize, on our own or through a future collaboration, one or more of our product candidates.

As the outcome of our ongoing research and development activities, including the outcome of future anticipated clinical trials, is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates, on our own or in collaboration with others. As with prior periods, we will continue to incur costs associated with other development programs for PH94B, PH10 and AV-101. In addition, other unanticipated costs may arise. As a result of these and other factors, we will need to seek additional capital to meet our future operating requirements, including capital necessary to develop, obtain regulatory approval for, and to commercialize our product candidates. Raising funds in the current economic environment may present additional challenges. Even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations.

Our future capital requirements depend on many factors, including:

- the number and characteristics of the product candidates we pursue;
- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical and clinical studies;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- the cost of commercialization activities if any of our product candidates are approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our product candidates and any products we successfully commercialize;
- our ability to establish and maintain strategic partnerships, licensing or other collaborative arrangements and the financial terms of such agreements;
- market acceptance of our product candidates;
- the effect of competing technological and market developments;
- our ability to obtain government funding for our research and development programs;
- the costs involved in obtaining, maintaining and enforcing patents to preserve our intellectual property;
- the costs involved in defending against such claims that we infringe third-party patents or violate other intellectual property rights and the outcome of such litigation;
- the timing, receipt and amount of potential future licensee fees, milestone payments, and sales of, or royalties on, our future products, if any; and
- the extent to which we may acquire or invest in additional businesses, product candidates and technologies.

Any additional fundraising efforts will divert certain members of our management team from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. We cannot guarantee that future financing will be available in sufficient amounts, in a timely manner, or on terms acceptable to us, if at all. The terms of any future financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline. The sale of additional equity securities and the conversion, exchange or exercise of certain of our outstanding securities will dilute all of our stockholders. The incurrence of debt could result in increased fixed payment obligations and we could be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborative partners or otherwise at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or product candidates or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

If we are unable to obtain additional funding on a timely basis and on acceptable terms, we may be required to significantly curtail, delay or discontinue one or more of our research or product development programs or the commercialization of any product candidate or be unable to continue or expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations.

## CAUTIONARY NOTES REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains forward-looking statements that involve substantial risks and uncertainties. All statements contained in this prospectus supplement and the accompanying prospectus, other than statements of historical facts, are forward-looking statements including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- the impact of the COVID-19 pandemic, efforts to contain the pandemic and resulting economic downturn on our operations and financial condition;
- the availability of capital to satisfy our working capital requirements;
- our ability to implement the Charter Amendment;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- our plans to develop and commercialize our any of our current product candidates;
- our ability to initiate and complete our clinical trials and to advance our product candidates into additional clinical trials, including pivotal clinical trials, and successfully complete such clinical trials;
- regulatory developments in the United States and foreign countries;
- the performance of our third-party contractors involved with the manufacture and production of our drug candidates for nonclinical and clinical development activities, contract research organizations and other third-party nonclinical and clinical development collaborators and regulatory service providers;
- our ability to obtain and maintain intellectual property protection for our core assets;
- the size of the potential markets for our product candidates and our ability to serve those markets;
- the rate and degree of market acceptance of our product candidates for any indication once approved;
- the success of competing products and product candidates in development by others that are or become available for the indications that we are pursuing;
- the loss of key scientific, clinical and nonclinical development, and/or management personnel, internally or from one of our third-party collaborators;
- our ability to comply with Nasdaq continued listing standards;
- our ability to continue as a going concern; and
- other risks and uncertainties, including those described under Item 1A, “*Risk Factors*,” in our Annual Report on Form 10-K for the fiscal year ended March 31, 2020, and those described under Part II, Item 1A, “*Risk Factors*,” in our Quarterly Reports on Form 10-Q for the quarters ended June 30, 2020 and September 30, 2020, which risk factors are incorporated herein by reference.

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus supplement, as well as certain information incorporated by reference into this prospectus supplement and the accompanying prospectus, that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus supplement and the accompanying prospectus with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.

## USE OF PROCEEDS

We estimate that our net proceeds from this offering will be approximately \$       million after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We currently intend to use the net proceeds from the offering for research, development and manufacturing and regulatory expenses associated with continuing development of PH94B, PH10, AV-101, and potential drug candidates to expand our CNS pipeline and for other working capital and general corporate purposes.

Pending other uses, we intend to invest our proceeds from this offering in short-term investments or hold them as cash. We cannot predict whether the proceeds invested will yield a favorable return. Our management will have broad discretion in the use 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.

## DESCRIPTION OF THE SECURITIES WE ARE OFFERING

We are offering units. The units consist of        share of our common stock and        shares of our Series D Preferred Stock. The shares of common stock and Series D Preferred Stock forming a unit are each immediately separable and will be issued separately in this offering.

### Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limits our common stock are described under the caption “Description of Our Capital Stock” starting on page 9 in the accompanying prospectus.

### Series D Preferred Stock

#### *General*

In connection with this offering, our board of directors will designate up to 2,000,000 shares of our 10,000,000 million authorized shares of preferred stock as Series D Preferred Stock. The preferences and rights of the Series D Preferred Stock will be as set forth in a Certificate of Designation (the “Series D Certificate of Designation”).

#### *Rank*

The Shares of Series D Preferred Stock rank:

- senior to all of our common stock until the date of the Charter Amendment;
- senior to any class or series of our capital stock hereafter created specifically ranking by its terms junior to the Series D Preferred Stock;
- on parity to all shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock;
- on parity to any class or series of our capital stock hereafter created specifically ranking by its terms on parity with the Series D Preferred Stock; and
- junior to any class or series of our capital stock hereafter created specifically ranking by its terms senior to the Series D Preferred Stock;

in each case, as to distributions of assets upon our liquidation, dissolution or winding up whether voluntarily or involuntarily and/or the right to receive dividends.

#### *Conversion*

Each whole share of Series D Preferred Stock will initially be convertible into        shares of our common stock at any time at the option of the holder *provided*, that the Series D Preferred Stock shall not be convertible until the effective date of the Charter Amendment; and *provided further*, that the holders of Series D Preferred Stock will be prohibited, subject to certain exceptions, from converting such shares of Series D Preferred Stock into shares of our common stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 9.99% of the total number of shares of our common stock then issued and outstanding, which percentage may be changed at the holder’s election to a lower percentage at any time or to a higher percentage not to exceed 19.99% up 61 days’ notice to us.



*Liquidation Preference*

Prior to approval and effectiveness of the Charter Amendment, each holder of shares of Series D Preferred Stock is entitled to receive, in preference to any distributions of any of the assets or surplus funds of the Company to the holders of our common stock and any of our securities that by their terms are junior to the Series D Preferred Stock and pari passu with any distribution to the holders of any securities having (by their terms) parity with the Series D Preferred Stock, an amount equal to \$0.001 per share of Series D Preferred Stock, plus an additional amount equal to any dividends declared but unpaid on such shares, before any payments shall be made or any assets distributed to holders of any class of common stock or any of our securities that by their terms are junior to the Series D Preferred Stock. If, upon any such liquidation, dissolution or winding up of the Company, the assets of the Company shall be insufficient to pay the holders of shares of the Series D Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Company shall be distributed ratably to holders of the shares of the Series D Preferred Stock and any securities having (by their terms) parity with the Series D Preferred Stock. After such preferential payment, each holder of shares of Series D Preferred Stock shall be entitled to participate pari passu with the holders of common stock (on an as-converted basis, without regard to the 9.99% beneficial ownership limitation) and any securities having (by their terms) parity with the Series D Preferred Stock, including the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock, in the remaining distribution of the net assets of the Company available for distribution.

On and after the approval and effectiveness of the Charter Amendment, the Series D Preferred Stock will have no liquidation preference.

*Voting Rights*

Prior to the date of the Charter Amendment, the Series D Preferred Stock will vote on an as-converted-to-common-stock basis as a single class with our common stock. On and after the date of the Charter Amendment, the Series D Preferred Stock will generally have no voting rights. However, so long as shares of Series D Preferred Stock remain outstanding, the affirmative vote of holders of a majority of the then-outstanding shares of Series D Preferred Stock will be required before we can (a) amend, alter, modify or repeal (whether by merger, consolidation or otherwise) the Series D Certificate of Designation, our articles of incorporation or our bylaws in any manner that adversely affects the rights, preferences, privileges or the restrictions provided for the benefit of the Series D Preferred Stock, (b) issue further shares of Series D Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series D Preferred Stock, or (c) enter into any agreement to do any of the foregoing that is not expressly made conditional on obtaining the affirmative vote or written consent of the requisite holders.

*Dividends*

Shares of our Series D Preferred Stock are entitled to receive any dividends payable to holders of our common stock on an as-converted-to-common-stock basis.

*Redemption*

We will not be obligated to redeem or repurchase any shares of Series D Preferred Stock. Shares of Series D Preferred Stock will not otherwise be entitled to any redemption rights or mandatory sinking fund or analogous fund provisions.

*Exchange Listing*

We do not intend to apply for listing of the Series D Preferred Stock on any securities exchange or other trading system.

## **DIVIDEND POLICY**

We have never paid or declared any cash dividends on our common stock, and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. Shares of our Series B 10% Convertible Preferred Stock accrue dividends at a rate of 10% per annum, which dividends are payable solely in unregistered shares of our common stock at the time the Series B 10% Convertible Preferred Stock is converted into common stock. At September 30, 2020, accrued dividends on our Series B 10% Convertible Preferred Stock totaled approximately \$5.7 million.

**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2020:

- on an actual basis;  
and
- on a pro forma basis giving effect to the sale and issuance by us of shares of common stock and shares of Series D Preferred Stock in this offering, at a public offering price of \$ per unit, after deducting the underwriting discount and commissions, and estimated offering expenses payable by us.

**As of September 30, 2020**

**(amounts in dollars and in thousands, except share and per share amounts)**

	<u>Actual</u>	<u>Pro forma</u>
Cash and cash equivalents	\$ 15,400	\$
<b>Debt</b>		
Notes Payable		
7.3% and 6.3% notes payable to insurance premium financing provider	\$ 215	\$ 215
1% note payable under Paycheck Protection Program <sup>(1)</sup>	224	224
Total Debt	439	439
<b>Stockholders' equity (deficit):</b>		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized:		
Series A Preferred, 500,000 shares authorized and outstanding, actual and pro forma	\$ 1	\$ 1
Series B Preferred, 4,000,000 shares authorized and 1,160,240 shares outstanding, actual and pro forma	1	1
Series C Preferred, 3,000,000 shares authorized and 2,318,012 shares outstanding, actual and pro forma	2	2
Series D Preferred, no shares authorized and outstanding, actual; shares authorized and shares outstanding, pro forma	-	-
Common stock, \$0.001 par value, 175,000,000 shares authorized; 74,133,722 shares issued, actual; shares issued, pro forma	74	74
Additional paid-in capital	216,445	216,445
Treasury stock, at cost, 135,665 shares, actual and pro forma	(3,968)	(3,968)
Accumulated deficit	(208,332)	(208,332)
Total stockholders' equity	\$ 4,223	\$ 4,223
Total capitalization	\$ 4,662	\$ 4,662

(1) While we currently believe that our use of the Paycheck Protection Program ("PPP") loan proceeds will meet the conditions for forgiveness under the PPP, there can be no assurance that we will obtain full or partial forgiveness of the loan.

The above discussion and table are based on 73,998,057 shares of common stock outstanding as of September 30, 2020 and excludes the following securities

- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares of our Series A Preferred Stock held by one institutional investor and one accredited individual investor;
- 1,160,240 shares of common stock reserved for issuance upon conversion of 1,160,240 shares of our Series B 10% Convertible Preferred held by two institutional investors;
- 2,318,012 shares of common stock reserved for issuance upon conversion of 2,318,012 shares of our Series C Convertible Preferred held by one institutional investor;
- 25,761,834 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$.53 per share;
- 12,068,088 shares of common stock reserved for issuance upon exercise of outstanding stock options under our 2019 Omnibus Equity Incentive Plan and our 2016 Equity Incentive Plan, with a weighted average exercise price of \$1.20 per share;
- 4,665,162 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan;  
and
- 971,875 shares of common stock reserved for future issuance in connection with the 2019 ESPP.

## DILUTION

If you purchase shares of our common stock in this offering, you will experience dilution to the extent of the difference between the offering price per share in this offering and our as adjusted net tangible book value per share immediately after this offering. 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. As of September 30, 2020, our net tangible book value was approximately \$4.22 million, or approximately \$0.06 per share.

After further giving effect to the sale by us of units in this offering at a public offering price of \$ per unit, after deducting the underwriting discount and commissions, and estimated offering expenses payable by us and the conversion of the shares of Series D Preferred Stock into shares of our common, our as adjusted net tangible book value as of September 30, 2020 would have been approximately \$ or approximately \$ per share. This amount represents an immediate increase in net tangible book value of approximately \$ per share to existing stockholders and an immediate dilution in net tangible book value of approximately \$ per share to purchasers of our common stock in this offering.

The following table illustrates the dilution in net tangible book value per share to new investors:

<b>Public offering price per share:</b>		\$
Net tangible book value per share as of September 30, 2020	\$	0.06
Increase in as adjusted, net tangible book value per share after this offering		
As adjusted net tangible book value per share after this offering		
Dilution in as adjusted net tangible book value per share to new investors in this offering		\$

The foregoing discussion and table do not take into account further dilution to new investors that could occur upon the exercise of outstanding options or warrants having a per share exercise price less than the public offering price in this offering. To the extent that we raise additional capital through the sale of equity or convertible debt securities after this offering, the issuance of those securities could result in further dilution to our stockholders.

The above discussion and table are based on 73,998,057 shares of common stock outstanding as of September 30, 2020 and excludes the following securities:

- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares of our Series A Preferred Stock held by one institutional investor and one accredited individual investor;
- 1,160,240 shares of common stock reserved for issuance upon conversion of 1,160,240 shares of our Series B 10% Convertible Preferred held by two institutional investors;
- 2,318,012 shares of common stock reserved for issuance upon conversion of 2,318,012 shares of our Series C Convertible Preferred held by one institutional investor;
- 25,761,834 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$.53 per share;
- 12,068,088 shares of common stock reserved for issuance upon exercise of outstanding stock options under our 2019 Omnibus Equity Incentive Plan and our 2016 Equity Incentive Plan, with a weighted average exercise price of \$1.20 per share;
- 4,665,162 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan; and
- 971,875 shares of common stock reserved for future issuance in connection with the 2019 ESPP.

## MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion is a summary of the material U.S. federal income tax consequences to U.S. holders and non-U.S. holders (each as defined below) of the purchase, ownership, conversion and disposition, as applicable, of the shares of our Series D Preferred Stock and our common stock issued pursuant to this offering (including our common stock received upon conversion of the shares of our Series D Preferred Stock), but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the “IRS”), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership, conversion and disposition, as applicable, of the shares of our Series D Preferred Stock and our common stock.

This discussion is limited to holders that hold our common stock or our Series D Preferred Stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a holder’s particular circumstances, including the impact of the Medicare contribution tax on net investment income and the alternative minimum tax. In addition, it does not address consequences relevant to holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons holding our stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our stock under the constructive sale provisions of the Code;
- persons who hold or receive our stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our stock being taken into account in an applicable financial statement;
- tax-qualified retirement plans; and
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock or our Series D Preferred Stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock or our Series D Preferred Stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

**THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP, CONVERSION (IN THE CASE OF OUR SERIES D PREFERRED STOCK) AND DISPOSITION OF OUR COMMON STOCK OR SERIES D PREFERRED STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.**

#### **Allocation of Purchase Price between Common Stock and Series D Preferred Stock**

Although not free from doubt, the acquisition of a unit should be treated for U.S. federal income tax purposes as the purchase of an investment unit consisting of share of our common stock and shares of our Series D Preferred Stock. For U.S. federal income tax purposes, each holder of a unit should allocate the purchase price paid by such holder for such unit between the share of our common stock and shares of our Series D Preferred Stock based on the relative fair market value of each at the time of issuance. Under U.S. federal income tax law, each investor must make his or her own determination of such value based on all the facts and circumstances. Therefore, we strongly urge investors to consult their tax advisors regarding the determination of value for these purposes. The price allocated to each share of our common stock and shares of our Series D Preferred Stock should be the shareholder's tax basis in such share of our common stock or shares of our Series D Preferred Stock, as the case may be.

#### **Series D Preferred Stock Treated as “Common Stock” for Purposes of Section 305**

The U.S. federal income tax consequences with respect to our Series D Preferred Stock depends, in part, on whether it is “participating” preferred stock (that is, treated as “common stock”) for purposes of Section 305 of the Code. Participating preferred stock is stock that participates in corporate growth to any significant extent (disregarding conversion privileges). Generally, stock which enjoys a priority as to dividends and on liquidation and is entitled to participate, over and above such priority, with another less privileged class of stock in earnings and profits and upon liquidation, would be treated as “participating” preferred stock for purposes of Section 305 of the Code. Our Series D Preferred Stock is entitled to receive dividends when dividends are paid on our common stock and has the right to participate, over and above its preference amount, in any liquidation proceeds along with our common stock on an as-converted basis (see “Description of the Securities We Are Offering—Series D Preferred Stock”). Based on the foregoing, we currently intend to treat the Series D Preferred Stock as participating preferred stock (that is, treated as “common stock”) for purposes of Section 305 of the Code. There is no assurance, however, that the IRS or the courts will not take a contrary position. Investors should consult their tax advisors regarding the characterization of our Series D Preferred Stock as participating preferred stock.

#### **Definition of a U.S. Holder and Non-U.S. Holder**

For purposes of this discussion, a “U.S. holder” is any beneficial owner of shares of our Series D Preferred Stock or our common stock (other than an entity treated as a partnership for U.S. federal income tax purposes) that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

For purposes of this discussion, a “non-U.S. holder” is any beneficial owner of shares of our Series D Preferred Stock or our common stock that is neither a “U.S. holder” nor an entity treated as a partnership for U.S. federal income tax purposes.

## **Tax Consequences Applicable to U.S. Holders**

### ***Distributions***

As described in the section titled “Dividend Policy,” we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Dividends paid to non-corporate U.S. holders generally will qualify for taxation at reduced rates if such U.S. holders meet certain holding period and other applicable requirements. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a U.S. holder’s adjusted tax basis in its stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under “—Sale or Other Taxable Disposition.” U.S. holders should consult their tax advisors regarding the application of reduced tax rates in their particular circumstances.

### ***Sale or Other Taxable Disposition***

A U.S. holder will recognize capital gain or loss on a sale or other taxable disposition of our stock equal to the difference between the amount of cash and the fair market value of any property received upon the sale or other taxable disposition and the U.S. holder’s adjusted tax basis in the shares sold or disposed of. Such capital gain or loss will be long-term capital gain or loss if the U.S. holder’s holding period for the shares sold or exchanged is more than one year. Long-term capital gains recognized by certain non-corporate U.S. holders, including individuals, will be taxable at reduced rates. The deductibility of capital losses is subject to limitations.

### ***Conversion of Series D Preferred Stock into Common Stock***

A U.S. holder generally will not recognize any income, gain or loss upon the receipt of common stock upon the conversion of our Series D Preferred Stock. A U.S. holder’s adjusted tax basis of our common stock received upon conversion generally will equal the U.S. holder’s adjusted tax basis in its Series D Preferred Stock converted, and such U.S. holder’s holding period for common stock received on conversion will generally include the period during which the U.S. holder held its Series D Preferred Stock prior to conversion.

### ***Information Reporting and Backup Withholding***

Distributions with respect to our stock to a U.S. holder and proceeds from the sale or other taxable disposition of our stock by the U.S. holder generally are subject to information reporting to the IRS, unless the U.S. holder is an exempt recipient. Backup withholding may apply to such payments if a U.S. holder is not otherwise exempt and:

- such holder fails to furnish its taxpayer identification number (“TIN”), which for an individual, is ordinarily his or her social security number;
- such holder furnishes an incorrect TIN;
- the applicable withholding agent is notified by the IRS that such holder has failed to properly report payments of dividends or interest;  
or
- such holder fails to certify, under penalties of perjury, that such holder has furnished a correct TIN and that the IRS has not notified such holder that such holder is subject to backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. holder’s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

## **Tax Consequences Applicable to Non-U.S. Holders**

### ***Distributions***

Any distributions of cash or property on our stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will first constitute a return of capital and be applied against and reduce a non-U.S. Holder's adjusted tax basis in its stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or Other Taxable Disposition."

Subject to the discussions below on effectively connected income, backup withholding and FATCA (as defined below), dividends paid to a non-U.S. holder on our stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the non-U.S. holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A non-U.S. holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), the non-U.S. holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the non-U.S. holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates. A non-U.S. holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

### ***Sale or Other Taxable Disposition***

Subject to the discussions below regarding backup withholding and FATCA, a non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our stock constitutes a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation ("USRPHC") for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular rates. A non-U.S. holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on gain realized upon the sale or other taxable disposition of our stock, which may be offset by U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States), provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.



With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition of our common stock by a non-U.S. holder will not be subject to U.S. federal income tax if our common stock is “regularly traded,” as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the non-U.S. holder’s holding period. If our common stock is considered to be regularly traded and we are or were to become a USRPHC, gain recognized on a sale or other taxable disposition of our Series D Preferred Stock generally would be subject to U.S. federal income tax only in the case of a non-U.S. holder that owned, as of the date of any acquisition of our Series D Preferred Stock, an amount of our Series D Preferred Stock having a fair market value greater than 5% of our outstanding common stock as measured on such date.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

#### ***Conversion of Series D Preferred Stock into Common Stock***

A non-U.S. holder generally will not recognize any gain or loss upon the receipt of our common stock upon the conversion of our Series D Preferred Stock.

#### ***Information Reporting and Backup Withholding***

Payments of dividends on our stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our stock paid to the non-U.S. holder, regardless of whether such distributions constitute dividends or whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our stock within the United States or conducted through certain U.S. related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person or the holder otherwise establishes an exemption. Proceeds of a disposition of our stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder’s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

#### ***Additional Withholding Tax on Payments Made to Foreign Accounts***

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or “FATCA”) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our stock paid to a “foreign financial institution” or a “non-financial foreign entity” (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any “substantial United States owners” (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain “specified United States persons” or “United States owned foreign entities” (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our stock.

## UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement among us, Jefferies LLC and William Blair & Company, L.L.C. as the representatives of the underwriters named below and joint book-running manager of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of units shown opposite its name below:

<b>Underwriters</b>	<b>Number of Units</b>
Jefferies LLC	
William Blair & Company, L.L.C.	
<b>Total</b>	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the units if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable. There is currently no trading market for the Series D Preferred Stock and no such trading market is expected to develop.

The underwriters are offering the units subject to their acceptance of the units from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

### Commission and Expenses

The underwriters have advised us that they propose to offer the units to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ \_\_\_\_\_ per unit. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ \_\_\_\_\_ per unit to certain brokers and dealers. After the offering, the public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering.

	<b>Per Unit</b>	<b>Total</b>
Public offering price	\$ _____	\$ _____
Underwriting discount and commissions paid by us	\$ _____	\$ _____
Proceeds to us, before expenses	\$ _____	\$ _____

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$ \_\_\_\_\_.

## **Listing**

Our common stock is listed on the Nasdaq Capital Market under the symbol “VTGN.” Our Series D Preferred is not and will not be listed on a national securities exchange.

## **No Sales of Similar Securities**

Pursuant to the underwriting agreement, we have agreed that for a period of 90 days following the pricing of the offering, and subject to certain customary exceptions, not to (i) sell, offer to sell, contract to sell or lend, effect any short sale or establish or increase a put equivalent position or liquidate or decrease any call equivalent position, pledge, hypothecate or grant any security interest in, or in any other way transfer or dispose of, in each case whether directly or indirectly, any shares of common stock or related securities; (ii) enter into any swap, hedge or similar arrangement; (iii) make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any shares of common stock or related securities, or cause to be filed a registration statement (other than as contemplated by the underwriting agreement with respect to the units or except for registration statements on Form S-8 with respect to any and all shares of common stock or related securities to be issued pursuant to any employee benefit plans), prospectus or prospectus supplement with respect to any such registration; (iv) effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction; or (v) publicly announce any intention to do any of the foregoing, in each case without the prior written consent of Jefferies LLC and William Blair & Company, L.L.C.

Pursuant to certain “lock-up” agreements, our directors, executive officers and their affiliates have agreed that, for a period ending on the later of (i) 90 days from the date of this prospectus supplement or (ii) the earlier of (x) the effective date of the Charter Amendment and (y) 120 days from the date of this prospectus supplement, they will not, subject to certain customary exceptions, sell or offer to sell any of our securities currently or hereafter owned, enter into any swap, make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any of our securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or publicly announce any intention to do any of the foregoing without the prior written consent of Jefferies LLC.

## **Stabilization**

The underwriters have advised us that they, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, and certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Naked” short sales are sales in excess of the shares of our common stock the underwriters are required to purchase. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of units on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of units on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The Nasdaq Capital Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of units in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

#### **Electronic Distribution**

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of units for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

#### **Other Activities and Relationships**

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

## **Disclaimers About Non-U.S. Jurisdictions**

### ***Notice to Prospective Investors in Canada***

The units may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the units must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

### ***Notice to Prospective Investors in the European Economic Area***

In relation to each Member State of the European Economic Area (each, a "Member State"), no offer of units may be made to the public in that Member State other than:

- to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the underwriters; or
- in any other circumstances falling within Article 1(4) of the Prospectus Regulation;

provided that no such offer of units shall require us or the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any units or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the underwriters and us that it is a "qualified investor" as defined in the Prospectus Regulation.

In the case of any units being offered to a financial intermediary as that term is used in Article 5 of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the units acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any units to the public other than their offer or resale in a Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer of units to the public" in relation to any units in any Member State means the communication in any form and by means of sufficient information on the terms of the offer and the units to be offered so as to enable an investor to decide to purchase units, the expression "Prospectus Regulation" means Regulation (EU) 2017/1129 (as amended).

***Notice to Prospective Investors in France***

Neither this prospectus nor any other offering material relating to the units described in this prospectus has been submitted to the clearance procedures of the Autorité des Marchés Financiers or by the competent authority of another member state of the European Economic Area and notified to the Autorité des Marchés Financiers. The units have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the units has been or will be

- released, issued, distributed or caused to be released, issued or distributed to the public in France;  
or
- used in connection with any offer for subscription or sale of the units to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (investisseurs qualifiés) and/or to a restricted circle of investors (cercle restreint d'investisseurs), in each case investing for their own account, all as defined in, and in accordance with, articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French Code monétaire et financier;
- to investment services providers authorized to engage in portfolio management on behalf of third parties;  
or
- in a transaction that, in accordance with article L.411-2-II-1<sup>o</sup>-or-2<sup>o</sup>-or 3<sup>o</sup> of the French Code monétaire et financier and article 211-2 of the General Regulations (Règlement Général) of the Autorité des Marchés Financiers, does not constitute a public offer (appel public à l'épargne).

The units may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French Code monétaire et financier.

***Notice to Prospective Investors in Hong Kong***

The units may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the units may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to units which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

***Notice to Prospective Investors in Israel***

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus supplement is being distributed only to, and is directed only at, and any offer of the units is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

***Notice to Prospective Investors in Japan***

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended) (FIEL), and the underwriters will not offer or sell any units, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means, unless otherwise provided herein, any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

***Notice to Prospective Investors in Singapore***

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the units may not be circulated or distributed, nor may the units be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the units are subscribed or purchased under Section 275 of the SFA by a relevant person which is

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor;

shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;
- where no consideration is or will be given for the transfer;  
or
- where the transfer is by operation of law.

Solely for the purposes of our obligations pursuant to Section 309B of the SFA, we have determined, and hereby notify all relevant persons (as defined in the CMP Regulations 2018), that the units are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on the Recommendations on Investment Products).

***Notice to Prospective Investors in the United Kingdom***

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a "relevant person"). The units are only available to, and any invitation, offer or agreement to purchase or otherwise acquire such units will be engaged in only with, relevant persons. This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

## **LEGAL MATTERS**

Certain legal matters in connection with this offering will be passed upon for us by Latham & Watkins LLP, Chicago, Illinois. Jefferies LLC is being represented in connection with this offering by Cooley LLP, New York, New York. The validity of the securities offered hereby will be passed upon for us by Woodburn and Wedge, Reno, Nevada.

## **EXPERTS**

OUM & Co. LLP, our independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended March 31, 2020, as set forth in their report, which is incorporated by reference in this prospectus. The report for VistaGen Therapeutics, Inc. includes an explanatory paragraph about the existence of substantial doubt concerning its ability to continue as a going concern. Our financial statements are incorporated by reference in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.



## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities covered by this prospectus supplement. This prospectus supplement, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and the securities covered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. The SEC maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available free of charge at our website, [www.vistagen.com](http://www.vistagen.com), as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus supplement.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents filed by us with the SEC are incorporated by reference in this prospectus:

- our Annual Report on Form 10-K for the year ended March 31, 2020, filed with the SEC on June 29, 2020;
- our Quarterly Reports on Form 10-Q for the quarter ended June 30, 2020, filed with the SEC on August 13, 2020, and for the quarter ended September 30, 2020, filed with the SEC on November 12, 2020;
- our Current Reports on Form 8-K, filed with the SEC on April 3, 2020, April 27, 2020, April 28, 2020, May 18, 2020, June 1, 2020, June 26, 2020, August 6, 2020, September 18, 2020, October 13, 2020 (solely with respect to the information disclosed under Item 3.01 of such Current Report on Form 8-K) and December 1, 2020;
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on July 27, 2020 (solely with respect to information required by Part III of our Annual Report on Form 10-K for the year ended March 31, 2020, which information shall update and supersede information included in Part III of our Annual Report on Form 10-K for the year ended March 31, 2020); and
- the description of our common stock contained in the Registration Statement on Form 8-A filed with the SEC pursuant to Section 12(b) of the Exchange Act on May 3, 2016, including any amendment or report filed with the SEC for the purpose of updating this description.

We also incorporate by reference any future filings (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 unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement and accompanying prospectus, which will become a part of this prospectus supplement and accompanying prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus supplement and accompanying prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later-filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. You may request a copy of these filings, excluding the exhibits to such filings which we have not specifically incorporated by reference in such filings, at no cost, by writing to or calling us at:

VistaGen Therapeutics, Inc.  
343 Allerton Avenue  
South San Francisco, California 94080  
(650) 577-3600

This prospectus supplement and the accompanying prospectus is part of a registration statement we filed with the SEC. You should only rely on the information or representations contained in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide information other than that provided in this prospectus supplement and the accompanying prospectus. We are not making an offer of the securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement and the accompanying prospectus is accurate as of any date other than the date on the front of the document.

PROSPECTUS



**\$150,000,000**

**COMMON STOCK  
PREFERRED STOCK  
WARRANTS  
UNITS**

From time to time, we may offer and sell, in one or more offerings, up to approximately \$147.1 million of any combination of the securities described in this prospectus. We may also offer securities as may be issuable upon conversion, repurchase, exchange or exercise of any securities registered hereunder, including applicable anti-dilution provisions, if any. Any warrants sold hereunder may be exercisable for shares of our common stock, shares of our preferred stock and/or units. Any units sold hereunder will represent an interest in two or more other securities, which may or may not be separable from one another. The shares of our common stock that may become issuable from time to time upon the exercise of our Series A1 Warrants (as defined herein) are also being offered pursuant to this prospectus.

This prospectus provides a general description of the securities we may offer from time to time. Each time we offer securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with an offering. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before you invest in any of the securities being offered.

Our common stock is listed on the Nasdaq Capital Market under the symbol "VTGN." On September 27, 2019, the closing price of our common stock on the Nasdaq Capital Market was \$1.14 per share.

We may offer and sell our securities to or through one or more agents, underwriters, dealers or other third parties or directly to one or more purchasers on a continuous or delayed basis. If agents, underwriters or dealers are used to sell our securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of our securities and the net proceeds we expect to receive from the sale of such securities will also be set forth in a prospectus supplement. For additional information on the methods of sale, you should refer to the section entitled "*Plan of Distribution*" in this prospectus.

As of September 30, 2019, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$54,677,141, which was calculated in accordance with General Instruction I.B.6 of Form S-3, based on 42,385,381 shares of outstanding common stock held by non-affiliates, at a price per share of \$1.29, the closing sale price of our common stock reported on the Nasdaq Capital Market on September 20, 2019.

Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell the securities described in this prospectus in a public primary offering with a value exceeding more than one-third (1/3) of the aggregate market value of our common stock held by non-affiliates in any twelve (12)-month period, so long as the aggregate market value of our outstanding common stock held by non-affiliates remains below \$75.0 million. During the twelve (12) calendar months prior to and including the date of this prospectus, we have offered and sold \$11.5 million of securities pursuant to General Instruction I.B.6 of Form S-3. As a result, we are currently eligible to offer and sell up to an aggregate of approximately \$6.7 million of our securities pursuant to General Instruction I.B.6. of Form S-3.

**Our business and investing in our securities involve significant risks. You should review carefully the risks and uncertainties referenced under the heading "*Risk Factors*" on page 6 of this prospectus, as well as those contained in the applicable prospectus supplement and any related free writing prospectus, and in the other documents that are incorporated by reference into this prospectus or the applicable prospectus supplement.**

**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.**

**The date of this prospectus is October 7, 2019**

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**VISTAGEN THERAPEUTICS, INC.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement filed with the Securities and Exchange Commission (the *SEC*), using a “shelf” registration process. Under this shelf registration process, we may sell the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities which may be offered from time-to-time. Each time we offer securities for sale, we will provide a prospectus supplement that contains information about the specific terms of that offering. Any prospectus supplement may also add or update information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described below under “*Where You Can Find More Information*” and “*Incorporation of Certain Information by Reference*.”

### **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information contained or incorporated by reference in this prospectus, and in any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making offers to sell or solicitations to buy the securities described in this prospectus in any jurisdiction in which an offer or solicitation is not authorized, or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should not assume that the information in this prospectus or any prospectus supplement, as well as the information we file or previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate as of any date other than its respective date. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “*Where You Can Find More Information*.”

## COMPANY OVERVIEW

*This summary highlights information contained elsewhere in this prospectus. This summary does not contain all the information you should consider before buying our securities. You should read the following summary together with the more detailed information appearing in this prospectus, including the section titled "Risk Factors" on page 6, before deciding whether to purchase our securities.*

*In this prospectus, unless otherwise stated or the context otherwise requires, references to "VistaGen," "Company," "we," "us," "our," refer to VistaGen Therapeutics, Inc.*

### Overview

We are a clinical-stage biopharmaceutical company committed to developing differentiated new generation medications for central nervous system (CNS) diseases and disorders with high unmet need. Our product candidate portfolio includes three differentiated clinical-stage candidates, AV-101, PH10 and PH94B, which we are developing for multiple CNS indications. We aim to become a fully-integrated biopharmaceutical company that develops and commercializes innovative CNS therapies for large and growing mental health and neurology markets where current treatments are inadequate to meet the needs of millions of patients and caregivers worldwide.

AV-101 (4-Cl-KYN) belongs to a new generation of investigational medicines in neuropsychiatry and neurology known as NMDA (N-methyl-D-aspartate) glutamate receptor modulators. The NMDA receptor is a pivotal receptor in the brain and abnormal NMDA function is associated with multiple CNS diseases and disorders, including major depressive disorder (MDD), chronic neuropathic pain, epilepsy, levodopa-induced dyskinesia and many others. AV-101 is an oral prodrug of 7-Cl-KYNA which binds uniquely at the glycine site of the NMDA receptor. We are developing AV-101 initially for the treatment of MDD, a serious neurobiologically-based mood disorder the leading cause of disability globally, affecting approximately 16 million adults in the United States and nearly 300 million people worldwide according to the U.S. National Institutes of Health (NIH). AV-101 is currently in Phase 2 development in the U.S. as an add-on treatment (together with current FDA-approved antidepressants (SSRIs and SNRIs)) for adult patients with MDD who have an inadequate response to their current antidepressant. The FDA has granted Fast Track designation for development of AV-101 as an add-on, or adjunctive, treatment for MDD. We believe AV-101 has potential as a novel treatment for multiple additional CNS indications, including as a non-opioid treatment for chronic neuropathic pain, for which the FDA has granted a second AV-101 Fast Track designation, as well as a novel oral therapy for levodopa-induced dyskinesia associated with Parkinson's disease therapy and suicidal ideation.

Our second product candidate, PH10, is a novel, rapid-acting CNS neuroactive nasal spray administered in microgram doses. PH10 activates nasal chemosensory receptors that, in turn, engage neural circuits that lead to rapid antidepressant effects without psychological side effects, systemic exposure or safety concerns often associated with current antidepressants and ketamine-based therapy (intravenous ketamine or esketamine nasal spray). In an exploratory 30-patient Phase 2a clinical study, PH10 was well-tolerated and, at microgram doses, demonstrated rapid-onset antidepressant effects, as measured by the Hamilton Depression Rating Scale (HAM-D), without psychological side effects or safety concerns. Based on positive results from this exploratory Phase 2a study, we are planning Phase 2b clinical development of PH10 in 2020, initially as a new stand-alone treatment for MDD. With its exceptional safety profile during clinical development to date, PH10 also has potential to change the current paradigm for treatment of treatment-resistant depression (TRD) with ketamine-based therapy (intravenous ketamine or esketamine nasal spray, both of which must be administered in a clinical setting), by enabling those who respond to such therapy to transition to more convenient at-home administration of PH10 to maintain the therapeutic benefits of ketamine or esketamine.

Our third product candidate, PH94B, is also a novel, rapid-acting CNS neuroactive nasal spray administered in microgram doses. We are developing PH94B initially for treatment of social anxiety disorder (SAD), which affects over 19 million Americans and is the third most common psychiatric condition after depression and substance abuse according to the NIH. SAD is characterized by a persistent and unreasonable fear of one or more social or performance situations, where the individual fears that he or she will act in a way or show symptoms that will be embarrassing or humiliating, leading to avoidance of the situations when possible and anxiety or distress when they occur. These fears have a significant impact on the person's employment, social activities and overall quality of life. Only three drugs, all antidepressants, are approved by the U.S. Food and Drug Administration (FDA) specifically for treatment of SAD. However, for treatment of both MDD and SAD, current oral antidepressants (ADs) have slow onset of effect (often several weeks to months) and significant side effects that may make them inadequate treatment alternatives for many individuals affected by MDD and SAD.

PH94B is fundamentally differentiated from all current treatments for SAD. PH94B activates nasal chemosensory receptors that, in turn, engage neural circuits that lead to rapid suppression of fear and anxiety, but without psychological side effects, systemic exposure, sedation or other safety concerns often associated with current antidepressants approved by the FDA for treatment of SAD, as well as benzodiazepines and beta blockers, which are not approved by the FDA to treat SAD but are often prescribed for treatment of SAD off-label. In a peer-reviewed, published double-blind, placebo-controlled Phase 2 clinical trial, PH94B neuroactive nasal spray was significantly more effective than placebo in reducing public-speaking and social interaction anxiety on laboratory challenges of individuals with SAD within 10 to 15 minutes of self-administration. Based on its novel mechanism of pharmacological action, rapid-onset of therapeutic effects and exceptional safety and tolerability profile in Phase 2 clinical trials to date, we are preparing to begin pivotal Phase 3 development of PH94B neuroactive nasal spray to become the first FDA-approved on-demand treatment for SAD. Additional potential CNS indications for PH94B include, general anxiety disorder (*GAD*), peripartum anxiety, preoperative anxiety, panic disorder and post-traumatic stress disorder (*PTSD*).

In addition to our current CNS product candidates, we have pipeline-enabling programs through our wholly-owned subsidiary, VistaStem Therapeutics (*VistaStem*). VistaStem is focused on applying pluripotent stem cell (*hPSC*) technology to discover, rescue, develop and commercialize proprietary new chemical entities (*NCEs*) for CNS and other diseases and regenerative medicine (*RM*) involving hPSC-derived blood, cartilage, heart and liver cells. Our internal drug rescue programs are designed to utilize *CardioSafe 3D*, our customized cardiac bioassay system, to discover and develop small molecule *NCEs* for our CNS pipeline or for out-licensing. To advance potential *RM* applications of our cardiac stem cell technology, we have sublicensed to BlueRock Therapeutics LP, a next generation cell therapy and *RM* company recently acquired by Bayer AG (*BlueRock Therapeutics*), rights to certain proprietary technologies relating to the production of cardiac stem cells for the treatment of heart disease (the *BlueRock Agreement*). In a manner similar to the *BlueRock Agreement*, we may pursue additional collaborations or licensing transactions involving blood, cartilage, and/or liver cells derived from hPSCs for cell-based therapy, cell repair therapy, *RM* and/or tissue engineering.

#### **Securities Offerings under Prior Registration Statement**

On August 31, 2017, we entered into an underwriting agreement with Oppenheimer & Co. Inc., relating to the issuance and sale (the "*September 2017 Public Offering*") of 1,371,430 shares of our common stock and warrants to purchase an aggregate total of 1,892,572 shares of our common stock, consisting of Series A1 Warrants to purchase up to 1,388,931 shares of common stock and Series A2 Warrant to purchase up to 503,641 shares of common stock (the Series A1 Warrants and Series A2 Warrants are collectively referred herein as the "*Warrants*"). Each share of common stock was sold together with 1.0128 Series A1 Warrants, each whole Series A1 Warrant to purchase one share of common stock, and 0.3672 of a Series A2 Warrant, each whole Series A2 Warrant to purchase one share of common stock, at a public offering price of \$1.75 per share and related Warrants.

Each Series A1 Warrant became exercisable six months from the date of issuance, while the Series A2 Warrants were immediately exercisable. Both Warrants have an exercise price of \$1.82 per whole share, and expire five years from the date first exercisable. In December 2017 and January 2018, all of the Series A2 Warrants were exercised at the reset exercise price resulting from a subsequent public offering of shares of our common stock and warrants completed in December 2017, from which we received nominal cash proceeds. As of the date of this prospectus, all Series A1 Warrants offered and sold in the September 2017 Public Offering remain outstanding.

#### **Risk Factors**

Our business is subject to substantial risk. Please carefully consider the section titled "*Risk Factors*" on page 6 of this prospectus for a discussion of the factors you should carefully consider before deciding to purchase securities that may be offered by this prospectus.

Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. The occurrence of any of these known or unknown risks might cause you to lose all or part of your investment in the offered securities.

## Risks Related to our Common Stock and our Series A1 Warrants

*The price of our common stock might fluctuate significantly, which could reduce the value of our Series A1 Warrants.*

Our common stock is listed for trading on the Nasdaq Capital Market under the symbol “VTGN.” Our stock price has been and could continue to be subject to wide fluctuations in response to a variety of factors, including the following:

- plans for, progress of or results from nonclinical and clinical development activities related to our product candidates;
- the failure of the FDA or other regulatory authority to approve our product candidates;
- announcements of new products, technologies, commercial relationships, acquisitions or other events by us or our competitors;
- the success or failure of other CNS therapies;
- regulatory or legal developments in the U.S. and other countries;
- announcements regarding our intellectual property portfolio;
- failure of our product candidates, if approved, to achieve commercial success;
- fluctuations in stock market prices and trading volumes of similar companies;
- general market conditions and overall fluctuations in U.S. equity markets;
- variations in our quarterly operating results;
- changes in our financial guidance or securities analysts’ estimates of our financial performance;
- changes in accounting principles;
- our ability to raise additional capital and the terms on which we can raise it;
- sales or purchases of large blocks of our common stock, including sales or purchases by our executive officers, directors and significant stockholders;
- establishment of short positions by holders or non-holders of our stock or warrants;
- additions or departures of key personnel;
- discussion of us or our stock price by the press and by online investor communities;  
and
- other risks and uncertainties described in these risk factors, and the risk factors incorporated by reference into this prospectus.

These and other factors might cause the market price of our common stock to fluctuate substantially, which may negatively affect the liquidity of our common stock. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies across many industries. The changes frequently appear to occur without regard to the operating performance of the affected companies. Accordingly, the price of our common stock could fluctuate based upon factors that have little or nothing to do with our company, and these fluctuations could materially reduce the market price of our common stock and the value of the Series A1 Warrants.

Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company’s securities. This litigation, if instituted against us, could result in substantial costs, divert our management’s attention and resources, and harm our business, operating results and financial condition.

***There is no public market for our Series A1 Warrants and the liquidity of our Series A1 Warrants may be limited.***

There is no established public trading market for our Series A1 Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for the listing of our Series A1 Warrants on any national securities exchange or other trading market. Without an active market, we expect the liquidity of our Series A1 Warrants will be limited, which may negatively impact the value of our Series A1 Warrants.

***Holders of our Series A1 Warrants will generally not have rights as a common stockholder until such holders exercise their Series A1 Warrants and acquire our common stock.***

Except as set forth in our Series A1 Warrants, holders of our Series A1 Warrants will generally not have rights with respect to the Series A1 Warrant Shares underlying the Series A1 Warrants. Upon exercise of the Series A1 Warrants, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

***Due to the speculative nature of our Series A1 Warrants, there is no guarantee that it will ever be profitable for holders of our Series A1 Warrants to exercise their Series A1 Warrants.***

Holders of Series A1 Warrants may exercise their right to acquire the Series A Warrant Shares by paying an exercise price of \$1.82 per share prior to their expiration on or about March 7, 2023, after which date any unexercised Series A1 Warrants will expire and have no further value. There can be no assurance that the market price of our common stock will ever equal or exceed the exercise price of the Series A1 Warrants, and, consequently, whether it will ever be profitable for holders to exercise their Series A1 Warrants.

***Significant holders or beneficial holders of our common stock may not be permitted to exercise Series A1 Warrants that they hold.***

The terms of the Series A1 Warrants prohibit holders from exercising their Series A1 Warrants if doing so would result in such holders (together with such holders' affiliates) beneficially owning more than 4.99% (which threshold may be decreased or increased, but not above 9.99%, at the election of the holders upon prior written notice to us) of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A1 Warrants. As a result, holders of the Series A1 Warrants may not be able to exercise our Series A1 Warrants for Series A1 Warrant Shares at a time when it would be financially beneficial for them to do so.

***We have broad discretion to determine how any funds received in connection with any offering will be used, and may use them in ways that may not enhance our operating results or the price of our common stock.***

Our management will have broad discretion over the use of proceeds received from any offering pursuant to this registration statement, including upon the exercise of the Series A1 Warrants, and we could spend the proceeds in ways in which our investors do not agree or that do not yield a favorable return. If we do not invest or apply the proceeds of any offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause the market price of our common stock and the value of our Series A1 Warrants to decline.

***We do not intend to pay cash dividends.***

We have never declared or paid cash dividends on our common stock or other securities. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Accordingly, investors may have to sell some or all of their shares of our common stock in order to generate cash flow from their investment. Investors may not receive a gain on their investment when they sell their shares of our common stock and may lose the entire amount of their investment.

**Corporate Information**

VistaGen Therapeutics, Inc., a Nevada corporation, is the parent of VistaGen Therapeutics, Inc. (dba VistaStem Therapeutics, Inc.), a wholly owned California corporation founded in 1998. Our principal executive offices are located at 343 Allerton Avenue, South San Francisco, California 94080, and our telephone number is (650) 577-3600. Our website address is [www.vistagen.com](http://www.vistagen.com). The information contained on our website is not part of this prospectus. We have included our website address as a factual reference and do not intend it to be an active link to our website.



## **RISK FACTORS**

Investing in our securities involves a high degree of risk. Before deciding whether to purchase any of our securities, you should carefully consider the risks and uncertainties described under “*Risk Factors*” on page 6 of this prospectus and in our Annual Report on Form 10-K for the fiscal year ended March 31, 2019, our Quarterly Report on Form 10-Q for the period ended June 30, 2019 and our other filings with the SEC, all of which are incorporated by reference herein. If any of these risks actually occur, our business, financial condition and results of operations could be materially and adversely affected and we may not be able to achieve our goals, the value of our securities could decline and you could lose some or all of your investment. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. If any of these risks occur, the trading price of our common stock could decline materially and you could lose all or part of your investment.

## CAUTIONARY NOTES REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this prospectus and the documents incorporated by reference herein, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- the availability of capital to satisfy our working capital requirements and clinical and nonclinical development objectives;
- the accuracy of our estimates regarding expenses, future revenues and capital requirements;
- our plans to develop and commercialize our product candidates, including, among other things, AV-101, initially as an add-on treatment for MDD, and subsequently as a treatment for additional diseases and disorders involving the CNS, PH94B, initially, as a treatment for SAD and PH10, initially, as a stand-alone treatment for MDD;
- our ability to initiate and complete necessary preclinical and clinical trials, to advance our product candidates into additional preclinical and clinical trials, including pivotal clinical trials, to successfully complete any such preclinical and clinical trials, and for those trials to generate positive results;
- economic, regulatory and political developments in the U.S. and foreign countries;
- the performance of the Department of Veterans Affairs (VA), Baylor University, our third-party contract manufacturer(s) (CMOs), contract research organizations (CROs) and other third-party preclinical and clinical drug development collaborators and regulatory service providers;
- our ability to obtain and maintain intellectual property (IP) protection for our core assets, including our product candidates;
- the size of the potential markets for our product candidates and our ability to enter and serve those markets;
- the rate and degree of market acceptance of our product candidates for any indication once approved;
- the success of competing products and product candidates in development by others that are or become available for the indications that we are pursuing in the markets we seek to enter on our own or with collaborators;
- the loss of key scientific, clinical or nonclinical development, regulatory, and/or management personnel, internally or from one or more of our third-party collaborators; and
- other risks and uncertainties, including those listed in the “Risk Factors” section of this prospectus and the documents incorporated by reference herein.

These forward-looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus, particularly in the “Risk Factors” sections in this prospectus and the documents incorporated by reference herein, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus, the documents incorporated by reference herein and the documents that we have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus and the documents incorporated by reference herein by these cautionary statements. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

## USE OF PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus primarily for research and development expenses associated with continuing development of AV-101, PH10, PH94B, potential drug rescue candidates, and for other working capital and capital expenditures. We may use a portion of the net proceeds to fund production of, and nonclinical and clinical studies related to Phase 2 and Phase 3 development of, AV-101, PH10 and PH94B and our other drug candidates. We may also use the net proceeds from the sale of the securities under this prospectus to in-license, acquire or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so.

Pending other uses, we intend to invest our proceeds from the offering in short-term investments or hold them as cash. We cannot predict whether the proceeds invested will yield a favorable return. Our management will have broad discretion in the use 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

## DESCRIPTION OF OUR CAPITAL STOCK

### General

Our authorized capital stock consists of 175.0 million shares of common stock, \$0.001 par value per share (“*Common Stock*”), and 10.0 million shares of preferred stock, \$0.001 par value per share (“*Preferred Stock*”). The following is a description of our common stock and certain provisions of our Restated Articles of Incorporation (“*Articles*”), and our amended and restated bylaws (“*Bylaws*”), and certain provisions of Nevada law.

As of September 30, 2019, there were issued and outstanding, or reserved for issuance:

- 42,622,965 shares of common stock held by approximately 6,000 stockholders of record;
- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares of our Series A Preferred held by one institutional investor and one accredited individual investor;
- 1,160,240 shares of common stock reserved for issuance upon conversion of 1,160,240 shares of our Series B Preferred held by two institutional investors;
- 2,318,012 shares of common stock reserved for issuance upon conversion of 2,318,012 shares of our Series C Preferred held by one institutional investor;
- 21,242,954 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$2.43 per share;
- 7,844,838 shares of common stock reserved for issuance upon exercise of outstanding stock options under our Amended and Restated 2016 Stock Incentive Plan, with a weighted average exercise price of \$1.76 per share;
- 170,000 shares of common stock reserved for issuance upon exercise of outstanding stock options under our 2019 Omnibus Equity Incentive Plan, with a weighted average exercise price of \$1.00 per share, and
- 8,718,412 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan.

We may elect or be required to amend our Articles to increase the number of shares of common stock authorized for issuance prior to completing sales of shares of our common stock, or securities convertible and/or exchangeable into shares of our common stock described in this prospectus.

### Common Stock

*This section describes the general terms of our common stock that we may offer from time to time. For more detailed information, a holder of our common stock should refer to our Articles and our Bylaws, copies of which are filed with the SEC as exhibits to the registration statement of which this prospectus is a part.*

Except as otherwise expressly provided in our Articles, or as required by applicable law, all shares of our common stock have the same rights and privileges and rank equally, share ratably and are identical in all respects as to all matters, including, without limitation, those described below. All outstanding shares of common stock are fully paid and nonassessable.

#### *Voting Rights*

Each holder of our common stock is entitled to cast one vote for each share of common stock held on all matters submitted to a vote of stockholders. Cumulative voting for election of directors is not allowed under our Articles, which means that a plurality of the shares voted can elect all of the directors then outstanding for election. Except as otherwise provided under Nevada law or our Articles, and Bylaws, on matters other than election of directors, action on a matter is approved if the votes cast favoring the action exceed the votes cast opposing the action.

#### *Dividend Rights*

The holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available, if our board of directors, in its discretion, determines to issue dividend, and only at the times and in the amounts that our board of directors may determine. Our board of directors is not obligated to declare a dividend. We have not paid any dividends in the past and we do not intend to pay dividends in the foreseeable future.

#### *Liquidation Rights*

Upon our liquidation, dissolution or winding-up, the holders of our common stock will be entitled to share equally, identically and ratably in all assets remaining, subject to the prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

#### *No Preemptive or Similar Rights*

Our common stock is not subject to conversion, redemption, sinking fund or similar provisions.

#### *Transfer Agent and Registrar*

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A., Jersey City, New Jersey.

#### **September 2017 Public Offering and Series A1 Warrant Shares**

On August 31, 2017, we entered into an underwriting agreement with Oppenheimer & Co. Inc., relating to the issuance and sale (the “*September 2017 Public Offering*”) of 1,371,430 shares of our common stock and warrants to purchase an aggregate total of 1,892,572 shares of our common stock, consisting of Series A1 Warrants to purchase up to 1,388,931 shares of common stock and Series A2 Warrant to purchase up to 503,641 shares of common stock (the Series A1 Warrants and Series A2 Warrants are collectively referred herein as the “*Warrants*”). Each share of common stock was sold together with 1.0128 Series A1 Warrants, each whole Series A1 Warrant to purchase one share of common stock, and 0.3672 of a Series A2 Warrant, each whole Series A2 Warrant to purchase one share of common stock, at a public offering price of \$1.75 per share and related Warrants.

Each Series A1 Warrant became exercisable six months from the date of issuance, while the Series A2 Warrants were immediately exercisable. Both Warrants have an exercise price of \$1.82 per whole share, and expire five years from the date first exercisable. In December 2017 and January 2018, all of the Series A2 Warrants were exercised at the reset exercise price resulting from a subsequent public offering of shares of our common stock and warrants completed in December 2017, from which we received nominal cash proceeds. As of the date of this prospectus, all Series A1 Warrants offered and sold in the September 2017 Public Offering remain outstanding.

#### **Preferred Stock**

*This section describes the general terms and provisions of our outstanding shares of preferred stock, as well as preferred stock that we may offer from time to time. The applicable prospectus supplement will describe the specific terms of the shares of preferred stock offered through that prospectus supplement, which may differ from the terms we describe below. We will file a copy of the certificate of designation that contains the terms of each new series of preferred stock with the SEC each time we issue a new series of preferred stock, and these certificates of designation will be incorporated by reference into the registration statement of which this prospectus is a part. Each certificate of designation will establish the number of shares included in a designated series and fix the designation, powers, privileges, preferences and rights of the shares of each series as well as any applicable qualifications, limitations or restrictions. A holder of our preferred stock should refer to the applicable certificate of designation, our Articles and the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) for more specific information.*

We are authorized, subject to limitations prescribed by Nevada law, to issue up to 10.0 million shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors can increase or decrease the number of shares of any series, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of the Company and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

## Outstanding Series of Preferred Stock

Currently, there are three series of our preferred stock outstanding- Series A Convertible Preferred Stock, Series B 10% Convertible Preferred Stock, and Series C Convertible Preferred Stock. The rights and preferences associated with each series are summarized below.

### Series A Preferred

#### *General*

In December 2011, our Board authorized the creation of a series of up to 500,000 shares of Series A Preferred, par value \$0.001 (*Series A Preferred*). Each restricted share of Series A Preferred is currently convertible at the option of the holder into one and one-half restricted shares of our common stock. The Series A Preferred ranks prior to the common stock for purposes of liquidation preference.

#### *Conversion and Rank*

At September 30, 2019, there were 500,000 shares of Series A Preferred outstanding, which shares are currently subject to beneficial ownership blockers and are exchangeable at the option of the holders into an aggregate of 750,000 shares of our common stock. The Series A Preferred ranks prior to our common stock for purposes of liquidation preference.

#### *Conversion Restriction*

At no time may a holder of shares of Series A Preferred convert shares of the Series A Preferred if the number of shares of common stock to be issued pursuant to such conversion would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) more than 9.99% of all of the common stock outstanding at such time; *provided, however*, that this limitation may be waived upon sixty-one (61) days' notice to us.

#### *Dividend Rights*

The Series A Preferred has no separate dividend rights. However, whenever the board of directors declares a dividend on the common stock, each holder of record of a share of Series A Preferred, or any fraction of a share of Series A Preferred, on the date set by the board of directors to determine the owners of the common stock of record entitled to receive such dividend (*Record Date*) shall be entitled to receive out of any assets at the time legally available therefor, an amount equal to such dividend declared on one share of common stock multiplied by the number of shares of common stock into which such share, or such fraction of a share, of Series A Preferred could be exchanged on the Record Date.

#### *Voting Rights*

The Series A Preferred has no voting rights, except with respect to transactions upon which the Series A Preferred shall be entitled to vote separately as a class. The common stock into which the Series A Preferred is exchangeable shall, upon issuance, have all of the same voting rights as other issued and outstanding shares of our common stock.

#### *Liquidation Rights*

In the event of the liquidation, dissolution or winding up of our affairs, after payment or provision for payment of our debts and other liabilities, the holders of Series A Preferred then outstanding shall be entitled to receive, out of our assets, if any, an amount per share of Series A Preferred calculated by taking the total amount available for distribution to holders of all of our outstanding common stock before deduction of any preference payments for the Series A Preferred, divided by the total of (x), all of the then outstanding shares of our common stock, plus (y) all of the shares of our common stock into which all of the outstanding shares of the Series A Preferred can be exchanged before any payment shall be made or any assets distributed to the holders of the common stock or any other junior stock.

### Series B Preferred

#### *General*

In July 2014, our Board authorized the creation of a class of Series B Preferred Stock, par value \$0.001 (*Series B Preferred*). In May 2015, we filed a Certificate of Designation of the Relative Rights and Preferences of the Series B 10% Preferred Stock of VistaGen Therapeutics, Inc. (*Certificate of Designation*) with the Nevada Secretary of State to designate 4.0 million shares of our authorized preferred stock as Series B Preferred.

*Conversion*

Each share of Series B Preferred is convertible, at the option of the holder (*Voluntary Conversion*), into one (1) share of the Company's common stock. All outstanding shares of Series B Preferred are also automatically convertible into common stock (*Automatic Conversion*) upon the closing or effective date of any of the following transactions or events: (i) a strategic transaction involving AV-101 with an initial up front cash payment to the Company of at least \$10.0 million; (ii) a registered public offering of Common Stock with aggregate gross proceeds to the Company of at least \$10.0 million; or (iii) for 20 consecutive trading days the Company's Common Stock trades at least 20,000 shares per day with a daily closing price of at least \$12.00 per share; provided, however, that Automatic Conversion and Voluntary Conversion are subject to certain beneficial ownership blockers set forth in Section 6 of the Certificate of Designation.

Following the completion of our \$10.9 million underwritten public offering of our common stock in May 2016, which public offering occurred concurrently with and facilitated our listing on the Nasdaq Capital Market, approximately 2.4 million shares of Series B Preferred were converted automatically into approximately 2.4 million shares of our common stock pursuant to the Automatic Conversion provision. At September 30, 2019, there were 1,160,240 shares of Series B Preferred outstanding, which shares are currently subject to beneficial ownership blockers and are exchangeable at the option of the respective holders by Voluntary Conversion, or pursuant to Automatic Conversion to the extent not otherwise subject to beneficial ownership blockers, into an aggregate of 1,160,240 shares of our common stock.

*Conversion Restriction*

At no time may a holder of shares of Series B Preferred convert shares of the Series B Preferred, either by Voluntary Conversion or Automatic Conversion, if the number of shares of common stock to be issued pursuant to such conversion would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) more than 9.99% of all of the common stock outstanding at such time; *provided, however*, that this limitation may be waived upon sixty-one (61) days' notice to us.

*Rank*

The Series B Preferred ranks prior to our common stock, and *pari passu* with the Series A Preferred for purposes of liquidation preference.

*Dividend Rights*

Prior to either a Voluntary Conversion or Automatic Conversion, shares of Series B Preferred will accrue dividends, payable only in unregistered common stock, at a rate of 10% per annum (the *Accrued Dividend*). The Accrued Dividend will be payable on the date of either a Voluntary Conversion or Automatic Conversion solely in that number of shares of Common Stock equal to the Accrued Dividend.

*Voting Rights*

The Series B Preferred has no voting rights, except with respect to transactions upon which the Series B Preferred shall be entitled to vote separately as a class. The common stock into which the Series B Preferred shall be exchangeable shall, upon issuance, have all of the same voting rights as other issued and outstanding shares of our common stock.

*Liquidation Rights*

Upon any liquidation, dissolution, or winding-up of the Company, whether voluntary or involuntary, the holders of Series B Preferred are entitled to receive out of the Company's assets, whether capital or surplus, an amount equal to the stated value of the Series B Preferred (\$7.00 per share), plus any accrued and unpaid dividends thereon, before any distribution or payment shall be made to the holders of any junior securities, including holders of our common stock. If the assets of the Company are insufficient to pay, in full, such amounts, then the entire assets to be distributed to the holders of the Series B Preferred shall be ratably distributed among the holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full.

## Series C Preferred

### *General*

In January 2016, our Board authorized the creation of and, accordingly, we filed a Certificate of Designation of the Relative Rights and Preferences of the Series C Convertible Preferred Stock of VistaGen Therapeutics, Inc. (the *Series C Preferred Certificate of Designation*) with the Nevada Secretary of State to designate 3.0 million shares of our preferred stock, par value \$0.001 per share, as Series C Convertible Preferred Stock (*Series C Preferred*).

### *Conversion and Rank*

At September 30, 2019, there were 2,318,012 shares of Series C Preferred outstanding, which shares of Series C Preferred are currently subject to beneficial ownership blockers and are exchangeable at the option of the holder into 2,318,012 shares of our common stock. The Series C Preferred ranks prior to our common stock for purposes of liquidation preference, and *pari passu* with the Series A Preferred and Series B Preferred.

### *Conversion Restriction*

At no time may a holder of shares of Series C Preferred convert shares of the Series C Preferred if the number of shares of common stock to be issued pursuant to such conversion would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) more than 9.99% of all of the common stock outstanding at such time; *provided, however*, that this limitation may be waived upon sixty-one (61) days' notice to us.

### *Dividend Rights*

The Series C Preferred has no separate dividend rights. However, whenever the board of directors declares a dividend on the common stock, each holder of record of a share of Series C Preferred, or any fraction of a share of Series C Preferred, on the date set by the board of directors to determine the owners of the common stock of record entitled to receive such dividend (*Record Date*) shall be entitled to receive out of any assets at the time legally available therefor, an amount equal to such dividend declared on one share of common stock multiplied by the number of shares of common stock into which such share, or such fraction of a share, of Series C Preferred could be exchanged on the Record Date.

### *Voting Rights*

The Series C Preferred has no voting rights, except with respect to transactions upon which the Series C Preferred shall be entitled to vote separately as a class. The common stock into which the Series C Preferred is exchangeable shall, upon issuance, have all of the same voting rights as other issued and outstanding shares of our common stock.

### *Liquidation Rights*

In the event of the liquidation, dissolution or winding up of our affairs, after payment or provision for payment of our debts and other liabilities, the holders of Series C Preferred then outstanding shall be entitled to receive, out of our assets, if any, an amount per share of Series C Preferred calculated by taking the total amount available for distribution to holders of all of our outstanding common stock before deduction of any preference payments for the Series C Preferred, divided by the total of (x), all of the then outstanding shares of our common stock, plus (y) all of the shares of our common stock into which all of the outstanding shares of the Series C Preferred can be exchanged before any payment shall be made or any assets distributed to the holders of the common stock or any other junior stock.



### Shares of Preferred Stock Issuable Pursuant to this Prospectus

We will incorporate by reference as an exhibit to the registration statement, which includes this prospectus, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering. This description and the applicable prospectus supplement will include:

- the title and stated value;
- the number of shares authorized;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date, and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise such redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- a discussion of any material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will fully be paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

## DESCRIPTION OF WARRANTS

*The following description, together with the additional information we include in any applicable prospectus supplements or free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus. Warrants may be offered independently or together with common stock or preferred stock offered by any prospectus supplement or free writing prospectus, and may be attached to or separate from those securities. While the terms we have summarized below will generally apply to any future warrants we may offer under this prospectus, we will describe the particular terms of any warrants that we may offer in more detail in the applicable prospectus supplement or free writing prospectus. The terms of any warrants we offer under a prospectus supplement or free writing prospectus may differ from the terms we describe below.*

In the event that we issue warrants, we may issue the warrants under a warrant agreement, which, if applicable, we will enter into with a warrant agent to be selected by us. Forms of these warrant agreements and forms of the warrant certificates representing the warrants, and the complete warrant agreements and forms of warrant certificates containing the terms of the warrants being offered, will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC. We use the term “warrant agreement” to refer to any of these warrant agreements. We use the term “warrant agent” to refer to the warrant agent under any of these warrant agreements. The warrant agent will act solely as an agent of ours in connection with the warrants and will not act as an agent for the holders or beneficial owners of the warrants.

The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement applicable to a particular series of warrants. We urge you to read the applicable prospectus supplements or free writing prospectus related to the warrants that we sell under this prospectus, as well as the complete warrant agreements that contain the terms of the warrants.

### General

We will describe in the applicable prospectus supplement or free writing prospectus the terms relating to a series of warrants. If warrants for the purchase of common stock or preferred stock are offered, the prospectus supplement or free writing prospectus will describe the following terms, to the extent applicable:

- the offering price and the aggregate number of warrants offered;
- the total number of shares that can be purchased if a holder of the warrants exercises them and, in the case of warrants for preferred stock, the designation, total number and terms of the series of preferred stock that can be purchased upon exercise;
- the designation and terms of any series of preferred stock with which the warrants are being offered and the number of warrants being offered with each share of common stock or preferred stock;
- the date on and after which the holder of the warrants can transfer them separately from the related common stock;
- the number of shares of common stock or preferred stock that can be purchased if a holder exercises the warrant and the price at which such common stock or preferred stock may be purchased upon exercise, including, if applicable, any provisions for changes to or adjustments in the exercise price and in the securities or other property receivable upon exercise;
- the terms of any rights to redeem or call, or accelerate the expiration of, the warrants;
- the date on which the right to exercise the warrants begins and the date on which that right expires;
- federal income tax consequences of holding or exercising the warrants; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the warrants.

### Exercise of Warrants

Each holder of a warrant is entitled to purchase the number of shares of common stock or preferred stock, as the case may be, at the exercise price described in the applicable prospectus supplement or free writing prospectus. After the close of business on the day when the right to exercise terminates (or a later date if we extend the time for exercise), unexercised warrants will become void.

A holder of warrants may exercise them by following the general procedure outlined below:

- delivering to the warrant agent the payment required by the applicable prospectus supplement or free writing prospectus to purchase the underlying security;
- properly completing and signing the reverse side of the warrant certificate representing the warrants;  
and
- delivering the warrant certificate representing the warrants to the warrant agent within five business days of the warrant agent receiving payment of the exercise price.

If you comply with the procedures described above, your warrants will be considered to have been exercised when the warrant agent receives payment of the exercise price, subject to the transfer books for the securities issuable upon exercise of the warrant not being closed on such date. After you have completed those procedures and subject to the foregoing, we will, as soon as practicable, issue and deliver to you the common stock or preferred stock that you purchased upon exercise. If you exercise fewer than all of the warrants represented by a warrant certificate, a new warrant certificate will be issued to you for the unexercised amount of warrants. Holders of warrants will be required to pay any tax or governmental charge that may be imposed in connection with transferring the underlying securities in connection with the exercise of the warrants.

#### **Amendments and Supplements to the Warrant Agreements**

We may amend or supplement a warrant agreement without the consent of the holders of the applicable warrants to cure ambiguities in the warrant agreement, to cure or correct a defective provision in the warrant agreement, or to provide for other matters under the warrant agreement that we and the warrant agent deem necessary or desirable, so long as, in each case, such amendments or supplements do not materially adversely affect the interests of the holders of the warrants.

#### **Warrant Adjustments**

Unless the applicable prospectus supplement or free writing prospectus states otherwise, the exercise price of, and the number of securities covered by, a common stock or a preferred stock warrant will be adjusted proportionately if we subdivide or combine our common stock or preferred stock, as applicable. In addition, unless the prospectus supplement or free writing prospectus states otherwise, if we, without receiving payment:

- issue capital stock or other securities convertible into or exchangeable for common stock or preferred stock, or any rights to subscribe for, purchase or otherwise acquire any of the foregoing, as a dividend or distribution to holders of our common stock or preferred stock;
- pay any cash to holders of our common stock or preferred stock other than a cash dividend paid out of our current or retained earnings or other than in accordance with the terms of the preferred stock;
- issue any evidence of our indebtedness or rights to subscribe for or purchase our indebtedness to holders of our common stock or preferred stock;  
or
- issue common stock or preferred stock or additional stock or other securities or property to holders of our common stock or preferred stock by way of spinoff, split-up, reclassification, combination of shares or similar corporate rearrangement,

then the holders of common stock or preferred stock warrants will be entitled to receive upon exercise of the warrants, in addition to the securities otherwise receivable upon exercise of the warrants and without paying any additional consideration, the amount of stock and other securities and property such holders would have been entitled to receive had they held the common stock or preferred stock, as applicable, issuable under the warrants on the dates on which holders of those securities received or became entitled to receive such additional stock and other securities and property.

Except as stated above or as otherwise set forth in the applicable prospectus supplement or free writing prospectus, the exercise price and number of securities covered by a common stock or preferred stock warrant, and the amounts of other securities or property to be received, if any, upon exercise of such warrant, will not be adjusted or provided for if we issue those securities or any securities convertible into or exchangeable for those securities, or securities carrying the right to purchase those securities or securities convertible into or exchangeable for those securities.

Holders of common stock and preferred stock warrants may have additional rights under the following circumstances:

- certain reclassifications, capital reorganizations or changes of the common stock or preferred stock, as applicable;
- certain share exchanges, mergers, or similar transactions involving us and which result in changes of the common stock or preferred stock, as applicable; or
- certain sales or dispositions to another entity of all or substantially all of our property and assets.

If one of the above transactions occurs and holders of our common stock or preferred stock are entitled to receive stock, securities or other property with respect to or in exchange for their securities, the holders of the common stock warrants and preferred stock warrants then outstanding, as applicable, will be entitled to receive, upon exercise of their warrants, the kind and amount of shares of stock and other securities or property that they would have received upon the applicable transaction if they had exercised their warrants immediately before the transaction.

#### **Series A1 Warrants**

As described above, we have issued Series A1 Warrants to purchase up to 1,388,931 shares of our common stock at an exercise price of \$1.82 per share, which warrants expire on or about March 7, 2023. The Series A1 Warrants Shares that may become issuable from time to time upon the exercise of the Series A1 Warrants are being offered pursuant to this prospectus. For more information, see “*Description of Warrants – Registration of Series A1 Warrants and Series A1 Warrant Shares*” below.

*Duration and Exercise Price:* The Series A1 Warrants are exercisable for a five-year period commencing on or about March 7, 2018, and have an exercise price of \$1.82 per share.

*Exercisability:* Each of Series A1 Warrant may be exercised, in whole or in part, by delivering to the Company a written notice of election to exercise the applicable Series A1 Warrant and delivering to the Company cash payment of the exercise price, if applicable. The exercise price and the number of shares of our common stock issuable upon exercise of the Series A1 Warrants is subject to adjustment in the event of certain subdivisions and combinations, including by any stock split or reverse stock split, stock dividend, recapitalization or otherwise.

*Cashless Exercise:* If, at any time during the term of the Series A1 Warrants, the issuance or resale of shares of our common stock upon exercise of the Series A1 Warrants is not covered by an effective registration statement, the holder is permitted to effect a cashless exercise of the Series A1 Warrants (in whole or in part) in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Series A1 Warrants. Shares issued pursuant to a cashless exercise would be deemed to have been issued pursuant to the exemption from registration provided by Section 3(a)(9) of the Securities Act, and the shares of common stock issued upon such cashless exercise would take on the characteristics of the Series A1 Warrants being exercised, including, for purposes of Rule 144(d) promulgated under the Securities Act, a holding period beginning from the original issuance date of the Series A1 Warrants.

*Adjustment Provisions:* The exercise price and the number and type of securities purchasable upon exercise of the Series A1 Warrants are subject to adjustment upon certain corporate events, including certain subdivisions, combinations and similar events. If we declare any dividend or distribution of assets (including cash, stock or other securities, evidence of indebtedness, purchase rights or other property), each holder of a Series A1 Warrant will be entitled to participate in such distribution to the same extent that the holder would have participated had the applicable Series A1 Warrant been exercised immediately before the record date for the distribution.

*Transferability:* Subject to applicable laws, the Series A1 Warrants may be offered for sale, sold, transferred or assigned without our consent. However, as of the date of this prospectus there is no established trading market for the Series A1 Warrants and it is not expected that a trading market for the Series A1 Warrants will develop in the future. Without an active trading market, the liquidity of the Series A1 Warrants will be limited.

*Listing:* We have not and will not apply to list the Series A1 Warrants on Nasdaq Capital Market. We do not intend to list the Series A1 Warrants on any securities exchange or other quotation system. Without an active market, the liquidity of the Series A1 Warrants will be limited.

*Rights as a stockholder:* Except as set forth in the Series A1 Warrants or by virtue of such holders' ownership of shares of our common stock, the holders of the Series A1 Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise the Series A1 Warrants.

*Limitations on Exercise:* The exercise of the Series A1 Warrants may be limited in certain circumstances if, after giving effect to such exercise, the holder or any of its affiliates would beneficially own (as determined in accordance with the terms of the Series A1 Warrants) more than 4.99% (or, at the election of the holder, 9.99%) of our outstanding common stock immediately after giving effect to the exercise.

*Fundamental Transactions:* In the event of certain fundamental transactions, as described in the Series A1 Warrants and generally including any merger or consolidation with or into another entity, the holders of the Series A1 Warrants shall thereafter have the right to exercise the applicable Series A1 Warrant for the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such fundamental transaction if it had been, immediately prior to such fundamental transaction, the holder of shares of common stock issuable upon exercise in full of the Series A1 Warrant. In the event of a Change of Control (as defined in the Series A1 Warrants) (other than a Change of Control which was not approved by the Board of Directors, as to which this right shall not apply), at the request of the holder delivered before the 30th day after such Change of Control, a holder of a Series A1 Warrant will have the right to require us or any successor entity to purchase the holder's Series A1 Warrant for the Black-Scholes Value of the remaining unexercised portion of the Series A1 Warrant on the effective date of such Change of Control (determined in accordance with a formula specified in the Series A1 Warrants), payable in cash; provided, that if the applicable Change of Control was not approved by our Board of Directors, such amount shall be payable, at our option in either (x) shares of our common stock or the consideration receivable by holders of common stock in the Change of Control transaction, as applicable, valued at the value of the consideration received by the shareholders in such Change of Control, or (y) cash.

*Dividends and Other Distributions:* If we declare or make any dividend or other distribution of our assets to holders of shares of our common stock (including any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets), then, subject to certain limitation on exercise described in the Series A1 Warrants, each holder of a Series A1 Warrant shall receive the distributed assets that such holder would have been entitled to receive in the distribution had the holder exercised the Series A1 Warrant immediately prior to the record date for the distribution.

*Registration of Series A1 Warrants and Series A1 Warrant Shares.* The Series A1 Warrants and the Series A1 Warrant Shares were previously registered pursuant to the Prior Registration Statement and a prospectus supplement filed with the SEC on August 31, 2017 pursuant to Rule 424(b)(5) under the Securities Act. Pursuant to Rule 415(a)(6) and Rule 429 under the Securities Act, the offering of the Series A1 Warrant Shares will be registered pursuant to this registration statement.

## DESCRIPTION OF UNITS

*This section outlines some of the provisions of the units and the unit agreements. This information may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units will be described in the applicable prospectus supplement or free writing prospectus. If so described in a particular prospectus supplement or free writing prospectus, the specific terms of any series of units may differ from the general description of terms presented below.*

As specified in the applicable prospectus supplement, we may issue units consisting of one or more shares of common stock, shares of our preferred stock, warrants or any combination of such securities.

The applicable prospectus supplement will specify the following terms of any units in respect of which this prospectus is being delivered:

- the terms of the units and of any of the shares of common stock, shares of preferred stock, or warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;
- a description of the terms of any unit agreement governing the units;
- if appropriate, a discussion of material U.S. federal income tax considerations;  
and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

**DESCRIPTION OF CERTAIN PROVISIONS OF NEVADA LAW AND  
OUR ARTICLES OF INCORPORATION AND BYLAWS**

**Transactions with Interested Persons**

Under the Nevada Revised Statutes (the *NRS*) a transaction with the Company (i) in which a Company director or officer has a direct or indirect interest, or (ii) involving another corporation, firm or association in which one or more of the Company's directors or officers are directors or officers of the corporation, firm or association or have a financial interest in the corporation firm or association, is not void or voidable solely because of the director's or officer's interest or common role in the transaction if any one of the following circumstances exists:

- the fact of the common directorship, office or financial interest is known to the board of directors or a committee of the board of directors and a majority of disinterested directors on the board of directors (or on the committee) authorized, approved or ratified the transaction;
- the fact of the common directorship, office or financial interest is known to the stockholders and disinterested stockholders holding a majority of the shares held by disinterested stockholders authorized, approved or ratified the transaction;
- the fact of the common directorship, office or financial interest is not known to the director or officer at the time the transaction is brought to the board of directors for action; or
- the transaction was fair to the Company at the time it is authorized or approved.

**Control Share Acquisition Provisions**

Nevada law precludes an acquirer of the shares of a Nevada corporation who crosses one of three ownership thresholds (20%, 33 1/3% or 50%) from obtaining voting rights with respect to those shares unless the disinterested holders of a majority of the shares of the Company held by disinterested stockholders vote to accord voting power to those shares.

**Combinations with Interested Stockholders**

Under the NRS, except under certain circumstances, a corporation is not permitted to engage in a business combination with any "interested stockholder" for a period of two years following the date such stockholder became an interested stockholder. An "interested stockholder" is a person or entity who owns 10% or more of the outstanding shares of voting stock. Nevada permits a corporation to opt out of the application of these business combination provisions by so providing in the articles of incorporation or bylaws. The Company's Bylaws contain a provision opting out of the application of these business combination provisions.

## PLAN OF DISTRIBUTION

We may sell the securities described in this prospectus to or through underwriters or dealers, through agents, or directly to one or more purchasers. A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters or agents, if applicable;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

We may also sell equity securities covered by this registration statement in an "at the market offering" as defined in Rule 415 under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of the Nasdaq Capital Market or any other securities exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- to or through a market maker otherwise than on the Nasdaq Capital Market or such other securities exchanges or quotation or trading services.

Such at-the-market offerings, if any, may be conducted by underwriters acting as principal or agent.

Only underwriters named in a prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement that names the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Any underwriter may engage in overallocation, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"). Overallocation involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters who are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in accordance with Rule 103 of Regulation M during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

#### **LEGAL MATTERS**

Certain legal matters in connection with this offering will be passed upon for us by Disclosure Law Group, a Professional Corporation, of San Diego, California.

#### **EXPERTS**

OUM & Co. LLP, our independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended March 31, 2019, as set forth in their report, which is incorporated by reference in this prospectus. The report for VistaGen Therapeutics, Inc. includes an explanatory paragraph about the existence of substantial doubt concerning its ability to continue as a going concern. Our financial statements are incorporated by reference in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.

#### **WHERE YOU CAN FIND MORE INFORMATION**

We are a public company and file annual, quarterly and special reports, proxy statements and other information with the SEC. Our SEC filings are available, at no charge, to the public at the SEC's website at <http://www.sec.gov>.



## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents filed by us with the SEC are incorporated by reference in this prospectus:

- our Annual Report on Form 10-K for the year ended March 31, 2019, filed on June 25, 2019;
- our Quarterly Report on Form 10-Q for the year ended June 30, 2019, filed on August 13, 2019;
- our Current Report on Form 8-K, filed on April 4, 2019;
- our Current Report on Form 8-K, filed on May 2, 2019;
- our Current Report on Form 8-K, filed on June 21, 2019;
- our Current Report on Form 8-K, filed on July 23, 2019;
- our Current Report on Form 8-K, filed on August 16, 2019;
- our Current Report on Form 8-K, filed on August 23, 2019;
- our Current Report on Form 8-K, filed on September 6, 2019;
- our Current Report on Form 8-K, filed on September 25, 2019;  
and
- The description of our common stock contained in the Registration Statement on Form 8-A filed pursuant to Section 12(b) of the Exchange Act on May 3, 2016, including any amendment or report filed with the SEC for the purpose of updating this description.

We also incorporate by reference all documents we file pursuant to Section 13(a), 13(c), 14 or 15 of the Exchange Act (other than any portions of filings that are furnished rather than filed pursuant to Items 2.02 and 7.01 of a Current Report on Form 8-K) after the date of the initial registration statement of which this prospectus is a part and prior to effectiveness of such registration statement. All documents we file in the future pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of the offering are also incorporated by reference and are an important part of this prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. You may request a copy of these filings, excluding the exhibits to such filings which we have not specifically incorporated by reference in such filings, at no cost, by writing to or calling us at:

VistaGen Therapeutics, Inc.  
343 Allerton Avenue  
South San Francisco, California 94080  
(650) 577-3600

This prospectus is part of a registration statement we filed with the SEC. You should only rely on the information or representations contained in this prospectus and any accompanying prospectus supplement. We have not authorized anyone to provide information other than that provided in this prospectus and any accompanying prospectus supplement. We are not making an offer of the securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or any accompanying prospectus supplement is accurate as of any date other than the date on the front of the document.

**Units  
Each Unit Consisting of  
Share of Common Stock  
and  
Shares of Series D Preferred Stock**



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Prospectus Supplement

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*Joint Book-Running Managers*

**Jefferies**

**William Blair**

The date of this prospectus supplement is December , 2020

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